Pre-Service teacher education curriculum:
A Study of the factors, which have influenced the curriculum developed in primary school departments in Israeli colleges teacher education in the last twenty years.

Aviva Cohen
Supervisors: Dr. Robert Smith
Dr. Mark Lofthouse

December 2005
Acknowledgements

In memory of my beloved parents - my mother, Dora Schneider, who died in grief after the death of my brother, Avi Schneider; and my father, Efraim Schneider, a real pioneer, who survived the holocaust, reached grand old age, and lately died.

I wish to thank my supervisors Dr. Bob Smith and Dr. Mark Lofthouse, who thoughtfully helped me to crystallise the ideas and shape them into the presented thesis.

Special thanks to all Heads of the Primary School Departments in state Colleges for Teacher Education, for willingly participating in this study.

I am particularly grateful to my late friend colleague Dr. Ruth Shein, of blessed memory, to Rakefet Shahar and David Lloyd for diligently reading the thesis and critically commenting on it.

Thanks to my extended family and other friends and colleagues at Kaye College Beer-Sheba, at other Colleges, and elsewhere, who showed deep interest and encouraged me to continue and complete this work.

My love and deep appreciation to my husband and children who supported me and patiently enabled me to concentrate on my work, while at the same time easing my feelings of guilt.

Aviva Cohen
Abstract

This study examines the external and the internal factors impacting on the development of 'Teacher Education Curricula' (T.E.C) in the primary school departments in Israeli 'Colleges for Teacher Education' over the past twenty years, since the 'Academisation process' started, within a conceptual framework adapted from Stark et al. (1986) Stark and Lauttuca (1997). Within this framework the study examines two dilemmas: Teacher Training (T.T) versus Teacher Education (T.E) and practical versus academic concerning identifying areas of commonality and difference, and analysing current preferred directions. This study uses an interpretive methodological tradition, thus the questionnaire and the case study have been qualitatively analysed.

The results reveal that the impact of different factors has caused major and minor changes in the T.E.C. These include organisational and structural changes as well as changes in contents. All changes represent micro level changes resulted from the most significant macro level change - the 'Academisation process', initiated by the Committee for Higher Education and the M.O.E in the 1980s. Two internal factors, the Colleges and the Departments, appeared to be the most influential factors. Both factors generated micro level changes, by locally mediating the directions and the extent of other factors' impact on the T.E.C, especially the Ministry of Education's (M.O.E) and the Academic external influences. The Departments appeared to be less obliged to the M.O.E's directives and the Academic influence than the Colleges. Still, the Colleges supported Departmental initiatives, such as: partnership; collaborative, reflective and research emphases; and, a whole personal development emphasis. These initiatives correlate with current common preferred directions for T.E in west countries. But, the Israeli answers differ from other west countries' answers in their interpretations and the ways of their implementation.
Table of Content

Chapter one - Introduction
1. History and background of teacher education (T.E) pp. 1-4
2. The Israeli context p. 5
   2.1 The Israeli society and the education policy pp. 6-10
   2.2 T.E in Israel pp. 10-15
   2.3 The Israeli T.E.C pp. 15-20
3. Rationale pp. 21-22
4. Methodology p. 23

Chapter Two - Literature Review
1. Curriculum in general p. 24
   1.1 The nature of curriculum pp. 24-25
   1.2 Factors that influence the curriculum pp. 25-26
   1.3 Definitions of curriculum pp. 26-32
2. Curriculum Development in the course of history p. 33
   2.1 Historical perspective in general p. 33
   2.2 Historical perspective - three metaphors of curricular development pp. 33-35
   2.3 Historical perspective - models of curricular development pp. 35-36
      2.3.1 Models of curriculum - the technical production approach p. 37
         2.3.1.1 Procedural models pp. 37-38
         2.3.1.2 Descriptive models p. 38
         2.3.1.3 Conceptual models pp. 38-39
      2.3.2 Models of curriculum - the ‘critical approach’ pp. 39-41
   2.4 The influence on educational beliefs on curriculum development – Historical and current perspectives pp. 41-43
      2.4.1 Beliefs concerned with ‘acculturation’ p. 43
      2.4.2 Beliefs concerned with Society or ‘socialisation’ pp. 44-45
      2.4.3 Beliefs concerned with learners or ‘individuation’ pp. 45-47
3. The nature of teacher education curriculum (T.E.C) pp. 48-50
   3.1 Conceptual framework for T.E.C influencing factors pp. 50-53
3.1.1 External factors

3.1.1.1 Societal influence

3.1.1.2 State’s influence

3.1.1.3 Technological influence

3.1.1.4 Universities’ influence

3.1.1.5 Colleges’ influence

3.1.1.6 Schools’ influence

3.1.2 Internal factors

3.1.2.1 Colleges’ influence

3.1.2.1.1 Educational research held in C.F.T.E

3.1.2.1.2 Staff’s beliefs

3.1.2.1.2.1 Teacher training (T.T) versus teacher education (T.E)

3.1.2.1.2.2 Practical versus academic emphasis

3.1.2.1.3 Conceptual paradigms concerning T.E

3.1.2.1.4 Staff’s beliefs and the T.E.C

3.1.2.2 Students’ perspectives and interests

3.2 Summary

4. Approaches to knowledge in T.E

4.1 Knowledge as a goal or as a means

4.1.1 Epistemologies of knowledge and the correlated T.E conceptual paradigms

4.2 Knowledge and educational beliefs

4.2.1 Reflection as practice and as an educational paradigm

4.3 Knowledge and curriculum

4.4 Professional knowledge and T.E.C

4.4.1 Professional knowledge, ideal graduate teachers and T.E.C

4.4.1.1 The School-Based approach

4.4.1.1.1 Partnership

4.4.1.2 The Constructivist approach

4.4.1.2.1 The Narrative sub-approach

4.4.1.2.2 The Collaborative sub-approach

p. 53
p. 54
p. 54-56
p. 56
p. 56
p. 56
p. 57
p. 57
pp. 58
p. 58
pp. 58-59
pp. 59-62
pp. 62-63
pp. 64-65
p. 66
p. 67
p. 68
p. 69
pp. 69-70
pp. 70-73
pp. 73-76
pp. 76-80
pp. 80-81
pp. 81-87
p. 87
pp. 87-88
pp. 88-90
pp. 90-92
pp. 92-93
p. 93
4.4.1.2.3 The Reflective sub-approach p. 93
4.4.1.2.4 The Critical sub-approach p. 94
4.4.1.2.5 The Research sub-approach pp. 94-95
4.4.1.3 The Competency-Based approach p. 95
4.4.1.4 The Whole Personal Development approach pp. 95-96
4.4.1.5 The Long Life Learning approach p. 96
4.5 Summary pp. 96-98

5. Curriculum - structure and organisation pp. 99-102
5.1 The T.E.C’s structure and organisation pp. 102-107
5.2 Knowledge and curriculum organised according to disciplinary preference pp. 107-110
5.2.1 Disciplines as an organiser principle pp. 110-113
5.2.2 Integrative approach as an organiser principle pp. 113-116
5.2.3 Competencies-Based organiser principle pp. 117-121
5.2.4 Personal development approach as an organiser principle pp. 121-122
5.3 Summary p. 123


Chapter Three – Methodology

1. The Methodological tradition pp. 127-129
2. The research method p. 129
   2.1 Justification of the research method applied in the study pp. 129-131
      2.1.1 Survey pp. 132-133
      2.1.2 Case study pp. 133-135
3. Theoretical context and the conceptual framework pp. 135-137
4. Data collection p. 137
   4.1 Ways of data gathering p. 137
   4.2 Identification of the research sample pp. 137-139
   4.3 The context of the research population pp. 139-141
   4.4 The development of data collection instruments p. 141
      4.4.1 The Questionnaire pp. 141-145
4.4.2 Case study
4.4.3 Separated interviews

5. Administrative procedures pp. 151-153
6. Analysis pp. 153-156
7. Procedure pp. 156-158
8. Generalisation pp. 159-160
10. Ethics pp. 164-165

Chapter Four – Findings and Analysis

1. The Questionnaire’s closed part p. 166
   1.1 The grading part pp. 167-178
   1.2 The rating part pp. 179-180
      1.2.1 The highest level of influence p. 180
         1.2.1.1. The Departmental influence pp. 180-181
         1.2.1.2 The Colleges’ influence pp. 181-182
      1.2.2 The moderate level of influence p. 183
         1.2.2.1 The Schools’ influence pp. 183-184
         1.2.2.2 The Academic influence pp. 184-185
         1.2.2.3 The Learners’ influence pp. 185-186
      1.2.3 The lowest level of influence p. 184
         1.2.3.1 The Society’s influence pp. 184-185
         1.2.3.2 The M.O.E’s influence p. 185
         1.2.3.3 The Technological innovation influence pp. 185-186
   1.3 The Comments' part p. 189
      1.3.1 Analysis of comments across the specific external influencing factors pp. 189-191
      1.3.2 Analysis of across the specific internal influencing factors p. 192
2. The questionnaire’s open part p. 193
   2.1 External influencing factors p. 194
      2.1.1 The Schools’ influence p. 194
         2.1.1.1 Changing roles of those involved in the interrelations
2.1.1.2 Changing the practical / educational parts of the T.E.C

2.1.1.3 Operating continuous processes in schools, as a result of the interrelations between schools and departments

2.1.1.4 Exposure to the schools' curricula

2.1.2 The Academic influence

2.1.2.1 Expectations from students

2.1.2.2 Expectations from staff members

2.1.2.3 Expectations from the T.E.C

2.1.3 The Society's influence

2.1.3.1 A general sensitivity to actual societal questions

2.1.3.2 Implications of the societal influences on the T.E.C

2.1.4 The Technological Innovation influence

2.1.5 The M.O.E's influence

2.2 Internal influencing factors

2.2.1 The Departments' influence

2.2.1.1 Interrelations between departments and schools

2.2.1.1.1 Partnership as a general pattern

2.2.1.1.2 Learning community as a central means for facilitating partnership

2.2.1.2 Students as learners

2.2.1.2.1 Group 1 – Characteristics of the independent students

2.2.1.2.2 Group 2 – Aspects of students' empowerment

2.2.1.3 Linking between courses and / or parts of the T.E.C

2.2.1.3.1 Linking theory to practice

2.2.1.3.2 Linking between theoretic courses

2.2.1.4 Child and Childhood concerns

2.2.1.4.1 The uniqueness of childhood

2.2.1.4.2 A holistic view at school children

2.2.1.4.3 School children's needs

2.2.1.5 The desired teacher profile
2.2.1.5.1 Disciplinary proficient teachers
2.2.1.5.2 Comprehensive teachers, educative oriented
2.2.1.6 Societal concerns
   2.2.1.6.1 A focus on students' personal ideological/value development
   2.2.1.6.2 A focus on societal values and needs
2.2.1.7 Teaching abilities and skills, and class management concerns
2.2.1.8 In Summary
2.2.2 The College's influence
   2.2.2.1 Changes cooperatively or uncooperatively initiated by the Colleges
   2.2.2.2 College's support of changes initiated by the Departments
   2.2.2.3 Competition and power struggles among Departments/faculties
   2.2.2.4 Permanent or as-hoc facilitations of a professional cross-departmental/faculties dialogue
   2.2.2.5 In Summary
2.2.3 The Learners' influence
   2.2.3.1 Direct Learners' influence
      2.2.3.1.1 Structural changes in the T.E.C
   2.2.3.2 Indirect Learners' influence
      2.2.3.2.1 Belief in the contribution of choice options to the increase of students' enrollment
      2.2.3.2.2 Belief in the essentialness of caring for the students' needs, as to encourage their personal and professional development
   2.2.3.3 Decrease in students' enrollment to the Departments
   2.3 Summary
3. The Case study - 'A' C.F.T.E
   3.1 Background
3.2 Historical phases

3.2.1 The first phase

3.2.1.1 Structural characteristics

3.2.1.2 Pedagogical characteristics

3.2.2 The second phase – The phase of ‘Reform’

3.2.2.1 Structural characteristics

3.2.2.2 Pedagogical characteristics

3.2.2.3 The second phase – Analysis of the T.E.C

3.2.3 The third phase - the Academism phase

3.2.3.1 The College’s influence

3.2.3.1.1 Structural organisation

3.2.3.1.2 Pedagogical organisation

3.2.3.1.2.1 The College’s general policy

3.2.3.2 The Department’s policy

3.2.3.3 The third phase – Analysis of the T.E.C

3.2.3.3.1 Analysis of the T.E.C presented in Tables 48A-51A

3.2.4 The fourth phase – The ‘Post-Academism’ phase

3.2.4.1 Internal influencing factors

3.2.4.1.1 The College’s influence

3.2.4.1.1.1 The College’s structural organisation

3.2.4.1.1.2 The College’s pedagogical organisation

3.2.4.1.1.3 The College’s general atmosphere

3.2.4.1.2 The Department’s influence

3.2.4.1.2.1 Characteristics that contributed to the increase of the Department’s influence

3.2.4.1.3 The Learners’ influences

3.2.4.2 External influencing factors

3.2.4.2.1 The Schools’ influence

3.2.4.2.2 The Academic influence

3.2.4.2.3 The M.O.E’s influence

3.2.4.2.4 The Technological Innovation influence

3.2.4.3 The fourth phase - Analysis of the T.E.C

3.2.4.3.1 Analysis of the T.E.C presented in Table 52A

3.2.5 The fifth phase – The ‘Uncertainty’ phase
3.2.5.1 Internal influencing factors p. 258

3.2.5.1.1 The College's policy p. 258

3.2.5.1.1.1 The College's structural organisation pp. 258-260

3.2.5.1.1.2 The College's pedagogical organisation p. 261

3.2.5.1.1.2.1 Functionaries' personal educational credos p. 261

3.2.5.1.1.2.2 The College's pedagogical Mechanisms and Procedures pp. 261-263

3.2.5.1.1.2.3 Dilemma between the academic and the education orientations pp. 264-266

3.2.5.1.1.3 The College's general atmosphere pp. 266-269

3.2.5.1.2 The Department's influence p. 269

3.2.5.1.2.1 The Department's credos pp. 270-271

3.2.5.1.2.2 Characteristics that increased the Department's influence pp. 272-276

3.2.5.1.2.3 The T.E.C in the early 2000s p. 276

3.2.5.1.2.3.1 Hectic changes pp. 277-280

3.2.5.1.3 The Learners' influence p. 281

3.2.5.1.3.1 Proactive influence, which enhanced curricula's adaptation to students' needs and expectations p. 281

3.2.5.1.3.2 Reactive influence, which enhanced T.E.C's adaptation to students' needs and expectations pp. 282-283

3.2.5.2 External influencing factors p. 283

3.2.5.2.1 The Schools' influence pp. 283-285

3.2.5.2.2 The Academic influence pp. 285-287

3.2.5.2.3 The M.O.E's influence pp. 287-290

3.2.5.2.4 The Society's influence pp. 290-291

3.2.5.2.5 The Technological Innovation influence p. 291

3.2.5.3 The fifth phase - Analysis of the T.E.C p. 291

3.2.5.3.1 General conceptual changes p. 291

3.2.5.3.1.1 Changes that demonstrated loosening loyalty to the T.E.C defined at
Chapter Five – Discussion

1. Preceding comments pp. 303-305

2. Meanings and the implications of the main findings, in context of the study’s purposes p. 306

2.1 The external and the internal factors that influence the T.E.C’s development pp. 306-308

2.1.1 The refined conceptual framework for the T.E.C’s influencing factors pp. 308-309

2.2 Areas of commonality and difference in the primary school departments’ T.E.C p. 310

2.2.1 Areas of commonality

2.2.1.1 The Colleges and the Departments pp. 310-312

2.2.1.2 The Schools pp. 312-314

2.2.2 Areas of difference p. 314

2.2.2.1 The T.I pp. 314-315

2.2.2.2 The Society pp. 315-317

2.2.2.3 The M.O.E pp. 317-320

2.2.2.4 The Academic Research pp. 320-324

2.2.2.5 The Students pp. 324-326

2.2.3 Summary pp. 326-327

3. The preferred directions that have influenced the T.E.C, and the correlated ideal graduate teachers types p. 328

3.1 The worldwide approaches p. 328

3.1.1 The school-based approach pp. 328-330

3.1.2 The constructivist approach pp. 330-332

3.1.2.1 Constructivist sub-approaches p. 332

3.1.2.1.1 The collaborative sub-approach pp. 332-333

3.1.2.1.2 The reflective sub-approach pp. 333-334

3.1.2.1.3 The research sub-approach pp. 334-335
3.1.2.1.4 The critical sub-approach  
3.1.2.1.5 The narrative sub-approach  
3.1.3 The competencies-based approach  
3.1.4 The whole personal development approach  
3.1.5 The long-life learning approach  
3.2 Local approaches  
3.2.1 The academic approach  
3.3 The Departments’ preferred directions and the ideal graduate teacher types  
3.4 Summary  
4. Dilemmas revealed in the T.E.C  
4.1 Dilemmas relevant to the researched Departments’ T.E.C  
4.1.1 Category 1: The social and the educational vision  
4.1.2 Category 2: The nature of preparation  
4.1.3 Category 3: The nature of knowledge  
4.1.4 Category 4: Structure and organisation  
4.2 Summary  

Chapter Six - Conclusions Recommendation, and the Study’s contribution  

1. Conclusions  
1.1 Macro-level changes  
1.2 Micro-level changes  
1.3 Disharmony between the macro-level and the micro-level changes  
1.4 Limitations of the T.E and the T.E.C  
2. Recommendations  
3. The study’s contribution  
4. Last Comments  

Bibliography  

Appendixes:  
Appendix 1 - The Questionnaire
Appendix 2 - H.O.D' interviews
Appendix 3 – Functionaries interviews
Appendix 4 - The Case Study’s interviews – an example
Appendix 4b - The Case Study’s interviews – relevant organised units
Appendix 5 - The Questionnaire’s data in tables, examples
Appendix 5a - The Questionnaire’s data in tables and diagrams
Appendix 5b - Tables 10-20 - Questionnaire’s Rating
Appendix 5c - Diagrams 9 -16 the distribution of total score
Appendix 5d - The Questionnaire’s data in diagrams, an example
Appendix 5e - The Questionnaire’s Rating statements, an example
Appendix 5f - An unfilled summarising table of the Rating
Appendix 6 - The Questionnaire close part- types of responses
Appendix 6a - The Questionnaire close part - organised Comments
Appendix 6b - The Questionnaire’s open part organised units
Appendix 7 - Case study’s T.E.C
List of Abbreviations

C.F.T.E - Colleges for Teacher Education
C.F.H.E - Committee for Higher Education
C.B.T.E - Competency-Based Teacher Education
H.O.D – Head of Department; Heads of Departments
H.O.D.F - Heads of Disciplinary Faculties
I.E.S - Israeli Education System
L.R – Literature Review
M.O.E - Ministry of Education
P.G.C.E - Post Graduate Certificate of Education
P.D.S – Professional Development Schools
P.S.T.E - Primary School Teacher Education
S.B.T.E - School-Based Teacher Education
T.E - Teacher Education
T.E.C - Teacher Education Curriculum; Teacher Education Curricula
T.I - Technological Innovation
T.T – Teacher Training
List of Tables

Table 1 - Institutions for T.E, p. 6

Table 2 - Typology of curriculum definitions p. 28

Table 3 - The Educational beliefs p. 42

Table 4 - Conceptual paradigms for T.E p. 64

Table 5 - The ‘Epistemologies of knowledge’ in accordance with T.E conceptual paradigms p. 74

Table 6 - Types of the ‘Ideal graduate teachers’ and current correlated answers p. 97

Table 7 - External influences - an overall view of the four types of responses, as demonstrated by current and former H.O.D p. 169

Table 8 - Internal influences - an overall view of the four types of responses, as demonstrated by current and former H.O.D p. 169

Table 9 - Gaps in the external and the internal influencing factors p. 176

Table 10 - Rating statements according to their importance p. 179

Table 11 - Units of meaning - Questionnaire’s open part p. 194

Table 12 - Units of meaning - Case Study – The fourth phase p. 242

Table 13 - Units of meaning - Case Study – The fifth phase p. 257
List of Figures

Figure 1: Conceptual framework - T.E.C’s influencing factors p. 53

Figure 2: Dilemmas presented as extremes on continua p. 106

Figure 3: Refined Conceptual framework - T.E.C’s influencing factors p. 308

Figure 4: Dilemmas presented as extremes on continua, in accordance with the results p. 349
List of Documents

Document 1 - The Kibbutzim Seminary Platform, 1953
Document 2 - The "Academisation" proposal, 1986
Document 3 - 'A' College's Fifty's anniversary, 2001
Document 4 - 'Towards a reform in T.E', 1969
Document 5 - 'A' College - T.E in the early 1980s
Document 6 - Bulletin 1984-85
Document 7 - Bulletin 1985-86
Document 8 - Bulletin 1986-87
Document 10 - Bulletin 1990-91
Document 12 - Bulletin 1992-93
Document 14, Bulletin 2001-02
Chapter One  Introduction

This thesis examines factors that have influenced the development of the T.E.C for primary school in Israeli C.F.T.E over the past twenty years.

1. History and background of teacher education (T.E)

The teacher education, as a process of pre-service professional preparation, has been undervalued and subject to continuous debate and criticism since its beginning as an organised activity about 250 years ago, in spite of tremendous change through efforts in the field (Yaffe 1979; Feiman-Nemser, 1990; Judge, 1990; Reid, 1994; Partington, 1999). Teacher education represents a controversial area giving rise to much dissatisfaction (Adams and Tulasiewicz, 1995, and Zeichner, 1983; Goodlad, 1999a). There has never been a consensus about the aims and the most appropriate means for educating pre-service teachers.

It has been claimed that the T.E.C does not provide sufficient answers to the current reality and the derived demands (Zeichner, 1983; Wideen, 1995; Buchberger, 1996; Stark and Lattuca, 1997; Rhodes and Bellamy, 1999; Back, 2001a; Flores, 2001; Hallinan and Khmelkov 2001). Thus, the T.E and the T.E.C have been subject to continuous conceptual and concrete changes. However, it seems as if society avoids making any serious intervention in creating significant reform in the teacher education (Fullan, 1993; Howey and Zimpher, 1989; Kfir and Ariav 2004).

Changes have been influenced by: governments’ policies, social pressures, economic market forces (Judge, 1990; Whitty, 1993; Reid, 1994; McCulloch, 1994; Edwards, 1994;
Adams and Tulasiewicz, 1995; Yonai, 2002; Kfir and Ariav 2004), or by educational theories and beliefs (Zeichner, 1983; Partington, 1999).

These diverse sources of influence can explain the "highly heterogeneousness" of T.E systems and models (Buchberger, 1996, p. 3). Heterogeneity of T.E systems' nature appears not only in different countries but also within countries (Feiman-Nemeser, 1990).

Ever since the area of T.E for primary school started as an organised preparation system, teaching has not been considered a demanding profession. Until the middle of the 19th century only few believed that primary schoolteachers ought to be properly trained. Even in the early 20th century many primary school teachers never received any training or certification in colleges or other institutions for teacher training. Some teachers received certification 'on the job', without any formal training (Feiman-Nemeser, 1990; Judge, 1990; Partington, 1999).

A significant change in the understanding of Primary School Teacher Education (P.S.T.E) occurred in the 1960s, once teaching was recognised as a profession stipulated by a graduate degree. This process named 'Accreditation Process' (Partington, 1999) urged fundamental and long-running changes in T.E systems. It accelerated further reforms since the 1980s (Yonai, 2002; Kfir and Ariav 2004). The 'Accreditation Process' was generated as a result of a convergence of political, social, economic and educational pressures and forces. This process fostered an academic orientation - a graduate degree (B.Ed) instead of a teacher diploma or certificate. It demanded cardinal curricular changes; intellectual concerns; theoretical studies; and, eventually, lengthening of the period of study (ibid.).
The ‘Accreditation process’ altered the balance between theory and practice studies. It increased the weight given to academic studies, and appreciated intellectual abilities more than teaching skills and competencies (Pring, 1999; Roth, 1999).

The ‘Accreditation Process’ encouraged the development of different routes and modes for teacher preparation - in C.F.T.E, in multi-purpose colleges, or in different programs in universities. This process opened routes for postgraduate programs, such as P.G.C.E, and undergraduate programs, such as the B.Ed. It enabled the enrichment of the rigid conventional courses by allowing: flexible and modular courses, credit accumulation and recognition of previous academic studies or experience in teaching (Judge, 1990; Whitty, 1993; Reid, 1994; Buchberger, 1996).

The Israeli version of the ‘Accreditation Process’, the ‘Academisation process’ started in 1981 as a result of political and educational concerns. From a political point of view, until the early 1980s, the Israeli T.E system was controlled only by the Ministry of Education (M.O.E) (Kfir, et al. 1997). A change occurred in the early 1980s, when the universities’ “Committee For Higher Education” (C.F.H.E), which determined the higher education academic policy, got involved in the ‘Academisation process’, and together with the M.O.E set a more academic program for Junior Education. At that point the T.E system began a new phase, where it was controlled by two masters - the M.O.E and the C.F.H.E.

From an educational point of view, the ‘Academisation process’ aimed at raising teachers’ status by changing the preparation programs and awarding graduates with B.Ed degrees, so teaching would be a more attracting profession. It suggested turning ‘Teacher Training Seminaries’ to C.F.T.E, while changing the nature of the T.E.C (The M.O.E, 1981). The academic part has become massive, and C.F.T.E had to follow the detailed
and strict academic disciplinary study-program set jointly by the M.O.E and the C.F.H.E. The practical part remained open to institutional considerations, and had to follow only a recommended frame (The M.O.E, 1997, 1981).

There is a similarity between the Israeli ‘Academisation process’, in the 1980s, and the ‘Accreditation’ process in the 1960s in the U.K and the U.S.A. Both processes aimed at increasing the level and the prestige of the T.E, and improving the teachers’ image. But, as opposed to the U.K and U.S.A, in Israel the T.E system has been disconnected from universities. Universities were not expected to take responsibility for training primary school teachers, as a result of the ‘Academisation process’. They continued training only secondary and high schools teachers as they did previously. The M.O.E believed that the universities’ preferences did not correlate with the primary school teachers’ needs, thus, it insisted on having exclusive institutions for P.S.T.E, (The Public Committee 1962; Dror 1991, pp.22-24; Gotlib, et al. 1994). As a consequence, the P.S.T.E and education for secondary and high schools has been totally separated (The Public Committee 1962; Dror 1991).
2. The Israeli context

This study is concerned only with pre-service T.E and not with in-service professional development. The Israeli policy completely divides the pre-service education from the in-service professional development.

Forty-three institutions for T.E were budgeted and inspected by the M.O.E in Israel in year 2000. These institutions serve different populations, hold different conceptions, and differ in their T.E curricular emphases. All institutions are divided into four different social sectors, which comprise the main sub-groups of Israeli society. These sectors represent the structure of the M.O.E, which goes through all levels of study from kindergartens to high schools. From a wider perspective, this structure demonstrates the complexity of the Israeli society and its implication for the educational system policy.

2.1 The Israeli society and the education policy

The nature of the Israeli society influences the T.E, and the T.E.C for primary school, and reflects the complexity of Israeli society. This society is heterogeneous and struggles permanently for its identity (Peled, 1976; Matiash, 2002). Four conflicts have emerged from this reality: 1. A conflict between different cultures, mainly Eastern and Western, as Israel absorbed immigration from all continents in an intensive process that has now lasted more than hundred years, evoking problems of belonging and identity 2. A conflict between the veterans who ‘built the country’ and newcomers who insist on imprinting their influence on its formation and reshaping its nature. 3. A conflict between the ‘New Secular Jews’ who separate components of the religious identity from the components of national identity and the ‘Religious and Ultra-Orthodox Jews’, who integrate the components of religious identity with components of national identity. 4. A conflict
between the Arab-Israeli population and the Jewish-Israeli population that becomes more complicated due to the fact that those populations practice different religions—Jewish, Islamic and Christian (Beker and Ligele, 1985).

It took time while different sub-groups turned implicit expectations and hopes into explicit ones. Meanwhile, a deep frustration increased and the conflicts identified became more complicated. Conflicting interests burst out and opened a continuous social-political and cultural struggle between the different sub-groups, in terms of shaping the state’s culture and for recognition as equal participants in recreating it.

This mixture of populations, beliefs and interests, limits and prevents the creation of a common educational policy for all parts of the Israeli society (Peled, 1976). Therefore, the M.O.E is divided into four sectors: state secular schools, state religious schools, ultra orthodox schools and Arabic schools. Each sector has its own T.E system and institutions. Table 1 shows the spread of T.E institutions.

**Table 1 – Institutions for T.E** (adapted from the M.O.E report, 1999)

<table>
<thead>
<tr>
<th>State institution</th>
<th>State religious Institutions</th>
<th>Independent Institutions (Ultra-orthodox)</th>
<th>Arabic Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 colleges:</td>
<td>12 colleges:</td>
<td>2 seminaries *12 seminaries</td>
<td>2 colleges:</td>
</tr>
<tr>
<td>8 general teaching</td>
<td>11 general teaching</td>
<td></td>
<td>1 general teaching</td>
</tr>
<tr>
<td>3 technology teaching</td>
<td>1 Judaism studies</td>
<td></td>
<td>1 Islamic studies</td>
</tr>
<tr>
<td>1 art/design teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 sport teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 general teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Seminaries are institutions for teacher training that train only for teachers’ diploma and not for teachers’ graduation and diploma.
This table exposes the differences between the sectors in quantity, in type and in the institution’s level. The notion of levels will be discussed later.

As seen in Table 1, the education system in Israel invests resources mainly for the Jewish population - the secular and the religious (Peled, 1976). The Arab sector, with a population of about 1,500,000 people, has only two colleges for T.E, and two faculties in Israeli colleges, whereas the Jewish secular sector of about 4,500,000 people has 14 C.F.T.E (The M.O.E, 1999).

This data might indicate a discrimination against the Arabic population. Yet, besides the unique Arabic colleges, some C.F.T.E have either separate departments for Arabic students, and/or mixed departments. Notwithstanding, this discrimination can be explained by the fact that Israel’s first priority is to foster Jewish tradition and interests, even if it means that not all sectors are equally treated. Consequently, minorities in the country are deprived and neglected.

The Israeli social-political policy and, respectively, the Israeli educational system, tried to create a homogenous and modern society that promoted Jewish values with general humanistic, socialistic and democratic values, in order to introduce a new common Jewish-Israeli culture. The official ideology tried to reshape new Jewish immigrants, without legitimising their uniqueness, while ignoring their traditions on behalf of the ‘melting pot’ ideology. As a result, the veteran population in Israel rejected the new immigrants’ culture. This has caused a deep resistance both to Israeli leadership and to the veterans. Since the mid 1970s, the society, and accordingly, the education system have moved towards a more pluralistic, multi-cultural ideology (Peled, 1976; Matiash, 2002).
The Israeli Education System (I.E.S) did not deal only with social-political issues while designing its shape. It has been concerned with issues that other Western countries identify as important in creating an appropriate educational system in the last hundred years. Those issues relate to three basic tasks:

1. Creation of social-political integration that accompanies the emergence of national countries.
2. Preparation of young generations for a proper integration in modernization processes and task choices.
3. Increasing the population’s abilities and qualifications to use advanced technologies (Beker and Ligele, 1985).

However, the I.E.S, as a part of the social-political system, can be defined as a system that characterises under-developed countries’ policies, on the one hand, and modern and developed countries’ policies, on the other hand. In that sense, the I.E.S is unique, as it comprises those two opposite characteristics, which make the education’s mission difficult but challenging (Beker and Ligele, 1985).

This controversial situation that characterises the Israeli reality can be understood in relation to three factors:

1. The Zionist Movement’s ideology, imprinted its influence on the Israeli society by leading a political and educational vision. The Zionist movement was tolerant neither to religious orthodox and traditional needs nor to Afro-Asian new immigrants’ needs and problems. This non-tolerance orientation demonstrates an educational conflict that characterises under-developed countries. Israel, in that sense, can be defined as an under-developed country.
2. Israel’s security needs an assured preparation for a strong and efficient army, in order to enforce a modern orientation and an organised and established educational system. From this angle Israel can be characterised as a developed country, as the budget for education in Israel is high, and the system of education at all levels and frames is well established, (Beker and Ligele, 1985).

3. The cultural mixture in Israel influences the educational system as it fosters a multicultural orientation that characterises developed countries.

As the Israeli population comprises immigrants from all continents and many countries, the I.E.S has become a stage for debate, on the one hand, and an open stage for educational innovation, on the other hand. The I.E.S has become a stage for polemic, as it tries to bridge between different and even controversial educational schools of thoughts and opposed interests. The I.E.S has become an open stage for educational experiments, for integrating local thoughts and interests, and even for absorbing new ideas from the western world, and adjusting them to local needs and interests. The I.E.S policy is not compulsory; it accommodates more than one preferred direction and enables a certain freedom to schools to choose their educational ideas (ibid. Matiash, 2002).

Two examples show a shift from the main educational pattern in Israel - the ‘Kibbutz’ pattern and the religious schools’ pattern. The ‘Kibbutz’ educational policy has always been open to adopting and adapting new educational theories such as active learning, much more than the regular state schools. Furthermore, the ‘Kibbutz’ environment supported its schools, and was always ready to invest money in education, to a greater extent than the state system. Therefore, its educational pattern became more advanced than the dominant pattern in Israel. As to the religious schools’ educational policy
(orthodox or traditional), it developed in a different direction than the ‘Kibbutz’. The religious schools’ educational policy never opened its gates to new educational trends. It has kept traditional ways of learning, brought from the countries of origin, and remained untouched by new educational thoughts. The religious congregation supported its schools, and was ready to invest money in education in the same as the ‘Kibbutz’s’ congregation did, so those schools could improve their educational system much more than the state system could improve its system.

This reveals a contradiction between the efforts to create a unified educational policy for all sectors, and the readiness to allow unique directions within the sectors’ programs. This contradiction can be explained either by the fact that the educational policy is not yet solidified, and therefore different sectors develop in different directions. It can also be explained as the M.O.E’s intended policy. According to this explanation, the M.O.E sets clear educational borders and directions to all sectors. However, at the same time it is open enough to allow controlled autonomy within sectors, as it is aware of their special needs and desires.

The next section focuses on the Israeli T.E, as a system that reflects the M.O.E’s policy.

2.2 T.E in Israel

The Israeli T.E system reached its peak in the year 2000, as the cycle of the ‘Academisation process’ was accomplished. Then, most ‘Seminaries’ became C.F.T.E, and all students have completed, for the first time, a direct course of study for the B.Ed degree, based on the M.O.E’s recommendations (The M.O.E, 1997; Ben Peretz, 2001b).
It took about a hundred years to reach that point. This period leans towards a constant eagerness for change (Rachimi, 1995). It can be divided into three main periods: The first phase started in 1904, when the first 'Seminaries' in Israel were founded and ended in 1948, as the State of Israel was established. The second phase lasted until 1981, when the process of 'Academisation' started spreading and influencing the traditional Seminaries for T.E. In both periods T.E was concerned mainly with designing the shape of the Israeli society. Both phases adopted characteristics of the humanistic approach for T.E. Furthermore, in both stages graduates ended with only a teachers’ diploma (Dror, 1991). Eight external committees were appointed between 1937 and 1981, seven during the second period, after the establishment of the Israeli state, in order to improve structural, organizational and pedagogical problems concerning T.E (Rachimi, 1995). These changes mostly indicate an additional or supplementary model by lengthening years of study and expanding or reducing disciplines’ themes, rather than a radical model. The expansion model represents an answer to demographic concerns, whereas the reductionist model reflects a pure educational call for improvement. Yet, the most significant change reflects a change in educational beliefs towards a more academic T.E.

The ninth committee, since 1981 and onwards, has opened the third phase – the 'Academisation period'. T.E standards, in this phase, have drastically changed. An academic policy was set, and a bachelor’s degree was offered to graduates in addition to the recognised teachers’ diploma (Dror, 1991; Rachimi, 1995).

The 'Academisation process' aimed to increase teachers’ knowledge and competences, by: meticulous sorting and more rigorous selection processes; increasing the academic level of the staff teachers. Another two steps were – lengthening the period of study from
three to four years, and designing an academic so that graduates could get an academic degree (B.Ed), on top of the regular ‘Senior Teacher Diploma’ (Kfir, et al. 1994, p. 30; Kfir, et al. 1998). This reform opened a period when a real attempt was made to equalise the status of teachers who are trained for primary schools in C.F.T.E, with those who are trained for high schools in universities. So, College’s graduates with high marks would be accepted into higher studies in universities (Dror, 1991).

Though the ‘Academisation’ policy was officially recognised and carried out at the end of 1981, roots of an academic orientation could be traced already in the 1930s. Teacher educators, then, criticised the common ‘Humanistic’ policy for emphasising pedagogical and practical training rather than academic studies (Dror, 1991). These criticisms exposed an imminent dilemma in the Israeli T.E system regarding the preferred approach for T.E — the ‘Humanistic’ approach versus the 'Academic’ one. The question of whether academic-theoretical education studies are the starting point and the aim of study, or whether rational practical concerns are the starting point and the aim of study, continues to occupy Israeli scholars and policy makers (Peled, 1976; Yaffe, 1979; Dan, 1983; Dror, 1991). Like scholars and policy makers in other countries (Reid, 1978), Yaffe (1979) and Dan (1983), Israeli educational leaders, protested against a pure ‘Academisation process’ that emphasises the academic degree. Yaffe states

"Teachers should be scholarly and know much, but the academic degree in itself assures nothing about the teacher training. An Academic degree is needed in order to signify that teachers are 'educated', but in order to fulfill properly their task as teachers they need an 'academic training level'" (ibid. p. 30), Translated from Hebrew).
Dan, who was in favor of the ‘Humanistic’ approach, claims:

"The first fundamental and distinguished question is . . . Is there a need for an academic degree in order to be a teacher in the class’ or maybe there is a need in such a degree only if teachers need to teach certain subject matters in the higher grades?" (Dan, 1983, p.22, Translated from Hebrew)

This dilemma even extended, as ‘Academic’ approaches from other countries penetrated to Israel in the mid 1950s, and reinforced the tendency to integrate the ‘Academic’ approach into the T.E system (Dror, 1991).

It took 50 years, since this criticism was first heard in the 1930s, to develop an agreed conception for P.S.T.E. During that period nine committees, appointed by the M.O.E, had a mandate to change the existing ‘Humanistic’ policy, which emphasised studies such as history of education and its sociology, pedagogical studies and practice, and developing a more academic policy. The committees’ recommendations were never fully fulfilled; changes were not fully implemented, and did not yield satisfactory results (Yonai, 1991; Kfir and Ariav 2004).

Dushkin and Yoffe’s committee, in the early 1960s, recommended integrating academic studies into the educational-‘Humanistic’ approach, and excluded the possibility of integrating P.S.T.E into the universities (The Public Committee 1962; Dror, 1991; Gotlib, et al. 1994). Praver’s committee (1963-5) offered reform in the schools’ structure. It suggested changing the structure of the primary and the high schools by establishing middle schools. It suggested a structure of k -6 grades as primary schools, instead of k – 8 grades; 7-9 grades as secondary schools; and, 10-12 grades as high schools. The M.O.E (1965) offered that Universities would be responsible for training secondary and high schools teachers.
The committees' work did not stop, as the dissatisfaction with the P.S.T.E never ended. In the 1970s Yoffe's committee recommended a three-year study instead of two and an additional year for internship; a clear academic orientation; specialization studies; and a bachelor's degree for graduates. But, it stressed the need to keep an educational atmosphere in the colleges, an organic connection between the academic studies and the training and between theory and practice. It recommended turning ‘Seminaries’ into C.F.T.E. This recommendation was the starting point for the ‘Academisation process’ ten years later (The M.O.E, 1971).

In December 1981, the M.O.E and the C.F.H.E approved the ‘Academisation process’. Internal conflicts and struggles were left behind as the ‘Academisation process’ progressed and towards the second half of the 1990s it widened and deepened. It widened as more and more ‘Seminaries’ turned into C.F.T.E. It deepened in three ways. Colleges got accreditation to: 1. Open new specialisations 2. Integrate into the curricula new courses such as: methodological courses, pro-seminaries and seminars, and 3. Establish evaluation and research units (The M.O.E, 1997). As the ‘Academisation process’ developed the number of T.E state institutions (not including the Ultra-orthodox and the Arabic institutions, see p. 6) decreased from 62 in 1967 to 28 in 1999 (Gotlib, et al. 1994; Rachimi, 1995; The M.O.E, 1999; Ben-Peretz, 2001b).

In mid 1990s new competitors applied for accreditation as teacher trainers undermined the unique status of the C.F.T.E as the exclusive institution for P.S.T.E. This move was unexpected and threatening. The threat came from colleges that were established in Israel for other reasons than T.E, as part of the C.F.H.E policy to foster the establishment of colleges for higher education, since the 1980s. The C.F.T.E were the first to be established in the early 1980s as part of this policy. In the late 1990s some of the new
colleges espoused an interest in opening T.E units. So far, the M.O.E and the C.F.H.E have rejected this initiative (Hofman, 2000). Ben-Peretz’s report (2001b) recommended that this initiative would be thoroughly and carefully examined, subjected to the M.O.E’s and the C.F.H.E interests.

Recently, the M.O.E has appointed a new committee (Dovrat, 2004), in order to develop a comprehensive policy for the I.E.S. Its recommendations have threatened the whole education system, but mainly the T.E system. The recommendations are now to be further elaborated into practical steps. Then, they will be given to negotiation with different interest sectors and the professional unions. Their full acceptance may completely change the T.E system.

2.3 The Israeli T.E.C

The ‘Academisation process’ has changed the T.E.C, according to an agreed framework, called ‘Guidelines’ (The M.O.E, 1981), and consequently their culture (Keinan et al. 1999). C.F.T.E’s culture encourages new academic knowledge creation, besides the teachers’ preparation for schoolwork. In fact, the academic culture has only a limited impact on the traditional Seminary’s culture (ibid.).

About 55% of the whole T.E.C recommended in the ‘Guidelines’ is devoted to disciplinary studies, and about 45% to educational and professional studies. In universities the proportion changes and 75% of the total program is devoted to disciplines studies and the rest to educational and professional studies (Zuzovsky, 1996). The universities’ T.E.C is separated from the disciplinary academic studies curriculum and consequently the graduates’ degree is separated from the ‘Teaching Diploma’. College
diplomas are associated, as the curricula are integrated. Colleges graduates first receive a 'Senior Teaching Diploma' that enables them to get into internship practice, and after completing internship duties and the academic studies they receive a B.Ed degree (ibid.).

A study by Kfir, et al. (1998) examines changes in colleges and the whole education system as a result of the 'Academisation process' and the 'Guidelines'. Its research question refers to changes that have occurred in the C.F.T.E's curricula, mainly in academic studies, as the transition from 'Seminaries' to the accredited 'Colleges' progressed, and what has happened since then (ibid. p. 64).

This research found that the 'Guidelines': 1. Formed a strict model and caused many essential changes in the traditional T.E.C, from five aspects: structure and sequence; flexibility and choice; variety of contents and representation of the disciplines; the scientific approach; foundation studies and support studies. 2. Reinforced academic studies and theoretic knowledge, and reflected a belief that teacher's professionalism means mainly mastering discipline knowledge (ibid. pp. 88-106).

These 'Guidelines' were used to design a new curriculum pattern for C.F.T.E, without presenting any rationale that explained the whole conception of the new suggested curriculum (Kfir, et al. 1997). They set only a framework that included: aims, principles, needed directions, scope of study hours, student's duties and a list of courses that ought to be included in the curriculum (The M.O.E, 1981; 1997). Concurrently, they decreased the College's responsibility for the whole curriculum and affected their autonomy. From that stage colleges could only design the pedagogical part of the curriculum - theoretical and practical studies, according to their educational belief (Dan, 1983).
The T.E.C include four main components: general academic courses; discipline courses for proficiency; academic educational courses + foundations; pedagogical counseling and practical experiencing (The M.O.E, 1997). The suggested curriculum for the primary school departments totals from 110 to 120 hours, in the four years of study + a year internship. 48 hours are dedicated to academic disciplinary studies, including specialization training; about 30 hours are dedicated to academic educational courses + 10 hours to foundations, including Jewish studies and sports; another 10-12 hours are devoted to pedagogical counseling, and 18 hours are dedicated to practical experiencing. Educational studies are mostly compulsory, and allow little freedom of choice. The disciplinary studies allow the choice of a preferred discipline, but once the discipline is chosen; there is not much choice between courses. This program has been working in this way since the 'Academisation process' was presented (The 'Guidelines', 1981).

Only in the early 1990s, ten years after the academic reform started, the need to re-emphasize pedagogical studies arose (Faigin, 1991; Kfir, et al. 1997; The M.O.E, 1997). Colleges have realised that the academic reform needed to be integrated with a pedagogical reform and practical studies. This reaction was a consequence of internal evolution in colleges and external influence on T.E, concerning new approaches to thinking and learning. In the mid 1990s, criticisms among educators and educational policy makers grew as they realised that the 'Guidelines' emphasise a curricular change that does not consider a serious teacher's training improvement. It was realised that the 'Guidelines' have disrupted the balance between pure academic studies, the educational studies and the professional studies and practice. Furthermore they have increased separation between the different parts of the T.E.C; disconnectedness among courses and a sequencing problem; and have emphasised academic disciplinary studies and
specialisation at the cost of the educational-pedagogical studies (Faigin, 1991; Kfir, et al. 1997; The M.O.E, 1997).

In November 1994, thirteen years after the ‘Guidelines’ were first presented, the ‘Unit of T.E’ in the M.O.E declared, for the first time, a recommended rationale for the academic reform, as a platform for deliberation in the M.O.E. It declared:

“The major program for developing an academic system for teacher training is based on the assumption that a teacher in Israel . . . has to be academically educated . . . The teaching profession, in its professional concept, which is adapted to the reality of knowledge development and the ways to attain this knowledge, sees an educated teacher, skilled to attain knowledge, to be updated, and to adapt himself to the changing world.

It continues:

His main task will be directing and supporting the students in using all kind of information, distinguished from impartation of knowledge. Teachers are also educators that have to support the development of their students, as human beings and friends in the society and the community. Therefore they need to acquire social and valued tools and skills in addition to their teaching skills” (The M.O.E, 1994).

This time the rationale presented an advanced conception of the ‘Guidelines’ that dealt with issues such as: structural and academic development in teacher training institutions; opening new routes for specialisation, relating to relevant educational needs; possible adjustments between curriculum and means. It presented an option for a modular and flexible design, which facilitated semester courses, summer studies, and enabled exemptions and fostered specialisation studies, and internship (ibid.).

In the late 1990s, the M.O.E (1997) admitted that the ‘Academisation process’ had reached the desired balance between the theoretical and practical parts of the T.E.C, but did not yet
reach the desired integration between these parts, which is needed for quality teaching in
the 21st century (Faigin, 1991; Kfir, et al. 1997; The M.O.E, 1997). Thus, the M.O.E has
insisted on ensuring the balance between the academic and the pedagogical studies, and
even enhancing a more integrated, sequential and coherent curriculum (Faigin, 1991; The
M.O.E, 1997). Recommendations have pointed to the need for enhancing: pedagogical
content knowledge; connectedness to schools' reality; flexibility and personal choice;
cultural and humanistic foundation studies; interdisciplinary studies; comprehensive
disciplinary and educational studies; focus on the disciplines' structure of knowledge and
possible meaningful organising principles; and ethnographic and interpretive
methodologies studies (not yet experiencing any kind of research), (Faigin, 1991).

A following report (Faigin and Ariav, 1996) shows a significant improvement in
sequencing the whole T.E.C, but not in sequencing courses in specific curricular domains.
It shows a better integration, but no interdisciplinary studies. It reveals only a partial
improvement in the extent of flexibility and personal choice; no real change in foundation
studies; much more comprehensive disciplinary and educational studies, but only a vague
focus on the disciplines’ structure of knowledge and possible meaningful organising
principles. However, scientific methodology studies and research are limited. They are
academic quantitative focused, yet still neglect the qualitative approach. The report has
noticed that T.E.C for primary schools has significantly changed in comparison with the
T.E.C for middle schools.

In the year 2000, as the 'Academisation process’ reached its official main aims – almost
all Seminaries’ turned to C.F.T.E and all graduates finished their study as B.Ed. Though
all Colleges are still obliged to the use the ‘Guidelines’, they show dissatisfaction with
the twenty-year-old T.E conception, and stress the need for adjusting the Historical ‘Guidelines’ to the new millennium needs. The M.O.E and the C.F.H.E have appointed a new committee, conducted by Rocheli, to develop a more integrative, rich and flexible curriculum (Rocheli, 2001), but the Committee’s recommendations were not approved. Consequently, the T.E.C in different C.F.T.E demonstrate variations based on the same foundations (Fucks, 2000). Yet, the problematic situation does not disturb C.F.T.E’s efforts to enhance M.Ed. programs, subjected to the C.F.H.E requirements (Ben-Peretz, 2001b).

The T.E is indirectly influenced by innovations presented for the general primary school education system. These cause minimal changes in the T.E.C, mainly adding new courses that concern these new tendencies, or changing the foci of existing courses. Still, there is no evidence that these changes deeply influence the T.E.C rationale and educational beliefs that teacher educators hold (Fucks, 2000).

As seen from the above-mentioned T.E chronicle the Israeli T.E system has three unique characteristics: a. A four year strict graduating route, mainly for under-graduated students; b. T.E.C that are partial approved by the M.O.E, according to predetermined directives (the disciplinary part) and partial determined by the Colleges/Departments (the educational and the practical parts). c. The M.O.E and Colleges award the graduates with a B.Ed degree and a teacher’s certificate, considering their actual results in the College. Still, the problems the Israeli system faces are similar to problems T.E systems in west countries face: a constant debate regarding the desired T.E’s model; ongoing reforms and changes. Additionally, the dilemma ‘Academisation’ versus ‘Humanisation’, or in its worldwide term, T.T versus T.E, underpins the Israeli and the west countries’ discourse.
3. Rationale

Given the current situation in Israel, this study aims to generate conceptual understandings relevant to needs and aspirations of the education systems in general and, in particular, to T.E systems. As the curriculum represents beliefs, ideologies, paradigms, attitudes, approaches, references, it reflects a whole range of influences on the curriculum – educational influences on the one hand and political, social, and economic on the other.

The importance of the study derives very much from its timing – the completion of the ‘Academisation process’ as a process of change is about to take place, and the pendulum moves towards a need to revise the ‘Guidelines’ to meet new educational directions. This is the right time for serious ‘mind-reckoning’ and evaluation towards designing new advanced T.E.C reflecting current educational policy.

This study combines two main bodies of knowledge and two central issues in education and the curriculum.

- **The study of teacher education**, since its formal beginning in the last century in U.S.A and then in UK, has always been under debate and dispute (Kliebard, 1992). The debate can be explained by three factors: 1. T.E is quite a new formal phenomenon 2. Teaching is a complicated profession that requires academic competence and knowledge and class management competencies 3. T.E is influenced by educational and political pressures, which do not necessarily complement each other. The combination of these three factors reinforces the debate, makes T.E complicated but challenging, and invites a study on the nature of T.E.

- **The study of curriculum** is defined as a body of knowledge that deals with curriculum theory, curriculum planning, curriculum implementation and curriculum evaluation.
Curriculum can be interpreted in a narrow sense or in a wide one, and its definitions relate to interpreters’ purposes and educational perceptions.

T.E.C reflects the influences of the three factors that are mentioned. The links between curriculum and teacher education lead to an actual relevant question for curriculum in general and in particular for T.E – the question of the nature of knowledge and knowing. As teacher education relates to two kinds of knowledge – theoretical knowledge and practical knowledge and is ambiguous about which knowledge ought to be emphasised in T.E. This makes for a context in which significant debate is promoted.

Many studies have been carried out on T.E, concentrating on links between theoretical and practical knowledge. Many studies have been carried out on curriculum planning, concentrating on subject-matters issues. Some examine specific influences, such as social influences on T.E.C.

The present study opens a broad picture for better understanding contextual ecology of the T.E.C’s development. It will:

1. Define the actual factors that influence the primary school departments’ T.E.C
2. Discuss common approaches to the T.E, stemming from the actual T.E.C
3. Indicate areas of commonality and difference in the T.E.C
4. Expose concrete dilemmas, originated in different educational beliefs concerning the T.E.C’s desired nature.
4. Methodology

The study uses two complementary method approaches - a survey and a case study. It was carried out in five steps:

1. A piloting step - the research tools, a questionnaire and two kinds of semi-structured interviews, one presented to the Heads of Departments (H.O.D), and one to other functionaries, will be piloted in the College where the researcher works, and will be refined according to the received comments.

2. A dissemination step - the questionnaire will be sent to heads of primary school departments in Israeli state-secular C.F.T.E.

3. A first analysis step - after receiving the questionnaires back, they will be analysed as to answer the study's aims.

4. A step of choosing and carrying out a case study - the case study chosen will represent best the complexity of the T.E.C's development, according to the questionnaire's results. It will include: interviews with the current and former H.O.D and other functionaries at the College level, who are involved in the T.E.C's development; relevant document gathering, and their systematical analysis.

5. A step of data triangulation - all results will be compared, as to develop a comprehensive picture of the contextual ecology that influences the T.E.C's development.
Chapter Two  

1. Curriculum in general

1.1 The nature of curriculum

This chapter clarifies the term curriculum, and its main concerns. It elaborates on the rich variety of definitions that present different perspectives and meanings, and the different conceptual frameworks that enable analysing curriculum in general and T.E.C in Israeli C.F.T.E in particular. Yet, it emphasises the inevitable debate that emerges from the multifaceted nature of the curriculum.

The term curriculum derives from the Latin word ‘currure’ and has been used since the 16th century (Schrag, 1992). ‘Currure’ has two different meanings. The first is a track to follow (Barrow, 1984; Schrag, 1992; Shremer, 1993; Guri-Rosenblit, 1996), or a course of study (Barrow, 1984; Connelly and Clandinin, 1988; Connelly and Lantz, 1991). This meaning represents a prescriptive dimension of the curriculum, concerning what needs to be done in order to achieve educational purposes (Barrow, 1984). The other meaning regards ‘currure’ as a process of doing (Pinar, 1975, in: Doll, 1993; Lawton, 1983), and represents a descriptive dimension, which illuminates what happens or might happen while operating the curriculum (Barrow, 1984). These two meanings indicate the built in complexity and ambiguity within the field. Yet, the field gets more complicated because curriculum is influenced by diverse factors. This study focuses particularly on factors that influence the T.E.C. These will be examined later in the literature review.

It is argued that curricula are concerned with two kinds of questions:

1. Substantial questions that refer to what knowledge is most worth studying, and what for (Walker, 1975; Doyle, 1992);
2. Syntactic questions that refer to how curricula are structured and organised (Doyle, 1992).

Aristotle raised substantial issues in the fourth century B.C. But, these contested questions are still relevant nowadays. Both questions got temporary answers, which have changed in the course of history, as a result of different influencing factors (Walker, 1975; Zais, 1976; Kliebard, 1992; Lofthouse, et al., 1995; Reid, 1978; 1997). The next section will, therefore, consider some of these influencing factors.

1.2 Factors that influence the curriculum

The answers given to the substantial and the syntactic questions demonstrate the non-obligatory meaning of curriculum (Goodlad and Su, 1992; Eisner, 1979). They indicate that curricula are influenced by both internal and external concerns and interests (Stengel, 1997; Doyle, 1992; Foshay, 1994, in: Stengel, 1997; Kelly, 1999; Kress, 2000).

Internal considerations, namely internal influencing factors, refer to philosophical and psychological trends and personal beliefs that influence educational theories. External interests and concerns, namely external influencing factors refer to socio-political forces, given to contextual, situated and local pressures (Heywood, 1984; Resnick and Resnick, 1985; King, 1988; Fullan, 1991; Valenshtein, 1996; Reid, 1997; Stark and Lattuca, 1997; Rosenmund, 2000; Levine and Nevo, 2000). Political influences demonstrate preferred public socio-cultural traditions that affect educational purposes (Dewey, 1929; Kliebard, 1992). These refer to "bodies of knowledge; arts; skills; languages; conventions; and values" (Stenhouse, 1975, p. 6). Both, the internal and the external influencing factors create a multifaceted educational policy that combines practical and ideological-theoretical aspects (Elmore and Sykes, 1992). These aspects turn curricula to be reactive,
and weaken their coherence (Barrow, 1984; Stenhouse 1975; Tanner and Tanner, 1975; Ariav, 1997).

The substantial and the syntactic questions form a basis for practical curricula planning (Guri-Rosenblit, 1996). Additionally, since the late 19th century, they have contributed to the development of a new theoretical "field of study" that focused on systematically inquiring into different aspects of curricula, defining what influences them, and developing curricular theory, theoretical paradigms and models (Walker, 1975; Stenhouse, 1975; Zais, 1976; Johnson, 1981; Guri-Rosenblit, 1996; Flinders and Thorenton 1997).

The development of practical and theoretical curricular studies during the 20th century reinforces the complexity and ambiguity of the curriculum area (Barrow, 1984; Jackson, 1979). It reveals diverse conceptions, shows dynamic changes, and intensive debate concerning essences, contents (Tanner & Tanner, 1975; Barrow, 1984; Shremer, 1993; Guri-Rosenblit, 1996; Marsh, 1997).

This study is concerned with curriculum as an academic field of study. It examines factors that influence the shaping of the T.E.C in Israeli Colleges for T.E. Categorisation of the rich variety of curriculum's definitions will reveal factors that influence the nature of curriculum. This is discussed in the next section.

1.3 Definitions of curriculum

Curriculum definitions demonstrate the impact of different and even conflicting influencing factors, and reveal educational dilemmas that show the "spectre of dualism . . . between thought and actions ... subject matter and instruction ... ends and means"
The definitions expose varied meanings of curriculum (Kerr, 1968; Beachamp, 1971; Doyle, 1992; Goodlad, 1994; Galton, 1998). They explain the "rich variety of responses over the purposes, content, organisation and implementation of curriculum for the last two millennia" concerning "The 'what', 'why', and 'how' questions" (Cuban, 1992, p. 221). The varied meanings cause different curricula frameworks and applications (Zais, 1976; Kelly, 1999; Marsh, 1997). Curriculum frameworks include basic components: purposes, contents, organisation and products. These components can be differently weight and organised, and can have different mutual relations (Ariav, 1997).

Curricular scholars believe that the absence of an agreed definition enriches the field of curriculum by enabling diverse foci (Connelly and Clandinin, 1988; Connelly and Lantz, 1991; Cuban, 1992), which is shown in the next table. Yet, they agree that a fixed and obligatory definition is inimical to the spirit of science (Guri-Rosenblit, 1996; Pinar et al. 1995).

Changes of curricula’s foci, resulting from changes of curriculum definitions, caused by different influencing factors may influence the T.E.C shaping. This aspect will be examined in this study.
Table 2 – Typology of curriculum definitions

<table>
<thead>
<tr>
<th></th>
<th>Mechanistic definitions</th>
<th>Developmental definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contents</td>
<td>products</td>
</tr>
<tr>
<td>Connelly and Lantz (1991)</td>
<td></td>
<td>Mean-ends</td>
</tr>
<tr>
<td>Beachamp (1971)</td>
<td></td>
<td>A synonym to planning instruction</td>
</tr>
<tr>
<td>Tanner and Tanner (1975)</td>
<td>• A production system</td>
<td>A plan for learning</td>
</tr>
<tr>
<td>Zais (1976)</td>
<td>A course content</td>
<td>Structured series of intended learning outcomes</td>
</tr>
<tr>
<td>Goodlad and Su (1992)</td>
<td>Bringing about behavioural changes in learners as a result of their schooling</td>
<td>Plan of institutionalised education</td>
</tr>
<tr>
<td>Marsh (1997)</td>
<td>Content</td>
<td>• Product</td>
</tr>
</tbody>
</table>
As seen from table 2, there are three categories of definitions - mechanistic, developmental and theoretical. The mechanistic category refers to purposes, behavioural objectives, and obligatory contents - concepts, facts, theories and outcomes. The developmental category is concerned with the meaning of learning, and focuses on learners' experiences. Most types can be organised under these two categories that are equivalent to Connelly and Lantz (1991) 'means-ends' and 'existential – personal' types. Only three types of definitions, mentioned by Tanner and Tanner (1975), belong to the third category – the theoretical one, and focus on philosophical, cultural and human beings’ nature of thought.

The table shows that all scholars considered learners’ action and experience, which can be conceived as 'existential–personal' developmental orientation. Some types refer generally to the action or the experiencing (Beachamp, 1971; Tanner and Tanner, 1975; Zais, 1976). Others emphasise schools' direct responsibility for this experiencing (Zais, 1976; Goodlad and Su, 1992; Marsh, 1997). Marsh (ibid.) relates also to indirect influences of schooling. The table shows that all scholars refer to curriculum as a plan or as a program, and it can be conceived as a 'means-ends' mechanistic orientation. Eight types of definitions relate to either content or product (Tanner and Tanner, 1975; Zais, 1976; Marsh, 1997). These definitions belong to the 'means-ends' mechanistic orientation. Another two types refer to the actual learning experiences and their impact on the learners (Zais, 1976; Goodlad and Su, 1992). These can be conceived as 'existential – personal' developmental orientation. The theoretical category includes Tanner and Tanner’s (1975) three definitions that point up possible significance of the curriculum as abstract, general and non-pragmatic attributes.
These definitions and others can be classified according to: beliefs, educational theories, directions, levels, scopes, and areas of focus that they reflect (Johnson, 1967; Lawton, 1983; Zohar, 1996). Definitions differ as a consequence of beliefs that underlie them. They can be subject oriented, child development oriented or society oriented (Goodlad and Su, 1992; Tanner and Tanner, 1975). Accordingly, they portray different educational theories, concerning: socio-philosophic views of educators, social conditions, conceptions of: knowledge, of the learner, and so forth (Tanner and Tanner, 1975). They might foster different general intentions - procedural, descriptive or programmatic (Johnson, 1967; Scheffler, 1960, in: Tanner and Tanner, 1975).

The definitions appear at five reference levels: the policy makers' upper level - ideal and formal levels, the actual learning level – perceived and operational levels, and the learners themselves - experimental levels (Goodlad et al, 1979). The ideal level sets the official demand and expectations from the educational system. The formal level may dictate national procedures determined for achieving the demands and expectations, for example by a ‘National curriculum’. The actual learning level refers to the implementation of the schools’ policy and teachers’ interpretations. The learners’ level refers to what learners actually learn.

Definitions differ in their scope, which can be either narrow and partial or broad and comprehensive. This study is interested in a broad and comprehensive definition. Kelly’s definition "Curriculum is the totality of the experiences the pupil has as a result of the provision made" (1999, p. 7) is too general and vague.

The study accepts three complementary definitions: Walker’s, Levine’s Stark and Lattuca’s. Walker’s definition offers
“The phenomenon of curriculum includes all those activities and enterprises in which curricula are planned, created, adopted, presented, experienced, criticises, attacked, defended, and evaluated, as well as the objects ... such as textbooks, apparatus and equipment, schedules, teachers guides ... These actual objects, events and processes (influence) the phenomena of curriculum (and) should be interpreted to include the plans, intentions, hopes, fears, dreams and the like agents such as teachers, students and curriculum developers or policy-makers have” (1975, p. 247).

This definition focuses on factors that influence the curriculum. It regards actual learning processes as part of the curriculum, leaves room for contextual interpretations, and for teachers, students, scholars and policy-makers who influence curriculum shaping.

Levine’s defines:

Curriculum is a “Conceptual framework of all pedagogical processes that take place in schools, and reflect schools’ educational perception, in regard with human beings, knowledge, and possible acquiring. It sets outlines for educational strategies and objectives, choosing and organising significant instruction contents, designing the nature of teaching-learning processes, defining teachers’ and learners’ roles and doing in the learning environment” (1998, p. 149).

This definition offers a conceptual framework for pedagogical processes that demonstrate the mutual relations between educational perceptions and curricular components. It considers teachers and learners as influencing factors, who are involved in the curriculum actual shaping.

Stark and Lattuca’s definition (1997) define curriculum as an “academic plan”, which “its intension is to foster students’ academic development” (ibid, p.10). They offer that curriculum is “A plan or any endeavour (that) incorporates a total blueprint for action, including purposes, activities, and ways of measuring success” (ibid, p 9). The ‘academic plan’ serves as a curriculum template suitable “for a course, a program of
courses, or the entire institution", and requires "attention to the importance of the context and learners served" (ibid, p. 21). Besides, it includes eight components: purpose, content, sequence, learners, instructional processes, instructional resources, evaluation, and adjustment, which "promote clarity about curriculum influences" (ibid, p. 14). Knowledge is another curricular component that needs to be considered as part of the academic plan. These components refer to the basic questions, earlier mentioned, curriculum is concerned with: why? What? and how?

The "academic plan" recognises the interdependency between the curriculum and external, organisational and internal influences. It enables the creation of an "environmental context" that interacts with the curriculum (Stark and Lattuca, 1997, p. 20). This definition is comprehensive and includes the main variables for curriculum developing, implementing, evaluating and reshaping. It provides "a conceptual umbrella" for curricula developed in various areas (ibid, p. 21). Current conceptual frameworks specify the influencing factors, as: ideological and political, social values and moral beliefs, and holistic and integrative educational perceptions (Ben-Peretz, 2001a).

In summary, this study chose a comprehensive definition that encompasses the curriculum's agreed components, and the environmental, external and internal factors that influence it, as to create a wide basis for understanding the complexity and the challenge of curriculum's development. The next section discusses the educational theories' influence on the nature of curriculum in the course of history, in order to better understand curriculum in general and T.E.C in particular. It elaborates on the dependence of these influencing factors on contextual societal-cultural and political realities.

32
2. Curriculum Development in the course of history

2.1 Historical perspective in general

This chapter widens the angle of curricular considerations, and gets deeper into historical perspectives and approaches of curriculum development, presented as metaphors and as models. Moreover, it examines historical and current educational beliefs concerning curriculum development in general and relevant implications for T.E.C development.

Curriculum is not a natural phenomenon; it represents societal structures that influence contents and teaching-learning processes (Goodson, 1991; Stark and Lattuca, 1997). Understanding the history of curriculum development enables scholars to examine curriculum initiatives and their evolution. It enables a thorough examination of what affects curricular changes, regarding: traditions, approaches and fashions; emphases; preferences of organisations; changing of subjects etc, which have appeared and reappeared, or appeared and disappeared, and analyse them. Understanding the history of curriculum development also helps to understand what influences contemporary matters in curriculum change (Goodlad and Su, 1992; Ariav, 1997; Marsh, 1997). The historical perspective will enable the author to analyse the interdependency between the T.E.C and the factors that influence them.

2.2 Historical perspective - three metaphors of curricular development

Changes caused by the dynamic relations between different educational beliefs have increased the complexity and the ambiguity of curriculum development time out of mind. These changes indicate widespread educational dilemmas: disciplinary versus integrative learning; learning as a social need versus an individual learning process; learning as
knowledge impartation, focused on contents and products versus learning as knowledge construction, focused on the personal learning processes; learning as development of specific skills and competencies versus learning as learners' wholeness development etc. (Burton, et al. 2001). These dilemmas represent educational traditions that reappear in the course of history, and demonstrate competing relations that prevented their meeting, or complementary relations that encouraged their interactive operation (Ariav, 1997).

Miel (1964) opens an interesting perspective for historical curriculum analysis, when offering a tool of three metaphors. The metaphors enable identification of modes introducing new / renewed educational theories, which represent educational traditions into the curriculum, thus illuminating aspects of curriculum development conduct.

The "Movement down a long road" metaphor (ibid. p. 358) identified two traditions that replace each other: a 'from - to' mode, and an either-or mode. New plans replace old ones in a continuous move forwards from one emphasis to another emphasis. Old approaches reappear, but are regarded as new, as nothing was learnt from their previous appearance. For example, in the 1960s disciplinary focus reappeared as a preferred 'new fashion' that replaced the integrative focus (Bruner, 1965; Eden, 1988). The "swing of the pendulum" metaphor (ibid. pp. 360-361) identified a recursive trend, back and forth way of thinking, which causes an interchange between opposed leading approaches, without significant learning or development from the approaches' advantages or disadvantages. The "upward and outward spiral" metaphor (ibid. pp. 361-362) emphasises an on going renewal. It takes into account relevant 'lessons' from previous experience, while progressing.
These metaphors exemplify that educational theories, embedded in societal-political circumstances, differently refer to educational matters. The way educational theories interact, competitively or complementarily, influences the outcomes in the curriculum. The metaphors create a tool for analysing historical curricular changes, and for revealing factors that influence curricula development, including the T.E.C.

2.3 Historical perspective - models of curricular development

During the last fifty years a growth of interest in schooling and education has occurred. There has been a significant ‘evolution’ in the field of curriculum development, and an emergence of different curricular models, influenced by conflicting societal-political, cultural schools of thoughts, educational theories and personal beliefs (Doll, 1993). The ‘evolution’ refers to three periods - the pre-modern, modern and post-modern. Curriculum in the pre-modern period, which is less relevant to this study, was influenced by a determined epistemology that conceived knowledge as absolute truth, and by socio-cultural and political factors, which limited learning possibilities. The aim of learning was ‘discovering’ everlasting known truths. Modern curriculum since the 1950s has been positivist in nature. Its epistemological justification relies on scientific inquiry that creates linear models, and aims to give right answers to societal-political needs and interests. Post-modern period Curriculum, mainly since the 1970s, except Dewey’s post modernist theory that goes back to the 1900s, is influenced by a relativistic epistemological conception. It aims at developing autonomous and critical human beings that are able to combine their individual existence with the need to be members of the society; hence knowledge is conceived as temporary and given to interpretations (ibid.). Curriculum, therefore, needs to be open-ended and flexible.
Posner (1998) offers a systematic tool for analysing curricular models. Posner used the tool for a comprehensive analysis of modern period curricular models, but this tool can be used as a theoretical platform for analysing other models, including T.E.C. Posner examines two approaches for curriculum development - 'a technical production' approach and 'a critical' approach represented in three distinctive models:

1. 'Procedural', which focuses on curricula development as defining steps to follow;
2. 'Descriptive', which focuses on ways people actually develop curricula, and;
3. 'Conceptual', which concentrates on defining curricular principles, components and their mutual relations (ibid.).

Different models, in accordance with these approaches and emphasises, give different answers to different curriculum development matters. Models that demonstrate proximity to the 'technical production' approach focus on concrete matters, and tend to offer means-ends or competencies-based curriculum. Those that demonstrate proximity to the 'critical' approach focus on insubstantial matters, such as awareness, and offer 'open' and flexible curriculum. These two approaches and the derivatives addressed below present evolution in curriculum development in the course of history, as a result of educational theories' and of societal-political forces' changes (ibid.). These approaches have influenced the history of T.E.C development.

2.3.1 Models of curriculum - the 'technical production' approach

This approach refers to schooling as an effective 'production system', motivated by a 'means-ends rationale'. Therefore, curriculum is conceived as a linear sequence of experiences that aims at attaining "intended learning outcomes", for set in advance objectives, "objectively and, if possible, scientifically" developed (Posner, 1998, pp. 81-82). Technical models principally offer 'ideology free approach', which, if believed,
enables schools to determine their own aims and means (ibid.). This has to be examined, because ‘ideology free’ is an ideological approach.

2.3.1.1 Procedural models

Tyler (1949) represents best the ‘technical production’ approach and procedural models (Posner, 1998; Kliebard, 1970). Tyler’s model (1949) is organised as a means–end model that is concerned with four fundamental issues: stating objectives; selecting experiences, organising them effectively, and evaluating the achievements according to the purposes (ibid.). These issues reflect three major influences: subject matter needs societal needs and child’s needs (Tyler, 1949; Kliebard, 1970; Macdonald and Purple, 1982; Marsh, 1997). The subject matter needs are associated with academic influences; the societal needs are associated with socio–political, technological, and educational influences; the children’s needs are associated with educational and learners’ influences.

Scholars’ responses to this model are conflicting. Adherents appreciate the model’s contribution to curriculum development (Jackson, 1992; Cuban, 1992; Helbowitsh, 1995). Others recognise its importance, but criticise it for being: linear, simplistic and too neutral (Goodlad and Su, 1992; Kelly 1999); too means-ends, too technical and behaviourist (Stenhouse 1975). Re-conceptualists reject it for determining prerequisites to the curriculum development process and for its rigid nature. They blame it for supporting the dominant hierarchic society and ignoring cultural-political conflicts (Kliebard, 1970; 1995; Pinar, 1977; Giroux, et al. 1981; Macdonald and Purple, 1982; Apple, 1990; Doll, 1993).

Tyler’s model has influenced the development of Schwab’s prescriptive model (Posner, 1998). Schwab’s model sets clear practical intentions of what should happen, and offer curricular procedural processes for attaining them (Marsh, 1997; Posner, 1998), but the
model offers more than practical matters (Van Manen, 1977; Posner, 1998). Schwab presents a liberal curriculum shaping that "becomes real in action" (Reid, 1993, p. 508). Schwab’s model has a conceptual, moral and critical interest that demands eclectic, dynamic, and flexible curriculum development, and emphasises interaction between theory and practice (Reid, 1978; 1993). The bridging between theoretical and practical matters is a vital principle for developing the T.E.C.

2.3.1.2 Descriptive models

These models offer a practical tool for extricating curricula based on conceptual platforms that reflect belief systems, images and procedures, conceptions, theories and aims. They refer to the way curricula are actually developed and adapted to actual circumstances. These models influence educational policies and crystallise curricular choices, in a dynamic process of reflection, deliberation, justification, and creation of alternatives (Walker, 1971; Jackson, 1992; Marsh, 1997; Posner, 1998).

Kress’s (2000) model supports this approach. The model describes considerations needed for developing curricula so they would: meet today’s reality of instability, consider different internal and external influencing factors; productively exploit the different and changeable representations of actual environments of learning, and interactively integrate the different ways of communication. Such curricula increase the learners’ active role, and the relevance of school studies.

2.3.1.3 Conceptual models

Conceptual models loosen the linear “means-ends logic” (Posner, 1998, p. 90). Goodlad’s model (1975, 1979), very much like Schwab, is open to contextual-cultural matters. The curriculum shaping is based on a deliberation processes, and creation of alternative
curricular materials, teaching-learning processes, and outcomes. The curricular arrangements are directly allied by an agreed conception and implementation criteria (Johnson, 1967, in: Giroux et al, 1981). Subsequently, an agreed rationale determines the: preferences order, needed adaptations to declared aims and learners’ needs, and directs responses to encouraging and hindering forces. Accordingly, practical curricular components are determined. This explains why this model is conceptual, and still presents a ‘technical production’ approach (Posner, 1998). This model enlightens an interesting angle for the T.E.C analysis, as it demonstrates interplay between a given rationale and contextual-cultural matters.

2.3.2 Models of curriculum - the ‘critical’ approach

This approach, as opposed to the dominant ‘technical production’ approach, demonstrates a belief in human being’s autonomy, and in their responsibility for their lives despite the dominant political-societal pressures (Posner, 1998). Freire’s method (1970) represents this approach. It is process oriented, and regards learning as solving actual problems, through constructivist and ‘critical reflective’ dialogues. It supports learners’ use of their existential experience as to change their social reality (ibid.).

Stenhouse (1975), similar to Freire, appreciates the contribution of dialogic and reflective thinking to meaningful learning processes, and his curriculum-shaping model is also process oriented. It offers a bottom-up framework, based on “pedagogical aims in terms of principles of procedure” (Galton, 1998, p. 92). These principles are neither hierarchical nor organised in a fixed order. They facilitate adaptation of the curriculum to schools’ contextual realities, to teachers’ and learners’ needs and interests. They demand contents focus on controversial human matters that evoke learners’ real questions; encourage open reflective discussions, and active learning. Such learning processes
promote inquiring current personal or social problems. They demand reflection "on the consequences of choices" (Stenhouse, 1975, p. 95). These processes enhance the learners' autonomy and their personal development. They invite them to critically examine their learning through intellectual processes, dialogues, experiencing and re-doing (ibid.).

Doll (1993), like Freire, criticises the dominant 'technical product' approach, and offers a conceptual model that focuses on pure educational concerns, rather than on educational concerns intermingled with conceptual-political-societal aspirations. Curriculum is regarded as a non-linear process, as a process inquiry of the unknown in a "multifaceted matrix" of study (Doll, 1989; 1993). This process encourages teachers' and learners' autonomy and active roles in knowledge construction when developing a conjoint curriculum, and creating contextual "webs of meaning" (Doll, 1993, p. 162).

Similar to Freire and Stenhouse, Doll regards dialogue and reflection, active and collaborative learning processes as central for learners' constructive learning. His model offers four major principles "richness, recursion, relations and rigor" that 'guarantee' 'self organisation' (Doll, 1993, p. 161). Rigor is a central principle because it guarantees a responsible, advanced transformational curriculum, not too relativistic, reflective, constructivist, heuristic and interactive. Besides, it offers three general parameters for curriculum shaping: "general, broad, indeterminate" (ibid. p. 163), instead of specific directives stemmed from official books, guides, regulations, etc.

In summary, the different models are based on diverse cultural-political agendas, different schools of thoughts, educational theories and personal beliefs; offer a variety of criteria for curricula analysis. They can be helpful when analysing educational beliefs that underpin the T.E.C, and seem to be based on conceptual models originated in the
technical production' approach and on models based on the 'critical' approach. The next section elaborates on this. It gives a review of beliefs that will enable revealing the espoused T.E.C, exposing their tacit values and assumptions.

2.4 The influence of educational beliefs on curriculum development - Historical and current perspectives

Education is influenced by different beliefs (Lamm, 2001; Ben-Peretz, 2001a; Reid, et al. 1989). Accordingly, curricular contents are selected, conceptualised, and organised (Schrag, 1992). Scholars have used different synonyms for beliefs. Some use the term ideology (Skilbeck, 1982; Lawton, 1983; Lamm, 1991; Eisner, 1992; Kelly, 1999); some use the term 'intellectual roots' (Tanner and Tanner, 1975, p. 10); some relate to 'orientations' (Eisner, 1979; Goodlad and Su, 1992); others refer to 'modes' (Schubert, 1982, 1986). This study prefers the use of the term beliefs.

Beliefs are cognitive structures that illuminate social preferences and interests, uttered as: values or assumptions concerning children, learning, teaching and knowledge, which are included and organised in curricula (Galton, 1998; Lamm, 1991; 1997). These have changed in the course of history, and accordingly have changed the status of knowledge and the curricula's nature (Lamm, 1997).

It is agreed that beliefs influence curricula frameworks, and determine what will be learnt, who will learn and how much will be learnt (Lamm, 1991; Ben-Peretz, 1991b; Elmore and Sykes, 1992). Use of different typologies as spectacles for analysing beliefs reveals their influence on the curricula shaping (Skilbeck, 1982; Lawton, 1983; Morrison and Ridley, 1989; Kelly, 1999).
### Table 3 - Educational beliefs

<table>
<thead>
<tr>
<th></th>
<th>Knowledge or Acculturation</th>
<th>Individual learners or Individuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamm (1991) and Scrimshow (in: Morrison and Ridley (1989))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilbeck (1982)</td>
<td></td>
<td>Classical humanism</td>
</tr>
<tr>
<td>Tanner &amp; Tanner (1975)</td>
<td>Cumulative tradition of organised knowledge</td>
<td>Modes of thoughts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Production system</td>
</tr>
<tr>
<td>Goodlad and Su (1992)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following typology of beliefs is based on Scrimshow's (in: Morrison and Ridley, 1989) and Lamm's (1991) classifications. It concentrates on three matters: 'knowledge' or 'acculturation'; 'society' or 'socialisation'; and 'individual learners' or 'individuation'. This typology correlates, to a large extent, with the three main sources that influence the curriculum according to Tyler (1949): the child's needs, the societal needs and the subject matter needs.

2.4.1 Beliefs concerned with knowledge or 'acculturation'

Four beliefs refer to 'knowledge' or 'acculturation' the: 'religious orthodoxy ideology' (Eisner, 1992), 'cumulative tradition of organised knowledge' (Tanner and Tanner, 1975), 'Intellectual traditionalist', and the 'Empiric-analytic' (Schubert, 1982, 1986). The 'religious orthodoxy ideology' takes for granted ultimate truth, based on faith in God's existence. Its influence on the Western world is marginal nowadays, and it does only minimally affect Israeli T.E.C in state secular C.F.T.E, which this study focuses on. The 'cumulative tradition of organised knowledge' continues to prevail. It emphasises intellectual directions of study and knowledge acquisition. Only one version out of the three versions mentioned by Tanner and Tanner (1975) strongly influences current T.E.C. The 'Disciplinary' version, which focuses on structures of knowledge and discipline-organised inquiry process. The 'perennial' version, which focuses on training for the mind rational development, does not influence current T.E.C, and the 'essential' version, which focuses on prescribed knowledge and cultural heritage (Goodlad and Su, 1992; Tanner and Tanner, 1975; Levine, 1978, in: Stark and Lattuca, 1997), has a marginal influence on current T.E.C. The 'Intellectual traditionalist' (Schubert, 1982) is equivalent to the 'perennial' version mentioned earlier, and the 'Empiric-analytic' (Schubert, 1986), can be linked to the 'Disciplinary' version.
2.4.2 Beliefs concerned with Society or 'socialisation'

Two groups of beliefs exemplify this type, which emphasises social needs and norms that influence the curriculum. The first group represents conservative concerns. It includes seven versions of beliefs: 'rational humanism ideology' (Eisner, 1992), 'classical humanism' (Skilbeck, 1982), 'social behaviourism', 'practical' (Schubert, 1982, 1986), 'curriculum as modes of thought', 'a plan', and 'production system' (Tanner and Tanner, 1975). These beliefs focus on curriculum as a rationale system that aims at preserving, and to a certain extent, improving the collective social achievements (Elmore and Sykes, 1992). The 'rational humanism' (Eisner, 1992), similar to the 'classical humanism' belief (Skilbeck, 1982) and, to a large extent, similar to the 'curriculum as modes of thought' socio-philosophical belief (Tanner and Tanner, 1975), concentrate on the development of learners' intelligence and high mental thinking through problem solving. But, like the 'Plan' and the 'Production system' beliefs (Tanner and Tanner, 1975), and the 'practical' belief (Schubert, 1986), still aim at guaranteeing the existing societal order. All seven beliefs are deeply associated with societal-cultural origins, and influence current T.E.C.

The second group includes six versions of beliefs that foster radical societal ideas regarding knowledge: 'critical theory' and 'cognitive pluralism' (Eisner, 1992), 'reconstructivism' (Skilbeck, 1982; Eisner, 1992) 'critical praxis' (Schubert, 1986), and 'critical inquiry', and the 'social re-constructivism' (Goodlad and Su's 1992). These beliefs have been influenced by the hermeneutic approach. They explicitly deal with critical thought; endorse the raising of social consciousness for equalising the schooling system, emancipating schools from the ruling elite's power, and the spread of knowledge and democratic ideas (Lawton, 1983; Eisner, 1992; Young, 1998a). They strive for reconstructing the current social order by a new alternative curriculum (Apple, 1975; Freire, 1970; Giroux, 1981; Pinar, 1977, in: Giroux, et al. 1981; Eisner, 1992).
According to these beliefs curriculum is based on human life. It is “a vehicle for remedying” societal problems (Eisner, 1979, p. 60). It is a mechanism for renewal rather than a mechanism for: control, holding capital or reproduction (Eisner, 1992; Friere, 1970; Elmore and Sykes, 1992). This mechanism empowers “teachers and students with a hope that change in the social, political, and economic structure” can occur (Giroux, 1981, p. 427). It offers breaking boundaries between schools’ knowledge and the real life knowledge, and activating critical reflection and historical consciousness. It facilitates opportunities for self-directness and self-control by active learning, focused on recognising, providing legitimisation and dealing with societal-political conflicts (Eisner, 1992). It encourages mutual communication between those who participate in the educational process (Young, 1998a; Giroux, 1981).

These beliefs have massively influenced the intellectual educational thought (Eisner, 1992). But, they have failed to actually influence the schools’ reality (Giroux, 1981). They have failed because they concentrated on “displaying the shortcomings of schooling” and did not offer positive practical alternatives (Bernstein, 1977, in: Giroux, et al. 1981, p. 410).

2.4.3 Beliefs concerned with Individual learners or ‘individuation’

Six versions exemplify these types of beliefs, the: ‘progressive ideology’ (Eisner, 1992); ‘progressivism’ (Skilbeck, 1982); ‘experientialism’ mode of thought (Schubert, 1982, in: Goodlad and Su, 1992); ‘curriculum as race experience’ and ‘curriculum as experience’ socio-philosophical beliefs (Tanner and Tanner, 1975), and ‘interpretive inquiry’ mode of inquiry (Schubert, 1986). These beliefs are liberal, and focus on learner’s developmental needs and interests. They emphasise learning for personal empowerment and for human’s

These beliefs focus on the learners' place in the educational process. They regard learners as human beings and whole entities, who develop their intelligence, operate deeply their minds and emotions. They regard learners' mutual relations with the environment, their ability to re-construct reality, as a basis for social reform (Eisner, 1979; 1992). The learners' mutual relations with the environment are demanding, but they increase their competencies, intelligence and growth. They encourage the learners' ability to deal with complex problems, and ultimately create a learners' centered curriculum (Skilbeck, 1982; Tanner and Tanner, 1975; Dewey, 1902). Still, such a curriculum should be obliged to the collective human-being product, in order to enable a better integration of individuals to the society (Dewey, 1902).

This kind of curriculum is developed in an interactive, dynamic and flexible process that synthesises teachers' and learners' needs as well as subject matters' and milieu's concerns (Schwab, 1973; Tanner and Tanner, 1975; Eisner, 1979; 1992; Goodlad and Su, 1992). Its development demands adaptation to contextual aspects, such as: learners' prior experience, needs, real interests and abilities. It represents a new conception, opposed to the common 'schools as factories' conception that focuses on efficient productive outcomes (Eisner, 1979; 1992; Goodlad and Su, 1992). Thus, in spite of its potential educative power, based on advanced educational theories, it has never been accepted as a dominant approach for curriculum development.

In summary, all educational beliefs, which demonstrate social, cultural or individuation orientations, illuminate conceptual and critical matters that underlie curricular
frameworks. Some of these beliefs influence curriculum development. They have an impact on legitimating, justifying, including or excluding contents and kinds of knowledge, regarding the different disciplines (Lawton, 1978; Lamm, 1991). Thus, analysing the beliefs' influence on the curriculum is vital to this study.

In summary, the historical perspectives shed light on different aspects of curriculum development, regarding the educational beliefs' influence on: 1. Changes, which ignore former curricula (from to); completely deny former curricula (either or); or use elements from former curricula and readapt them (upward spiral). 2. Models for curriculum development, which represent either a technical production approach or the critical approach, which can produce: procedural, descriptive and conceptual models; 3. Basic possible intentions that curricula stand for: acculturation, socialisation and individuation.

The next section examines internal and external factors that influence the T.E.C, while linking them to curriculum in general. As, "despite its importance, relatively little systematic curriculum research has been done in higher education" (Stark and Lattuca, 1997, p. 381), and

"The amount of explicit knowledge dealing directly with how to conduct curriculum development and revision in teacher education institutions is unfortunately quite limited, and . . . "there is much to draw upon from the more general literature on curriculum development and design that can be helpful in coping with this task" (Short, 1987, p. 3).

The next section elucidates dilemmas concerning conceptions of knowledge and learning theories, stemmed from the different beliefs that influence the T.E, and accordingly, the T.E.C.
3. The nature of teacher education curriculum (T.E.C)

This chapter reviews different perspectives of T.E.C and offers a conceptual framework for recognizing and analysing T.E.C influencing factors. The review presents different kinds of influencing factors, analyses their characteristics and their influencing potential. It elaborates the internal influences, which best represent the T.E.C at the department level, as mirrored by staffs' educational beliefs. Accordingly, it raises two central dilemmas that dominate the T.E discourse: training versus educating, and practical versus academic. Finally it presents alternative T.E conceptual paradigms, and analyses their implications for T.E.C.

The literature shows that despite the importance of the curriculum, which “forms the nucleus of colleges and universities” and is “a vehicle for organising teaching and learning” ... “for decision-making”, elucidating “institutional purposes and values” (Conard and Haworth, 1990, in: Stark and Lattuca, 1997, p. 381), systematic curriculum research has been relatively limited (Stark and Lattuca, 1997). Scholars who are concerned with T.E.C’s nature and challenges indicate a lack of theoretical rationale and partial awareness of the meaning of being a teacher, and the derived roles (Howey and Zimpher, 1989; Goodlad, 1999a). Researchers question and criticise T.E.C’s conceptual frameworks, purposes, common bases of knowledge, and link the T.E.C to social, political and economical influences (Beyer and Zeichner, 1987).

Only a few research projects show interest in higher education curricula. Conrad and Pratt have identified six themes of interest demonstrated in higher education curricular research: “Case studies of curricular ‘incidents’; Traditional and revisionist histories; Multi-site studies of academic change or conceptions of change processes; Descriptive

This study offers a macro level research, which refers to factors influencing the primary school T.E.C in Israeli C.F.T.E. It analyses the results, aiming at figuring out curricular correlation, areas of commonality and differences, which stemmed from the influencing factors’ impact on the T.E.C. Likewise, it analyses in depth a case study, at a departmental level. This allows of extricating the influencing factors’ impact on the T.E.C, and correlating the results with the survey’s results.

Scholars have recognised that teachers’ problems begin with the programs of their preparation (Fullan, 1993). Fullan (ibid.) and Howey and Zimpher (1989) regard programs as wide frameworks that underpin the meaning and the curriculum’s organisation. They consider curriculum as a technical mixture of theoretical courses and experiencing, presenting: academic or practical emphasis; scope and sequence; division of courses or possible integrations; conceptions of knowledge and derived learning processes; relation between theory and practice; relations between college and schools.
Barrow (1984) and Goodlad (1994), in contrast, regard curriculum as general guidelines rather than detailed prescriptions. Curriculum, explains Goodlad (ibid. p. 132), is

"A broad framework that stresses attention to the arts and sciences, pedagogy and the educational content that supports it, enough time for fundamental themes to appear and reappear, the integration of theory and practice throughout the length and breadth of the whole, modeling on the part of the responsible faculty of the practice ... the availability of an array of exemplary field settings ...".

This study adopts Barrow and Goodlad's (ibid.) interpretation of curriculum, since curriculum, so believed, reflects comprehensive and intentional considerations, rather than presenting narrow and technical arrangements. This interpretation complements Walker's (1975) Stark and Lattuca's (1997), and Levine's (1998) definitions of curriculum (see pp. 31-32) that have already been adopted in this study. Moreover, the study regards T.E.C as determined by a complex network of external and internal influencing factors, and is given to an ongoing process of change.

3.1 Conceptual framework for T.E.C's influencing factors

Different areas influence the T.E.C. These areas represent various, even contradicting, socio-political, cultural and economic forces external to the education system, as well as educational and managerial internal influences (Stark et al., 1986; Stark and Lattuca, 1997; Bell, 1999a; Ben-Peretz, 2001a; Delandshere and Arens, 2001). The influencing factors, presented in the cited areas, create an ecology in which the T.E.C are embedded. The interplay between the external and internal influences causes local curricular problems, and generates contextual solutions (Elmore and Sykes, 1992; Stark and
Lattuca, 1997). Therefore, a development of a meaningful framework that encompasses all influencing factors and links among them is needed. It will enable extricating the policy that underlies the T.E.C’s development.

Katz and Rath (1985) have developed a conceptual framework that refers to internal factors that influence the T.E.C. They define the T.E as a “set of phenomena deliberately intended to help candidates acquire the knowledge, skills, dispositions, and norms of the occupation of teaching” (in: Tisher and Wideen, 1990, p. 241). They consider: purposes, students’/staffs’ characteristics, contents, methods, duration/sequencing of the learning, the ethos of the T.E, regularities, resources, evaluation procedures, and short/long term impacts of the T.E. These characteristics can be either deliberately planned or incidental. They might appear in different contents and contexts, and all of them directly influence the nature of students’ experience. This framework facilitates conducting research, either by interrelating chosen characteristics of one setting, or by comparing chosen characteristics of different settings. The analysis of these characteristics may reveal different theoretical and practical matters caused by internal influencing factors (ibid.).

framework enables systematically arranging relevant gathered data and examining the influencing factors at different levels. This study is interested in the departmental level.

This study adopts these frameworks and adapts them to curriculum development in C.F.T.E. It divides the influences to external and internal factors, and regards organisational influences as part of the internal factors. In addition, it defines different kinds of links among the influencing factors. The T.E.C in the department's level is the heart of this framework. It is massively influenced by external and internal factors that can be either “hindering . . . (or) facilitating forces” (Imig and Switzer, 1996, p. 214). The T.E.C has essential links to the ‘teaching-learning’ processes, and the ‘Ideal graduate teachers’. These, in turn, have possible links to the T.E.C. The external and the internal influencing factors have essential links to the ‘Ideal graduate teachers’, and the ‘Ideal graduate teachers’ have only possible links to the influencing factors (Figure 1).
3.1.1 External factors

Most significant, widespread and lasting changes in T.E derive from external factors (Zais, 1976; Stark and Lattuca, 1997). "Teaching ... is regulated by outsiders to the field of education" (Schwartz, 1996, p. 10). T.E.C respond to changing circumstances and top-down complementary or opposed pressures on the existing educational reality (Zais, 1976; Young, 1998b; Ben-Peretz, 2001a). Changes can be forced or introduced by various ‘agents’: society, state, universities, colleges, schools, and technology (Corrigan and Haberman, 1990; Stark and Lattuca, 1997; Power, 2001; Pitzsimmons, 2001).
3.1.1.1 Societal influence

Society influences the T.E.C by formal pressure groups and informal interests. Educational concerns respond to formal cultural, political-economic market forces and societal interests (Aronoviwitz, 1981; Borman, 1990; Russell, 1993; Lofthouse, 1994; Adams and Tulasiewicz, 1995; Tulasiewicz, 1996; Imig and Switzer, 1996; Stark and Lattuca, 1997; Kress, 2000; Delandshere and Petrosky, 2004). Educational matters also react to cultural, political and societal informal interests, as represented by professional associations, publishers, and the media (Cuban, 1992; Totterdell and Lambert, 1997; Cochran-Smith, 2001b).

3.1.1.2 State’s influence

The State’s policy plays a central role in the T.E.C development. Governments intervene in T.E, by setting administrative circulars and educational requirements (Barrow, 1984; Whitty et al. 1987; Giroux and McLaren, 1987; Naish, 1990; McCulloch, 1994; Reid, 1994; Tisher, 1995; Lofthouse et al. 1995; Hudson and Lambert, 1997; Bell, 1999a). They use power-coercive strategies, for controlling educational systems, by: ‘centralisation’ or ‘decentralisation’ of the curriculum; allocating financial resources; setting accreditation standards, etc. (Aronoviwitz, 1981; Popkewitz, 1987; Stark and Lattuca, 1997; Bell, 1999a; Power, 2001; Brisard and Hall, 2001).

Society and State external influencing factors generate top-down initiatives, that cause "macro level" changes (Freiberg and Waxman, 1992) or 'grand reforms' (Kliebard, 1988, in Kliebard, 1992, p. 97). Three current trends exemplify impacts of such processes on the TEC:


2. The partnership system in the U.K demonstrates another top-down state radical enterprise, which has been part of 'The reform Agenda'. This process, initiated in 1979 by the government, was led by the state political forces, and affected by social and economic concerns (Kirk, 1988; Naish, 1990; Reid, 1994; Tulasiewicz, 1996). The U.K government indoctrinated and dominated a systematic school-based practice policy, and has transferred funding directly to partner-schools, despite the opposed professionals' agenda for T.E improvement (Fidler and McCulloch, 1994). This policy has challenged the role of higher education concerning the pre-service T.E (Whitty 1993; Reid, 1994; Glenny and Hickling, 1995; Edwards, 1994; Anderson, 1995; Adams and Tulasiewicz, 1995; Bell, 1999a; Poppleton, 1999). It has paralysed schools' and universities' autonomous initiatives, and prevented pure educational answers concerning dilemmas of T.E (Adams and Tulasiewicz, 1995).

3. The 'Standards' movement, in the U.K, and the U.S.A, has been another macro level, top-down intervention (Edwards, 1994; Bell, 1999a; Hegarty, 2000; Hallinan and Khmelkov, 2001; Sachs, 2003; Delandsheere and Petrosky, 2004). In the U.K the standards movement, jointly with governmental control, have dissolved universities’
formal role in T.E (Edwards, 1994; Bell, 1999a; Poppleton, 1999). Only lately, in a twenty year delay, when the ‘standards’ golden-age’ has almost died out, has it arrived to Israel (Shaked, 2002; Chen, 2002; Rotem, 2002; Sa’ar, 2002; Back, 2002a).

3.1.1.3 Technological influence

This sphere of influence has the potential to alter the nature of information and the common communal and personal interactions. Thus, it might play a vital role in T.E and T.E.C processes (Kirk, 1988; Felix, et al. 1995; Imig and Switzer, 1996; Stark and Lattuca, 1997; Pitzsimmons, 2001).

3.1.1.4 Universities’ influence

Universities develop research relevant to the T.E, which contributes to a better understanding of what is good practice (Corrigan and Haberman, 1990; Cuban, 1992; Stark and Lattuca, 1997; Hagger and McIntyre, 2000). Such research influences the T.E.C development, as it produces theories and principles concerning: teaching expertise, professional language, central concepts, etc. (Berliner, 2000).

3.1.1.5 Colleges’ influence

Colleges produce relevant research for T.E. They gather practical knowledge that can be disseminated and applied in different colleges. This agent is conceived of as a limited external influencing factor, as dissemination of academic and practical knowledge between colleges and between departments in the colleges is restricted.
3.1.1.6 **Schools’ influence**

Historically, schools’ influence on T.E.C was limited (Howey, 1995). Currently, as partnership “has become a leitmotif of new T.E schemes”, schools’ influence on T.E.C development increased (Graves, 1990, p. 66). Practice gathered in schools, craft knowledge and teachers’ action research, are conceived of as a central external influencing factor (Corrigan and Haberman, 1990). Now, the T.E.C correlates with schools’ reality (Combleth, 1986, in: Freiberg and Waxman, 1992; Bush, 1987). Furthermore, they regard schools’ renewal as part of their agenda.

In summary, external factors have the potential to promote curricular changes in “contents, context, form and evaluation/adjustment” (Stark and Lattuca, 1997, p. 126). But, in fact, when these influences are not internalised they tend to limit changes, increase threat, dispute and resistance (Zais, 1976, Freiberg and Waxman, 1992; Hargreaves, 1993; Fidler and McCulloch, 1994).

3.1.2 **Internal factors**

Internal factors refer to the colleges’ contribution to the T.E.C’ development; staff’s beliefs; administrative considerations; and local students’ needs and wishes (Stark and Lattuca, 1997). These factors “encompass a wide array of idiosyncratic, contextual and dynamic variables” (Flores, 2001, p. 135). Thus they reveal the richness and the complexity of a T.E.
3.1.2.1 Colleges’ influence

The colleges’ influence refers to: institutional vision; staff’s beliefs; educational research held in colleges, and institutional structural and organisational considerations. The colleges’ influence is not isolated from external influences, and it is given to internal pressures, interests and criticism (Hargreaves, 1993; Stark and Lattuca, 1997). These usually limit or dissolve internal initiatives (Zais, 1976).

3.1.2.1.1 Educational research held in C.F.T.E

Educational research held in C.F.T.E rarely focuses on the nature of instruction and practical experience (Berliner, 1984, in: Rowell, 1988; Shulman, 1986; Howey and Zimpher, 1989; Freiberg and Waxman, 1992). It disregards T.E.C’s improvement as the “heart of teacher education reform” (Short, 1987, p. 2). Such research is “limited in amount and quality” (Freiberg and Waxman, 1992, p. 624). It is regarded as an internal factor that neither contributes to a better understanding of “the task of curriculum development and revision in teacher education”, nor to the understanding of “how this process is being conducted or how it has been conceived” (Short, 1987, p. 2). This research contributes to the general understanding of the T.E setting. But, as research at doctoral level tend to be hardly disseminated to the relevant community (Denton et al., in: Freiberg and Waxman, 1992); its actual influence on the T.E.C development may be limited.

3.1.2.1.2 Staff’s beliefs

Teacher educators own solid educational beliefs and are aware of the influence of new educational ‘fashions’, and tend to modernise (Fucks, 2000). T.E.C in different
institutions differs, as different teacher educators hold different educational beliefs (Zeichner, 1983; Beyer and Zeichner, 1987; Fucks, 2000). These beliefs are neither explicit nor exclusive. They are underpinned by temporal theories that get changed or updated as part of change of the surrounding ecology and the knowledge change, and reflect personal values (Felix, et al. 1995). Curricula tend to be fragmental as they accept teachers’ diverse beliefs which do not necessarily correspond. Their parts need to get congruently and coherently integrated (Zeichner, 1983; Howey and Zimpher, 1989; Fullan, 1991, 2001; Goodlad, 1994).

Staff’s beliefs raise dilemmas that influence the T.E.C development. These are described and analysed in the following section. Additionally, their influence on the T.E.C development is examined.

3.1.2.1.2.1 Teacher training (T.T) versus teacher education (T.E)

The dilemma of whether to train teachers towards performing specific agreed behavioural routines or to generally educate them and develop their professional personality has been most prominent in the field of teacher preparation (Doyle, 1990; Aldrich, 1990; Bullough and Gitlin 1991; Goodlad, 1994; Hall and Millard, 1994; Tulasiewicz, 1996; Ovens, 2000; Lamm, 2001). Teaching conceived of as a craft and/or as an applied science is technical rationalist and competency oriented, and characterises the T.T approach (Schon, 1983; Cowen, 1990; Newman, 1996). This approach shares common features with vocational training (Eraut, 1994). Thus, it gives a false picture and limits the conception of schooling (Barrow, 1984; Giroux and McLaren, 1987). It encourages apprenticeship routines and short-term processes.
Teaching conceived of as art and/or as an intellectual and moral endeavour characterises the T.E approach, and develops a wider professional role, encourages intellectual, reflective, open-ended and long-term processes. It promotes teachers’ and learners’ independence and empowerment (Freire, 1970; Smyth, 1987; McCulloch, 1994; Eraut, 1994; Roth, 1999; Berliner, 2000; Fullan, 2001).


The T.E approach offers wide humanistic T.E curricula that strive at integrating practice and educational theory, and developing teachers’ professionalism through deep and empowering teaching and learning processes (Doyle, 1990; Goodlad, 1999a; Lamm, 2001) This approach is open to criticism (Beyer and Zeichner, 1987). Moreover, it encourages flexible practice that copes with unpredictable situations (Fish, 1989; Hodkinson and Harvard, 1993).

The T.T approach fosters teachers’ ability to use knowledge mainly as specific intellectual, affective and physical behaviours. Thus, T.T is criticised for limiting

The current English literature reveals an official policy that focuses on the T.T approach (Whitty et al. 1987; Hodkinson and Harvard, 1993; Hall and Millard, 1994; Young, 1998a). This policy expands the centrality of school experience, at the pre-service training stage, at the cost of the academic studies. The T.T approach conceives of academic studies as a means of enhancing good teaching, rather than as an aim for itself. Academic studies, thus, are learnt, if at all, in order to meet the explicit schools’ curriculum (Judge, 1990; Graves, 1990; Adams and Tulasiewicz, 1995). Whereas in the U.K theory studies are completely separated from practice, in other European countries there is no arbitrary separation between theory and practice. Theory, there, is vital for the T.E (Adams and Tulasiewicz, 1995; Tulasiewicz, 1996; Brisard and Hall, 2001).

The current American literature reveals initiatives of T.E approach, claiming “Teachers require training, but they also need education, in the very best sense of the word” (Goodlad, 1994, p. 11). T.E is regarded as an opportunity to develop educators’ commitment to “making a difference in the lives of students from all backgrounds” in order to create a social change (Fullan, 1993, p. 5). Current T.E demonstrates increased sensitivity to social order, and moral interests (Fullan, 1993; Cochran-Smith, 2000a). For example, the ‘effectiveness’, the ‘competency’ and the ‘standards’ movements have all
impacted on the development of T.T in the U.K and U.S.A (Young 1998a; Cochran-Smith, 2001b; Sachs, 2003). Lately, the last two fashions are heavily influencing educational policies in Israel. However, a further fashion has now emerged. This fashion focuses on expanding and deepening self-constructed intellectual and affective understandings (Cruickshank and Metcalf, 1990; Graves, 1990). It represents a T.E approach, as it aims at improving complex skills and competencies by setting "a satisfying intellectual framework to underpin the practice of T.E" (Graves, 1990, p. 71).

Training should be linked to education (Cruickshank and Metcalf, 1990). They should complement each other when preparing pre-service teachers "for professional careers" (Stark et al., 1986, p. 231). Only their bridging can guarantee socialisation, acculturation and individuation processes, and would ensure interweaving practice and academic studies in the T.E.C. This study intends to figure out to what extent, and how, this dilemma affects the T.E.C in the primary schools departments.

3.1.2.1.2.2 Practical versus academic emphasis

The above mentioned dilemma reappears in a form that illuminates some other characteristics of teacher preparation (Hall and Millard, 1994). It identifies long-standing divisions that play an important role in T.E— liberal versus applied studies (Beyer, 1988). Historically, teachers' preparation focused on applied studies and was field-based. Teaching focused on practical and technical competencies, and was regarded as a vocational matter (Beyer, 1988; Whitehead et al. 1994). The liberal tradition, in contrast, is academically oriented. Its adherents criticise the focus on field-based applied studies for accepting existing good / bad habits and patterns of schooling, without question, and
for reproducing the traditional reality (Zeichner, 1980; Beyer, 1988; Ginsburg, 1988; Fish, 1989; Freiberg and Waxman, 1992). Yet, they doubt whether quantity of practice immediately guarantees its quality (Beyer, 1988; Graves, 1990; Fidler, 1994).

Another version of this dilemma refers to the scientific versus the humanistic emphasis (Kerr, 1968; Moon, 1995; Reiman and Thies-Sprinthall, 1998). The scientific emphasis is equivalent to the liberal studies tradition; both focus on theoretical concerns. The humanistic emphasis corresponds with the applied studies tradition, and focuses on experiencing. Lately experiencing matters have widened and have been enriched by reflective processes and action research, so, as to improve pre-service teachers' quality of teaching (Pearson, 1989; Borman, 1990; Goodson, 1993; Moon, 1995).

Scholars criticise separation between theoretical and practical concerns and endeavour to thoughtfully bridge between them, because learning is an integrated and ongoing process (Barrow, 1984; Beyer, 1988; Russell, 1988; Lamm, 1989; Wideen, 1994; Moon, 1995; Korthagen and Kessels, 1999; Pring, 1999; Brisard and Hall, 2001). Scholars offer 'artistry' focus for T.E (Schon, 1987). This focus fosters reflective processes, research, and social and moral awareness that bind practical and theoretical matters (Freire, 1970; Kirk, 1986; Sockett, 1989, in: Avdor, 2001; Graves 1990; Doyle, 1990; Eisner, 1979). This focus supports synergy between practical knowledge; personal theories developed through practice, and theoretical knowledge (Beyer, 1988; Fish, 1989). This dilemma is mostly relevant to this study. Teacher educators call for the integration of theory and practice, through reflective practice (Silberstein, 1995, 1997).
### 3.1.2.1.3 Conceptual paradigms concerning T.E

These dilemmas, which dominate the T.E discourse, can be interpreted with regard to different conceptual paradigms. This is highly relevant to this study, as these conceptual paradigms influence both the institutional level – colleges' mission, and the department level – faculties' and staff's beliefs.

#### Table 4 - Conceptual paradigms for T.E

<table>
<thead>
<tr>
<th>Scholar</th>
<th>Types of Paradigms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Behaviour</td>
</tr>
<tr>
<td>Joyce (1975), in Feiman–Nemser (1990)</td>
<td>Behaviouristic</td>
</tr>
<tr>
<td>Zeichner (1983)</td>
<td>Behaviouristic</td>
</tr>
<tr>
<td>Feiman–Nemser (1990)</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Farnham-Diggory (1994)</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Zeichner (1993)</td>
<td>Competency</td>
</tr>
<tr>
<td>Young (1998a)</td>
<td>Competency</td>
</tr>
</tbody>
</table>

A. Cohen, 2002

Adapted from Feiman–Nemser, 1990, and elaborated

These paradigms indicate different beliefs “about the nature and the purposes of schooling, teaching, teachers and their education that give shape to specific forms of practice in teacher education” (Feiman–Nemser, 1990, p. 219). They are not exclusive; they demonstrate “considerable overlap in the theoretical perspectives, models, and paradigms” (ibid. p. 219).

Two groups of paradigms represent the practice versus the academic dilemma. One group demonstrates the practice preference (number3). It emphasises acculturation transfer, and includes the: ‘practical’, ‘apprenticeship’, ‘traditional’ and ‘traditional craft’ paradigms (Zeichner, 1983; Farnham-Diggory, 1994). Another group, which has been often considered as less relevant for both the T.T and the T.E, represents the academic preference (number4). A third group combines practical and academic matters (number5), and includes the: ‘personal’, ‘progressive’, ‘developmental’, ‘inquiry oriented’, ‘social reconstruction’, ‘critical /social’, and the ‘reflective’ paradigms. The conceptual paradigms inspire the different types of ‘ideal graduate teacher’ (Doyle, 1990; Lamm, 2001), and eventually influence the answers given to the above mentioned dilemmas.

The T.E.C is influenced by various educational beliefs and conceptual paradigms. These are based on different underling assumptions, and cause confusion (Fucks, 2000). The paradigms differ in their preferences and emphases (Zeichner, 1983). Among all the
paradigms; reflection has become, since the late 1980s, central to the T.E discourse (Shulman, 1986; Freiberg and Waxman, 1992; Young, 1998a). This discourse, with regard to staff’s educational beliefs and the conceptual paradigms, influences the T.E.C’s nature. The next section elaborates on this issue.

3.1.2.1.4 Staff's beliefs and the T.E.C

External factors rarely cause significant and lasting changes in the T.E.C. Deep changes emerge mainly out of internal or internalised factors, such as staff’s beliefs, concerning ideological and organisational matters (Freiberg and Waxman, 1992). These beliefs influence institutions – at the meso level, and departments – at the micro level.

Meso level changes refer to collaborations between institutions, on a basis of mutual educational beliefs and interests (Kliebard, 1992; Freiberg and Waxman, 1992). In the U.S.A and in Israel partnership frameworks, initiated by the institutions themselves, represent best the meso level (Freiberg and Waxman, 1992; Rhodes and Bellamy, 1999).

The Micro level represents changes initiated within institutions and/or departments (Short, 1987; Howey, 1995). T.E.C development exemplifies an institutional and/or a departmental change that occurs mainly as a result of staff’s influence (Kliebard, 1992; Sultana, 1995; Stark and Lattuca, 1997). Such changes are “personal and idiosyncratic”, thus contextual (Howey, 1995, p. 30). They encourage development of varied T.E.C (Buchberger, 1996). These changes have received little attention in the current literature (Short, 1987). This study presents a Case study in order to extricate micro level changes in the T.E.C in a chosen department, and associate them with macro level influences.
3.1.2.2 Students' perspectives and interests

Students represent another internal influencing factor. They are not 'tabula rasae', and their causal or normative knowledge, their practical and theoretical knowledge, perspectives and interests need to be considered when developing the T.E.C (Zeichner and Teitelbaum, 1982; Beyer, 1987; McIntyre, 1988; Clandinin and Connelly, 1991; Bennett et al. 1993; Reiman, 1999a). Students' perspectives have been interpreted in two ways. One demonstrates technocratic rationality, and focuses on students' survival, and of their individualistic thinking (Beyer and Zeichner, 1987). The other one shows developmental concerns. It focuses on students' development, believing that:

1. "Learning to teach is a time . . . of formation and transformation of scrutiny into what one is doing, and who one can become" (Britzman, 1991, in: Johnston, 1994, p. 80);

2. Students' shift from learners to teachers relies heavily on their mental schemata (Ayers, 1988; McIntyre, 1988; Sultana, 1995; Flores, 2001).

Schemata are affected by students' cultural background, social and personal context; then again influence students' perception of the teaching role. Hence, their understanding develops through dynamic, complex and even conflicting interaction between their previous knowledge, beliefs and experiences, and their new knowledge and experiences (Calderhead, 1988, 1991; Tillema and Knol, 1997; Korthagen and Kessels, 1999; Britzman, 2000). Therefore, T.E processes should "make explicit the implicit background knowledge that student bring to their programs" (Johnston, 1994, p. 80). The T.E.C has to consider students' background and prior knowledge (Walker, 1987). As noted, knowledge underpins the T.E.C's nature and development. The next section concentrates on epistemologies of knowledge, derived paradigms, related dilemmas and questions.
3.2 Summary

The T.E.C is part of an ecosystem, which is influenced by five external factors, the: society, state, technology, universities, colleges, and schools; and three internal factors, the: colleges, departments and the students. This study has chosen to refer to the T.E.C’s ecosystem as its conceptual framework, as it enables examining the extent of the factors’ influences, and their directions. The framework refers to the interrelations between the two blocks of factors – external and internal, and the T.E.C. It does not refer to the influencing factors’ interrelations among themselves, within the blocks of influences, as to present a basic and a simplified picture of the T.E.C’s phenomenon.

The interrelations between the different influencing factors trigger the emergence of two basic dilemmas: T.T versus T.E, and Practice versus Academic, as they represent different interests, and see differently the ‘ideal graduate teacher’ characteristics. These dilemmas turn the T.E.C’s development to a complex and a challenging matter.

These dilemmas are originated in different, and even disagreeing educational paradigms, which underpin the T.E’s discourse. The dilemmas have a vast impact on the way knowledge is conceived. The next section elaborates on knowledge matters.
4. Approaches to knowledge in T.E

This chapter reviews different themes concerning the nature of education in general, and the T.E in particular, with regard to epistemologies, derived paradigms of knowledge, knowing, and education. It elaborates on exclusive T.E paradigms that underpin the T.E.C. Reflection and professional knowledge are spotlighted as two central approaches for T.E that enhance new pedagogical ecology and influence the T.E.C.

4.1 Knowledge as a goal or as a means

Knowledge acquisition can be conceived of as a goal in its self (Lamm, 1993; Kelly, 1999). It can also be regarded as a means of knowledge accumulation for human development (Tanner and Tanner, 1975; Beyer, 1988; Lamm, 1993; Kelly, 1999). These two conceptions can be regarded as either complementary or exclusive; accordingly they influence the curriculum development (Lamm, 1993).

'Knowledge as a goal' represents a 'cultural' approach derived from internal humanistic justifications, rather than beneficial-external ones. Curricula based on this approach tend to be fixed and content-centered. They empower human beings' ongoing meaningful existence by inheriting and developing their culture (Lamm, 1993).

'Knowledge as a means' represents two distinctive approaches. One approach focuses on 'knowledge as a tool' for preserving societies' traditions and fostering their needs – so-called 'societal' approach (Lamm, 1993; Young, 1998a; Hegarty, 2000). This approach encourages fixed and content-centered curricula. The other approach focuses on 'knowledge as a tool' for fostering individuals' tacit knowledge, interests, intellectual,
and moral skills' development - so called 'personal development' approach (ibid.) or a process of "externalisation . . . combination . . . and internalisation" (Hegarty, 2000, p. 453). This approach encourages flexible and learner centered curricula. It supports curricula that encourage autonomy and critical skills development, besides pure intellectual and moral skills. It offers a new educational goal - changing the normative societal order and its traditional outcomes (Giroux, 1981; Young, 1998a; Gover, 2000).

4.1.1 Epistemologies of knowledge and the correlated T.E conceptual paradigms

These two ways of conceiving knowledge represent two opposed epistemologies of knowledge - positivistic and relativistic. Both have influenced human thought, and consequently the nature of curriculum (Green, 1971 in: Young, 1998a; Tom and Valli, 1990). These epistemologies interpret differently the nature of human knowledge (Hofer and Pintrich, 1997). They justify differently the way knowledge is acquired and validated (Stark and Lattuca, 1997). The relativist or hermeneutic epistemology has replaced the dominant, positivist epistemology since 1970s (Levine, 1998). Yet, one cannot deny a third epistemology, "epistemology of practice", or "craft knowledge" (Tom and Valli, 1990, p. 377). This epistemology is relevant to teachers' professional knowledge, although it is not recognised as one of the common epistemological traditions of knowledge (Tom and Valli, 1990; Whitehead, 2000).

The positivistic epistemology correlates with three T.E conceptual paradigms that consider knowledge as a goal, as presented in Table 4 (p. 63): the 'academic', the 'practical' or 'apprenticeship', and the 'technological' or 'behaviouristic' (Feiman–Nemser, 1990; Farnham-Diggory, 1994). This epistemology and the correlated paradigms

Knowledge, according to this epistemology, is revealed through scientific methods. It is organised in separated bodies of knowledge, given to impartation (Ginsburg, 1988; Levine, 1998). Curricula based on this epistemology, thus, are traditional, conservative and prescriptive. They socialise learners into society's standards and power relations, reproducing knowledge that has already been produced, preserved and transmitted (Young, 1998a; Pinar, 1977; Giroux, 1981).

The relativist epistemology correlates with three T.E conceptual paradigms that consider knowledge as a means, as presented in Table 4 (p. 63): the 'personalistic'; the critical/social, progressive or developmental, and the 'inquiry' oriented (Feiman-Nemser, 1990; Farnham-Diggory, 1994). Another two sub-paradigms have emerged out of the relativist epistemology - the 'interpretivism' and the critical conceptual paradigm (Tom and Valli, 1990). The 'Interpretivism' paradigm concentrates on contextual aspects of humans' life (ibid; Doyle, 1992). The critical conceptual paradigm focuses instead on revisionist social intentions (Tom and Valli, 1990; Giroux and McLaren, 1987; Ginsburg, 1988).

The relativist epistemology is interpretive in its nature (hermeneutic). It regards truth as contextual and dynamic (Hofer and Pintrich, 1997; Back, 1999). It regards knowledge as
dynamic, tentative, contextual, subject to social-political etc. influences; and as constructed through participatory collaborative and individual process of learning (Beyer, 1988; Ginsburg, 1988; Lamm, 1991; Nodding, 1996; Sfard, 1998; Kelly, 1999; Back, 1999). Consequently, it regards knowledge as a means for: raising human interest in critically constructing contextual understandings and meanings of reality; strengthening their involvement in changing it; and, enhancing professional development (Beyer, 1987, 1988; Ginsburg, 1988; Hofer and Pintrich, 1997; Tillema and Knol, 1997; Levine, 1998).

This epistemology combines between “knowing and acting” (Levine, 1998, p. 88), and leaves room for practice and experience in knowledge construction and reconstructing (Shremer, 1993; Beyer, 1988; Young, 1998a). Curriculum based on this epistemology enables learners to create unique personal knowledge, based on their previous knowledge, new experiences and new understandings of the external reality (Giroux, 1981; Schon, 1983; Shulman, 1987; Doll, 1993; Bengtsson, 1995; Young, 1998a).

The Epistemology of practice “is grounded in the wisdom of practice” (Tom and Valli, 1990, p. 389). It encourages students to develop their own comprehensive practices, as it accepts the legacy of their common sense, habits and experience, and enhances constructivist and reflective processes for examining the actual and contextual practice (Beyer, 1988; Butt, 1989; Kremer-Hayon, 1993; Sfard, 1998 Korthagen and Kessels, 1999). This epistemology aims at increasing and improving practice by linking it with theory, in order to reveal and reason principles that underlie teachers’ action patterns (Eisner, 1979; Schon 1983; Tom and Valli, 1990; Korthagen and Kessels, 1999).
The three epistemologies differ in “the extent to which knowledge entails practice and the purpose for which knowledge is used” (Tom and Valli, 1990, p. 389). They underlie the above mentioned dilemma, concerning practical versus academic orientation. This dilemma dominates the T.E.C discourse (Howey, 1995), especially currently when T.E.C are operating in complex social-cultural reality, and need to cope with rapid growth, and an explosion of knowledge (Apple 1979; Elkana, 1991; Schrag 1992; Kelly, 1999).

4.2 Knowledge and educational beliefs

Any attempt to analyse curricula demands an examination of epistemologies of knowledge, theories of knowledge and T.E conceptual paradigms. These underpin: the nature of knowledge; what counts as worthwhile to be learned (Bernstein, 1982; Popkewitz, 1987; Lamm, 1991, 2001); forms of knowledge organisation, and ways in which knowledge is acquired or constructed, transmitted, operated and evaluated (Phenix 1964, in: Eisner, 1992; Gardner 1982; Lazear, 1995; Kelly, 1999).
Table 5 - Epistemologies of knowledge and theories of knowledge in accordance with T.E conceptual paradigms

<table>
<thead>
<tr>
<th>Scholars</th>
<th>Epistemologies of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positivistic</td>
</tr>
<tr>
<td>Aristotle</td>
<td>Theoretical</td>
</tr>
<tr>
<td>Schrag (1992)</td>
<td>Philosophical</td>
</tr>
<tr>
<td></td>
<td>*Scientific</td>
</tr>
<tr>
<td>Kelly (1999)</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Joyce (1975) in Feiman-Nemser (1990)</td>
<td>Academic</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Zeichner (1983)</td>
<td>Academic</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Feiman-Nemser (1990)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Farnham-Diggory (1994)</td>
<td>Academic</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Young (1998a)</td>
<td>Competency</td>
</tr>
</tbody>
</table>

T.E conceptual paradigms

A. Cohen, 2002

* Epistemology and conceptions of knowledge that combine practice and theory

Aristotle (in: Schwab, 1964; Eisner, 1992; Smith, 1999, 2001), relates to three forms of knowledge, when discussing the nature of the disciplines: theoretical, practical and productive. The *theoretical* form of knowledge focuses on pure knowing of permanent and absolute contents. Schrag’s ‘*philosophical*’ tradition (1992), and Kelly’s ‘*absolute*’ theories represent the same conception. The ‘*philosophical*’ tradition, first developed in ancient Greece, conceives knowledge as “*abstract generalities*”, as “*the most*
fundamental, general truths about the universe and human life”, which “emerges from deep and sustained reflection on our beliefs and experiences” (Schrag, 1992, p. 270). The ‘absolute theories’ (Kelly, 1999) link knowledge with human’s values, and conceive that it is achieved through intellectual and rational thinking. These concepts have influenced the educational thought by presenting the ‘collective interests’, and introducing the ‘most intellectual’ subjects into curricula. These concepts correlate with the ‘academic’ T.E conceptual paradigm (see Table 5, p. 75).

The practical conception of knowledge focuses on reasonable decision making concerning technical, moral and value choices, and can be interpreted as practical know-how knowledge. The ancient and universal ‘apprenticeship’ tradition represents professional nowadays training, but not by itself (Aldrich, 1990). Because, this kind of training is limited to acquisition and mastering of separated feasible and desirable ‘technical’ and ‘behavioural’ skills or competencies (Popkewitz, 1987; Eraut, 1991; Farnham-Diggory, 1994). These characteristics correspond with the ‘technological’, ‘behaviouristic’ and ‘competency’ T.E conceptual paradigms, and with the ‘traditional’, ‘traditional craft’ T.E conceptual paradigms, which also represent a practical conception of knowledge (Table 5).

The ‘scientific’ and the ‘empiricist’ theories combine philosophical and apprenticeship elements, theory and knowledge of ‘know how’, while creating general truths. The ‘scientific’ theories demand the development of knowledge through discovery and experimentation (Schrag, 1992), whereas the ‘empiricist’ theories emphasise human experience, proved by the senses and intellectual processes (Kelly, 1999). These kinds of
theories, consider knowledge and truths as questionable, and significantly influence the educational thought. They encourage the development of individuals' knowledge (ibid.). Yet, they integrate theoretical and practical concepts of knowledge, and three T.E conceptual paradigms: academic, apprenticeship and behaviour.

The productive conception of knowledge refers to knowledge construction and reconstruction (Schwab, 1964; Eisner, 1992). The 'existentialist', 'new sociology' and 'post-modern' theories (Kelly, 1999) can be regarded as productive. 'Existentialist' theories emphasise individuals' knowledge construction and reconstruction, fostering human responsibility for meaningful existence. 'New sociology' theories reject absolute theories and socially constructed knowledge that are imposed and controlled by education systems according to certain political ideologies (ibid; Young, 1998a). Some political ideologies positively view the reinforcement of equality by modifying and adjusting the curriculum to all learners, in order to achieve meaningful learning (Howey, 1995). These theories view knowledge as constructed by learners in an active mode of learning. 'Post-modern' theories reject all absolute theories and ultimate truths, and encourage scepticism and interpretation. These theories integrate intellectual, rational thinking and pragmatic ways of thinking, and develop a "questioning approach to human knowledge and understanding" (Kelly, 1999, p. 30). They also emphasise hermeneutic knowledge, reflective and constructive thinking (Young, 1998a).

4.2.1 Reflection as practice and as an educational paradigm

Reflection has emerged as 'a zeitgeist' in T.E in the late 1980s (Zeichner and Tabachnick, 1991, p. 1). It demands open-mindedness, responsibility, wholeheartedness,

Reflection has been translated into various hermeneutic T.E methods that emphasise student teachers’ voice, explicate personal assumptions and predispositions that underlie their practical and assess their consequences (Van Manen, 1977). The T.E literature notices three possible interpretations of the term ‘reflection’: 1. Reflection as a private activity or as a form of collaborative interaction and shared experience, carried out through dialogue, in order to examine past experiences or future plans (Zeichner and Tabachnick, 1991; Pinar, 1981; Zeichner, 1993). 2. Reflection as a pure rational process or as a process concerned with ethical and care issues. 3. Reflection as a main activity in sporadic courses or as a cross-curricular organiser principle (Zeichner, 1993).

Thus, reflection as “a process of knowledge making” (Kelly 1999, p. 44):

1. Exposes ‘pre-action’ tacit professional knowledge (Inbar, 1999), and in and on action tacit professional knowledge (Schon, 1983; MacKinnon and Erickson, 1992; Korthagen et al. 2001)


Reflection encourages teachers to experience different sources of knowledge, modes of knowing, and uses of knowledge (Zeichner and Teitelbaum, 1982; Zeichner, 1993). It encourages them to reconsider: educational aims, skills involved in class inquiry, processes for monitoring and researching their own practice and thinking (Whitty et al. 1987; Butt, 1989). Reflection supports meta-cognitive processes that enhance teachers’ awareness and expand their conscious repertoire of personal abilities, teaching strategies and practical knowledge (Butt, 1989; Osterman, 1990; Felix, et al. 1995).

Reflection appears in three forms that can be regarded as variations or as hierarchic levels (Van Manen, 1977; Beyer, 1991): ‘technical application’ or ‘procedural’, ‘practical’ or ‘interpretive’, and ‘critical’ or ‘ameliorative’ (Van Manen, 1977; Beyer, 1991). These variations correlate with Barone et al.’s (1996) and with Zeichner’s (1993, p. 18) typologies. The first level – the ‘operational’, or ‘instrumental mediation’ correlates
with the ‘technical’ or ‘procedural’ forms; the middle level - the ‘articulative’, or ‘deliberative’ correlates with the ‘practical’ or ‘interpretive’ forms; and the highest level - the ‘political’, or the ‘restructuring experience’ correlates with the ‘critical’ or ‘ameliorative’ forms. At this level reflection fosters awareness of societal and contextual factors (Pesig, 1997; Shulman, 1987), as a basis for knowledge reconstruction (Ben-Peretz, 1998), and intellectual and moral development (Bullough and Gitlin, 1991; Beyer, 1991). All types of reflection correspond with the ‘developmental’, ‘personal and critical/social’ T.E conceptual paradigms (see Table 5, p. 75). Eventually, the use of these levels of reflection depends on the purpose of the reflection, its contents and the preferred reflective processes (Zeichner, 1993).

It is not agreed whether reflection is an alternative to the other paradigms or it is a complementary paradigm (Eraut, 1995). Some scholars argue that reflection is an independent paradigm (Korthagen, 1988; Silberstein, 1998; Korthagen et al., 2001). Others believe that it complements other ideological paradigms (Feiman-Nemser. 1990; Zeichner and Tabachnick, 1991; Zeichner, 1993; Carson, 1995).

Most scholars recognise reflection’s contribution to professional teaching, and argue that T.E.C have to consider reflection besides the development of conceptual and technical competencies (Hodkinson and Harvard, 1993; Stark and Lattuca, 1997; Pitzsimmons, 2001). Some scholars, even Schon (1987), criticise the amount of time needed for reflective processes (Eraut, 1995; Van Manen, 1995). Others criticise it for being over employed or notice the danger of superficiality (Zeichner and Tabachnick, 1991; Inbar, 1999). Moreover, Van Manen (1995) warns that reflective processes are too demanding.
for pre-service teachers, because they require distancing the self from actual situations, yet they do not necessarily improve teaching.

These different conceptions of knowledge reveal knowledge’s multi-faced nature. Their influence on curriculum and on the T.E.C is discussed in the next section.

4.3 Knowledge and curriculum

The field of knowledge has developed in the last decades. New conceptions of knowledge, intelligence and cognition have emerged, for example: situated and contextual knowledge; constructed and reconstructed knowledge; different structures and multiple forms of knowledge. These conceptions have influenced educational learning theories (Beriter, 1990). They have widened educational processes by increasing potential equity and success opportunities (Eisner, 1992; Gardner 1982).

Curriculum is “concerned with the presentation of knowledge” (Eggelston 1977, in: Heywood, 1984, p. 15). It is influenced by “socially organised knowledge” (Young, 1998a, p. 22): educational beliefs, derived instructional theories and conceptions of knowledge; developers’ beliefs, values and norms of instruction; experiences created at schools; personal experiences and interpretations of reality as singles, and as part of social groups (Eisner, 1992; Lamm, 1993; Wideen, 1997; Young, 1998a; Kelly, 1999).

These influences determine the conceptual organisation of knowledge, and the preferred teaching-learning processes. They determine the way knowledge is chosen and organised (Tanner and Tanner, 1975; Van Manen, 1977; Beyer, 1988; Shremer, 1993; Helbowitsh,
1997). They determine which types of knowledge are emphasised: a type that represents a behaviourist approach - prepositional / declarative or / and procedural and knowledge of skills (Anderson, 1983, in: Bereiter, 1990); or / and a type that represents a developmental approach – conceptual, analogical and logical structures of knowledge (Farnham-Diggory, 1994).

These influences determine whether the curriculum focuses on transfer of factual knowledge in a fixed mode, or it generates interpretive understanding and critical thinking in a flexible mode (Apple and Wexler, in: Young, 1998a; Giroux, 1981). They determine whether knowledge focuses on disciplines’ nature and is organised as segregated disciplines’ sequences, or it is contextual, situated, crosses disciplines, and emphasises integrative themes that form an organic and holistic picture of reality (Bernstein 1973, in: Young, 1998a; Bereiter, 1990; Thomas, 1993). Thus, curriculum influences the way learners acquire, conceptualise, and/or create knowledge (Elkana, 1991; Shremer, 1993; Kelly, 1999). Hence, it can be regarded as a tool for mind-altering and knowledge development (Bernstein, 1971, in: Eisner, 1992).

4.4 Professional knowledge and T.E.C

The preferred epistemology of knowledge – positivist, relativist or practical - underpins the T.E.C and the practice of teaching. It shapes the nature of what counts as being worthy of teacher professional knowledge. Current T.E.C demonstrates dualism. They reveal buds of relativist’s and practical directions, but they are mostly positivistic in nature, and are dominated by scientific-theoretic and technical terms and procedures. The
national accreditation and licensing requirements, the competency based T.E.C and the race for standards reinforce this tradition (Beyer, 1987).

Traditional T.E.C focus on: technical applications and competences, based on technocratic rationality (Van Manen, 1977). They are utilitarian and behavioural; enhance non-critical apprenticeship and instrumental reasoning (Beyer and Zeichner 1987; Giroux and McLaren, 1987; Bennett et al. 1993; Korthagen et al. 2001). T.E.C respond neither to complex, uncertain contextual environmental and political considerations (Pearson, 1989), nor to value and moral concerns (Giroux and McLaren, 1987; Kelly, 1999). T.E and T.E.C are not yet ripe for using reasoning based on practical reflection, and / or images and ideas that open alternative discourse and processes.

Cochran-Smith (2000b), thus, asks, "What should teachers know and be able to do?" (p.332). Other scholars agree that there is disagreement regarding the knowledge base required for T.E (McIntyre, 1988; Cowen, 1990; Russell, 1993; Tisher, 1995). Ben-Peretz, (1989) indicates that this disagreement characterises the Israeli context of T.E.

Scholars do agree that knowledge needed for T.E is complex, and should include more then one form of knowledge (Roth, 1999). Shulman and Sykes (1986, in: Tamir, 1989) argue that teachers' professional knowledge includes: understandings and competences, attitudes and values, personal characteristics and behaviours. Shuman (1986) suggests that teachers' professional knowledge base encompasses three components - content knowledge, pedagogical content knowledge, and curricular knowledge. These components might appear in three forms: 1. propositional knowledge that directs
instruction, promotes technical types of learning or recommended behaviours; 2. Case knowledge that enables to confront the complexity of teaching situations through dilemmas, and transform prepositional-disciplinary knowledge to pedagogical content knowledge (Shulman, ibid; 1992; Wasserman, 1994; Geddis and Wood, 1997); and 3. Strategic knowledge that focuses on procedures, principles, maxims or norms teachers can adopt, adapt, or develop in order to resolve particular situations (Shulman, ibid; Floden and Buchman 1990; Calderhead, 1991).

Wilson et al. (1987) crystallise this categorisation. They offer two main categories of knowledge – a. subject knowledge that includes content, substantive and syntactic knowledge; and b. professional knowledge that includes general pedagogical and disciplinary knowledge, and knowledge about learners. Elbaz (1981) emphasises another two aspects of professional knowledge - personal theories and images. Korthagen and Kessels (1999) support these aspects, but prefer the use of the term Gestalt instead of images, because images leave hidden areas that cannot be fully interpreted and analysed.

Wilson et al. (1987) argue that the chosen balance between the two main categories of knowledge, mentioned above, influences the development of the T.E.C's theoretical framework. T.E.C that focus on 'professional knowledge', offer a four levels progress: from concrete experiences, to Gestalt creation, to schemata formation, and to personal theory development. T.E.C that adopts such frameworks are constructive, value and moral concerned, and regard students as whole entities (Korthagen and Kessels, 1999).
Cochran-Smith (2000b) introduces another question "How do teachers construct new knowledge appropriate for differing local contexts, particularly for increasingly diverse learners?" (p. 332). This question assumes that teachers construct their professional knowledge. Thus, answers given to this question regard teachers' professional knowledge as developed in an active process of reconstructing understandings based on personal knowledge, experience, and beliefs (Johnston, 1994; Prentice, 1997, Flores, 2001).

Scholars agree that teachers' professional knowledge encompasses more than academic, disciplinary knowledge (Schon, 1983; Smyth, 1987; Shulman and Sykes, 1986, in: Tamir, 1989; Doyle, 1990; Macintyre, 1991; Goodlad, 1994; Pring, 1999; Back, 2002b). Some regard academic knowledge as part of professional knowledge (Schrag, 1992). Others regard academic knowledge and professional knowledge as distinctive categories (Ryle, 1949, in: Schrag, 1992; Hegarty, 2000). These scholars conceive academic knowledge as received knowledge or as 'know that', and professional knowledge as reflective constructed knowledge or 'know how' (Eggleston, 1977, in: Heywood, 1984; Schon, 1983; Pearson, 1989).

The 'know that' kind of knowledge represents both positivist and relativist epistemologies. It concentrates on accumulating disciplinary content knowledge and theoretical aspects of the nature of teaching, including technical and procedural knowledge aspects. In Habermas's (1971) terminology 'know that' refers to a technocratic kind of knowledge.
The 'know how' integrates technical, practical and personal knowledge with procedural knowledge derived from the 'know that' kind of knowledge (Schon, 1983). Some scholars refer to 'Know how' as technocratic, concrete, and too efficacious (Liston and Zeichner, 1990). Others regard it as dynamic, focused on personal pedagogical knowledge, curricular knowledge, and knowledge of actual teaching (Elbaz, 1981; Pearson, 1989; Shulman, 1986; Shulman and Sykes, 1986, in: Tamir, 1989; Doyle, 1990; 1992; Goodlad, 1994). Others emphasise that 'know how' significantly contributes to teachers' professional development (Fish, 1989). It enhances situated strategic and reflective learning, locally generated, through practice and action research (Schon, 1983; Shulman, 1986; Eisner, 1992; Cochran-Smith, 2000b).

Some scholars recognise a third form of knowledge - personal knowledge. This form of knowledge correlates with Habermas's 'emancipatory' kind of knowledge (1971). It stemmed from cognitive and affective insights emerged as a result of integration between methods, theoretical education studies, and actual experiences (Howey and Zimpher, 1989; Clandinin and Connelly, 1991).

Professional knowledge also focuses on 'Know why' and underpins the 'know how' (Burgess, 2000). 'Know why' has to be considered when developing the T.E.C (Whitehead, et al. 1994). The combination between these forms of professional knowledge creates another form. This form fosters the construction of unique ways of thinking and action, so-called 'Professional super-ego' (Schon, 1983) or "restructuring perspective" of knowledge (Eggleston, 1977, in: Heywood, 1984, p. 37). It focuses on constructivist and reflective processes and self-development (Schon, 1983; Doyle, 1990;
Whitehead et al. 1994). These processes deepen the understanding of both academic and practical knowledge by integrating theoretical knowledge, previous knowledge, personal hidden theories and beliefs, and life experience (Pinar, 1989; Bennett et al. 1993; Korthagen and Kessels, 1999; Flores, 2001; Korthagen et al. 2001).

T.E curricula originated in this form of knowledge emphasise ‘Phronesis’ - practical-mental wisdom, which fosters contextual experiencing and derived subjective and critical interpretive understandings, rather than ‘Episteme’ – theoretical and conceptual wisdom (Beyer, 1988; Korthagen and Kessels, 1999; Back, 2001b; 2002b; Eisner, 2002). Such curricula are learner focused (Woods, 1987; Back, 2001b). They tend to be fieldwork oriented, thus, to enhance reflective processes and a narrative approach, based on ethnography inquiry and action research. They promote ‘ethical know-how’, through dialogues based on case studies, life histories and autobiographies, thus deepen the understanding of how teachers think and act, within the actual reality of their experiencing (Woods, 1987; Shulman, 1992; Hargreaves, 1993; Wasserman, 1994). Consequently, T.E curricula foster students to generate “second order knowledge” (Shulman, 1987, p. 129) or ‘meta-knowledge’ (Bereiter and Scardamalia, 1992, p. 525).

T.E curricula that adopt such learning processes enhance knowledge constructed in "processes of identification, internalisation, reinterpretation, discovery and recognition of the need for new information or skills" and “living, experiential, processual, flexible, creative . . . insights” (Woods, 1987, p. 122). These processes need to carefully integrate the self-development, environmental considerations and societal-contextual agendas, with the common T.E heritage, as to promise thoughtful socialisation processes (Henderson,
Otherwise, they might cause surplus 'self-development', 'narcissism' and 'self-indulgent', and "loss of boundaries of the self" (Hargreaves, 1993, pp. 102, 105).

The nature of the T.E curricula - their foci, contents and organisation influences the 'Ideal graduate teacher's characteristics. They are influenced by different approaches concerning professional knowledge, and concurrently influence these approaches. In addition, the different approaches directly influence the different external and the internal factors, and these influence the 'Ideal graduate teacher's characteristics (figure 1, p. 53).

4.4.1 Professional knowledge, ideal graduate teachers and T.E.C

The restlessness revealed in seeking that T.E appropriately prepares 'Ideal graduate teachers' has developed a new 'pedagogical ecology' that aims at changing the T.E environmental setting, and accordingly, the T.E curricula. The contemporary answers are divergent, but to a large extent correlate with the types of the 'Ideal graduate teachers' (Table 6, p. 96). The answers present five main approaches: field-based, constructive, competency based whole personal development, and the long-life learning.

4.4.1.1 The School-Based approach emphasises the importance of "providing (pre-service teachers) sufficient 'real life' experience" (Beyer, 1988, p. 193). There are two distinctive interpretations to the 'real life' experience. One interpretation requires going back to basics, in the apprenticeship's spirit, assuming that pre-service teachers automatically master them through professional activity (Carnegie Forum, 1986; Beyer, 1988; Russell, 1993; Whitty, 1993; Dunne, 1993; Bell, 1999a). It reflects behavioural and instrumental educational beliefs that highlight accumulation of technical skills and
competencies (Reid, 1994; Partington, 1999). Schools, thus, are regarded as the ultimate environment for pre-service T.T and academic studies in higher education institutions as needless (Beyer and Zeichner, 1987; Tulasiewicz, 1996; Roth, 1999).

The other interpretation accepts that schools are the ultimate site for teacher preparation, but offers a considered balance between theoretical and practical matters, while incorporating different forms of knowledge (Beyer, 1988; Dunne, 1993; Goodson, 1993; Partington, 1999; Reiman, 1999a; Berliner, 2000). It argues that a carefully balanced interaction between practice and theory are required for constructivist teaching-learning processes, critical study and enquiry, and professional development (Beyer and Zeichner, 1987; Bullough and Gitlin, 1994; Wideen, 1994; Tom, 1995; Pinar, 1998 Partington, 1999). Such T.E processes deal with the complexity of teacher’s role, foster the personal, interpersonal and moral development; thus, empowering teachers (Reiman, 1999a; Korthagen and Kessels, 1999). They guarantee quality of experience rather than quantity (Dunne, 1993).

4.4.1.1.1 Partnership represents a distinctive sub-approach in the field-based approach that has spread all over the world. It has two main interpretations:

1. A governmental top-down initiative for school-based partnership in the U.K, mentioned earlier (pp. 58-59)

2. A bottom-up enterprise of the ‘Professional Development Schools’ (P.D.S) in the U.S.A and in Canada; school-based professional development in Australia, as part of the ‘Innovative Links’; partnership in France and in Israel etc. These partnerships require collaboration between schools and training universities or C.F.T.E (Tisher,
Partnership creates a new optimal ecosystem that enhances students' responsibility for schoolwork, and their socialisation to teamwork and schools' culture (Fidler, 1994), instead of the traditional focus on classroom's culture (Goodlad, 1999b). Partnership enables both partners to generate a difference they cannot make on their own, and improve both schools and the T.E. (Holmes Group, 1986; Goodlad, 1994; Ariav and Kleinard, 2000). Adherences of partnership, in both versions, believe that it is a lever to a second order change of school's and T.E reality (Ariav and Kleinard, 2000). They believe that such processes alter the conception and organisation of the T.E and the T.E.C (Cuban, 1992). Such processes encourage teachers' leadership and mentoring. They encourage transferring experienced practitioners' tacit knowledge to novice teachers, and making it explicit, thus they contribute to the development of pre-service teachers' professional knowledge (Holmes Group, 1986; Carnegie Forum, 1986; Pinar, 1989; Fullan, 1993; Hargreaves, 1999b; Hallinan and Khmelkov, 2001). Such processes increase T.E.C's responsiveness for societal and community needs (Prentice, 1997; Stark and Lattuca, 1997; Burstein et al. 1999). They encourage development of school-based practical courses rather than pure academic courses (Prentice, 1997; Edwards, 1994; Bell, 1999a; Poppleton, 1999).

Moreover, partnership encourages a common vision, and shared interests between two cultures. It enhances mutual responsibility for the T.E, and creation of pertinent T.E.C,
staff's professional development and research activities (Doyle, 1990; Cornish et al. 1994; Goodlad, 1994; Day, 1998; Burstein et al. 1999).

Schools’ responsibility for T.E might indicate “technocratic modernisation” or “reflective modernisation” (Young, 1998a, p. 55). “Technocratic modernisation” represents the U.K version, which focuses on practical skills and actual experiencing. “Reflective modernisation” represents the U.S.A, the Australian and the Israeli partnerships. These partnerships offer fruitful combinations between schools and universities/colleges (Young 1998a; Darling-Hammond, 1994; Wideen, 1995; Cohen, 2000). They enhance the development authentic collaborative school-university communities, which carry out reflective processes and link between theory and practice (Fidler and McCulloch, 1994).

4.4.1.2 The Constructivist approach, derived from Piaget’s work, regards knowledge as created through cognitive and social active process of construction (Vygotsky, 1978; Von Glasersfeld, 1991; Watts and Bentley, 1991; Perkins, 1992; Hendry et al. 1999; Back, 1999; Fox, 2001). Such a process stimulates individuals’ responsibility for their learning (Osterman, 1990; Tillema and Knol, 1997; Tatto, 1999). It requires high-interrelated mental efforts for reinterpreting previous knowledge, usually incoherently structured, experiences and beliefs given to actual environmental influences, and reconstructing contextual meaningful understandings (Butt, 1989; Hendry, et al. 1999; Back, 1999; Holt-Reynolds, 2000; Birenboim, 2002).
Constructivism appears in two versions, a weak version and a strong one. The weak version aims at restructuring students' previous knowledge by active learning, questioning and inquiring, while building bridges that help attain desired understandings. T.E curricula that adopt this version are content concerned, and do not create whole frameworks for facilitating students' personal and professional development.

The strong version focuses on constructive processes that enhance cognitive knowledge construction, and contextual and relativistic understandings through contrasts and contradictions. These processes support reflective and meta-cognitive procedures, collaboration and caring (Watts and Bentley, 1991). In this context knowledge is regarded as developmental and provisional, multidimensional and contextual (Roth, 1999). It is subjective, given to human interpretations, and socially communicated, through shared and guided experiences and dialogues.

T.E curricula based on this version combine theory and practice studies in a flexible way, and focus on the students' needs (Frid and Redden, 2001). They focus on knowledge construction through the experience of teaching, believing that the way teachers come to know and conceptualise their own learning influences the way they teach (Calderhead, 1991; Prentice, 1997; Tillema and Knol, 1997; Tato, 1999; Fox, 2001). Such knowledge construction increases contextual and situated learning. It promotes authentic collaborative problem-based learning by raising conceptual conflicts and ambiguity, and using case study methods and performance assessment (Giroux, and McLaren, 1987; Wasserman, 1994; Tillema and Knol, 1997; Hendry et al. 1999; Korthagen and Kessels, 1999). Problem-based learning might focus on: learning as problem solving; learning
through problem solving; or learning to solve problems (Bereiter and Scardamalia, 1992). Such learning encourages learners’ to translate ‘declarative’ or ‘propositional’ knowledge into ‘procedural’ knowledge (ibid; Berliner, 2000). It contributes to the crystallisation of personal professional development.

T.E curricula that adopt the constructive approach consider simple and complex forms of knowledge through reactive and proactive processes (Fox, 2001). They consider possible advantages and disadvantages of the constructive processes. Interacting, dialogue, problem-solving and reflective processes are regarded as advantageous. Constructive processes are regarded as disadvantageous in two cases: when they are too relativistic or too personal, and thus do not explain or construct the social reality; when they are too demanding, so students may misconstrue new conceptions or misinterpret understandings of themselves, forget what they learned, or fail to apply fragile new knowledge (ibid.).

The constructive approach has produced some sub-approaches that have different foci.

4.4.1.2.1 **The Narrative sub-approach** emphasises the basic role of the personal narrative in becoming a teacher (Carter and Doyle, 1990). It is a vehicle for reconstructing accumulated experiential knowledge (Thomas, 1993). This sub-approach supports processes of adaptation of personal understandings, development of professional knowledge and empowerment (Aronoviwitz, 1981; Woods, 1987; Carter and Doyle, 1990; Clandinin and Connelly, 1991; Bullough and Gitlin, 1994; Connelly and Clandinin, 1995; Pinar, 1998; Claus, 1999; Wang and Odell, 2002). It requires dynamic teaching–learning processes that maximise reconstructing of pre-service teachers’ personal theories, by using cases and life histories as pedagogical instruments that strengthen
personal voices linked to general societal contexts (Butt, 1989; Shulman, 1992; Thomas, 1993).

4.4.1.2.2 The Collaborative sub-approach focuses on enhancing the potential of learning-communities (Adams and Tulasiewicz, 1995; Tatto, 1999). Learning communities appear in three different levels: peer-work in a cohort level (Howey and Zimpher, 1989; Samaras and Gismondi, 1998; Korthagen et al. 2001); faculties’, and teacher educators’ collaboration in an intra-institutional level (Diez, 1999); and, partnership and professional collegiality in an inter-institutional level (Beyer, 1988; Cornish et al. 1994; Samaras and Gismondi, 1998). Learning communities are operated either face to face or as networks (Fullan, 1993; Claus, 1999).

All kinds of collaboration are geared to improve social communication and enhance critical evaluation of practice and the self through cognitive dialogues (Butt, 1989; Whitehead, 1994; Samaras and Gismondi, 1998). Such dialogues support “a spirit of cooperation and caring” (Ayers, 1988, p. 26). They facilitate responsiveness, involvement, problem solving and authentic research, deepen meaningful learning and expand the “awareness of the roots of professional practice” (Thomas, 1993, p. 239).

4.4.1.2.3 The Reflective sub-approach regards the T.E.C as a means for a better interpreting and understanding of the ‘Self’, the ‘Other’, and the society (Schubert, 1989; Osterman, 1990; Whitehead et al. 1994; Bullough and Gitlin, 1994; Pinar, 1998; Darling-Hammond, 1998a; Tattoo, 1999; Reid and O’Donoghue, 2004). This answer has been discussed in depth (see pp. 81-83).
4.4.1.2.4 The Critical sub-approach regards the T.E.C as a platform for critical reflective pedagogy concerning schools' reality, and the socio-political contexts in which schools are embedded (Beyer, 1988; Whitehead et al. 1994; Cornish et al. 1994). Critical thinking is regarded as the highest level of reflectivity (Van Manen, 1977). Critical thinking encourages developing alternative hermeneutic answers to personal and professional matters, and/or reacting to social injustice (Aronoviwitz, 1981; Beyer and Zeichner, 1987; Beyer, 1987, 1988; Giroux and McLaren, 1987; Schubert, 1989; Hall and Millard, 1994; Darling-Hammond, 1998a; Claus, 1999; Wang and Odell, 2002; Reid and O'Donoghue, 2004).

4.4.1.2.5 The Research sub-approach regards teachers' learning through investigation and challenging critical-reflective processes, either action research or self-study research, as a vehicle for:

1. Improving practice (Goodson, 1993; Wong, 1995; Wilson, 1995; Whitehead, 2000; Barksdale-Ladd et al., 2001; Reid and O'Donoghue, 2004)


Action research encourages pre-service teachers to investigate their class work in the context of their life, and critically bridge between theory and practice (Cornish et al.
1994; Goodson, 1993; Wilson, 1995; Samaras and Gismondi, 1998). It evokes students’ excitement, because it: a. enhances students’ intellectual curiosity, provides opportunities to reflect upon life and work, internalise habits of learning, and integrate educational and discipline knowledge (Beyer, 1988; Ayers, 1988; Tisher, 1995); b. emphasises humanistic-critical inquiry by means of interpretive and qualitative methods (Fish, 1989; Schubert, 1989). The inclusion of action research in T.E.C increases students’ involvement in their practical and theoretical studies.

4.4.1.3 The Competency-Based approach in T.E regards skills and competencies acquirement as central to practical-professional knowledge. The standards sub-approach is a development of the competency approach, which determines an “outputs model” (Cochran-Smith, 2001a, p. 179). This model enhances accountability, and is used to guide and measure academic and fieldwork achievements, in accordance to set in advance centralised standards (Imig and Switzer, 1996; Burstein et al. 1999; Apple, 2001; Delandshere and Arens, 2001; Wang and Odell, 2002). The Standards’ policy increases governments’ control on “outcomes”, but concurrently reduces the teachers’ autonomy, and increases the complexity of their work (Hargreaves, 1999a). Moreover, it does not necessarily guarantee educational improvement (Fullan, 1991; Sachs, 2003), as atomising teaching to distinct “mini-acts” is as dangerous as considering teaching as a “holistic stance”, and art (Wragg, 1994, p. 192).

4.4.1.4 The Whole Personal Development approach is mainly concerned with the process of becoming teachers. T.E.C that adopt this approach are process and are learner centered rather than product and contents centered (Partington, 1999). This answer is
based on the assumption that teachers are key resources for the development of teaching tools and the 'Self' (Sultana, 1995). It assumes that constructivist teaching-learning processes encourage teachers' awareness of: contextual circumstances, personal beliefs, preferences and values, and their possible implications on their work, thus becoming professional teachers (Ayers, 1988; Hodkinson and Harvard, 1993; Roth, 1999).

4.4.1.5 The Long Life Learning approach regards T.E as a continuous process of learning throughout teachers' career (Fullan, 2001; Mitchell and Mitchell, 2003). Some scholars offer two obligatory phases of learning - pre-service learning and in-service professional development (Fullan, 1993; Hodkinson and Harvard, 1993; Birenboim, 2002). Others offer a three-stage process of professional development - pre-service training, followed by a period of induction, and in-service that necessitates advanced critical-reflective processes and professional studies (Lawton, 1990; Whitehead, et al. 1994; Barber, 1995; Newman, 1996). The phase of induction or internship is regarded as vital for the idea of evolving practical knowledge through active and continuous learning, while linking between practice and theory (Gallegos, 1981; Butt, 1989).

4.5 Summary

The first three approaches present current answers to Cochran-Smiths' (2000b) questions, mentioned earlier in pp. 81 and 83, and correlate with the ideal graduate teachers' types (Table 6, p. 96). The fourth and the fifth approaches present current answers that demonstrate new types of ideal teachers - the 'whole personal developed teachers' and the long life-learning teachers'.
The 'Good Employee' type (Doyle, 1990, p. 5) demonstrates a practical T.T orientation. The 'Junior Professor' type (ibid.) shows academic orientation (Zeichner, 1993). These types correlate with the 'Training Teacher' (Lamm, 2001, p. 149) and the 'Teacher as Naturalist' types (Zeichner, 1993). The 'Fully Functioning Person', the 'Innovator' (Doyle, 1990), and the 'Teacher as an Artist' types represent strategic teachers (Zeichner, 1993), and correlate with the T.E orientation, and the 'Designing Teacher' type (Lamm, 2001). The 'Reflective Professional' (Doyle, 1990; Zeichner, 1993) hints at developmental teachers. It regards reflection as a generic phenomenon interwoven to their work, correlates with the T.E orientation, with the 'Cultivating Teacher' (Lamm, 2001) and the 'Teacher as Researcher' types (Zeichner, 1993). The 'Collaborating Teacher' type takes part in learning communities and is concerned with social and moral dilemmas (Zeichner, 1993). The 'whole personal developed teacher' new type of ideal teachers combines personal and professional development; and the 'long life learning teacher' new type focuses on a continuous professional development.

Table 6 - Types of the 'Ideal graduate teachers' and current correlated answers

<table>
<thead>
<tr>
<th>Ideal graduate Teachers' types</th>
<th>*Training Teachers</th>
<th>**Fully Functioning person</th>
<th>**Innovator or **Reflective professional</th>
<th>***Junior professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current answers to the ideal types</td>
<td>*School-based Competency-based • Standards • ***School-university partnerships</td>
<td>• School-university partnership</td>
<td>• Constructivism oriented • Narrative oriented • Collaborative oriented • Reflective oriented • Inquiry and research oriented • Critical oriented • Whole personal development • Long life learning</td>
<td>A. Cohen, 2002</td>
</tr>
</tbody>
</table>

* Lamm's (2001) types of the 'Ideal graduate teachers'
** Doyle's (1990) types of the 'Ideal graduate teachers'

** School-university partnerships' type appears twice. They can be interpreted as training focused or as fully functioning person focused.

**** The 'Junior Professor' type does not have any appropriate new answer, as rigid academic characteristics are less esteemed nowadays as important.

- New types of 'Ideal teachers', as derived from the current answers.

Most answers reject the 'technical' and 'positivistic forms of knowledge' traditionally offered by the universities and C.F.T.T (Schubert, 1989; Doyle, 1990; Cochran-Smith, 2000a). They offer relativistic forms of knowledge, within the very context in which these answers are implemented (Johnston, 1994; Wideen, 1995). They represent dynamic and complex learning (Vygotsky, 1978). These answers influence the T.E.C's structure and organisation. This is the focus of the next chapter.
5. Curriculum - structure and organisation

This chapter focuses on immanent dilemmas and problems, derived from external factors, educational beliefs and considerations that underpin the T.E.C’s structure and organisation, and contribute to the complexity of its developing. It reviews the T.E.C’s main components, the possible central emphases and their relative weight, through various debates, presented as continua, or as possible different organiser principles.

Bernstein (1982, p. 158) argues that the curriculum organisation should be based on an organiser principle, a “principle by which units of time and their contents are brought into a special relationship with each other”. Such a principle reflects preferred conceptual educational beliefs, pedagogical and technical matters, and social contextual needs and/or limits. These are intertwined into unique structures and organisations of T.E.C (Klein, 1991; Skilbeck, 1991; Shagrir, 2000).

Structure and organisation are not always conceived of as an integral part of curriculum development, as they represent politics and policy behind the curricula rather than its substance (Frey, 1991). But, changing curricula’s contents requires changing its organisation and even its structure. Without changing the deep structure the change’s impact might be limits (Tom, 1995).

Wragg (1997) offers a ‘cubic model’ that represents components of curricular organisation, in a form that considers three ‘pure’ curriculum-planning dimensions: First, contents - subjects to be learnt; Second, skills – cross-curricular issues that influence the learners’ development; and, Third, teaching-learning ways. Burton et al. (2001) have
developed Wragg’s ‘cubic model’. They suggest other three dimensions, the: ‘vision dimension’ that reflects the purposed ‘learnt curriculum’; ‘strategy dimension’ that focuses on the pedagogy, subjects and organisational culture, that reflect the ‘taught curriculum’; and ‘structure dimension’ that refers to managerial operations complementing the curricular considerations (Burton et al., 2001).

The “cubic model” is an open tool that offers a dynamic and flexible framework that enables the inclusion / exclusion of curricular elements, as a response to contextual circumstances (educational / socio-political). Yet, it enables transparency, defines correlation between the curricular elements, and thus guarantees a more coherent and cohesive curriculum.

Developing the T.E.C’s sequences is complicated because of four main reasons:

1. Scholars still disagree about the foremost characteristic of good primary school teachers, should they be specialists or generalists (Whitehead et al. 1994). Consequently, there is a disagreement concerning what is a good T.E.C for these teachers and what ought to be the relative weight given to their different parts.

2. Developing the T.E.C’s sequences requires crystallising conceptions for choosing the most appropriate organiser principles for integrating the relevant elements, and giving them a proper weight. Curriculum structure and organisation is influenced by three kinds of needs: child’s needs, society’s needs, and subject matter’s needs (Tyler, 1949; Skilbeck, 1982, 1991; Klein, 1991; Burton et al. 2001). These needs are given to socio-political and ‘pure’ educational interpretation, and to pedagogic and managerial considerations. These needs can be perceived as conflicting pressures or
as complementary factors (Johnson 1967, in: Giroux et al. 1981; Tanner and Tanner, 1975; Eden, 1988; Klein, 1991). The way these needs are perceived influences preferred pedagogic emphases, the relative weight given to them, and the way contents and experiences are articulated.

3. It is complicated to structure whole sequences according to preferred foci, while keeping connectedness between elements within disciplines, between disciplines, and between the study and the real life (Skilbeck, 1991; Stark and Lattuca, 1997). Thus, curricula tend to show hybrid structures and organisations (Goodlad and Su, 1992).

4. T.E.C is expected to give appropriate answers to diverse social settings. Different populations, undergraduates and postgraduates, experienced and non-experienced etc. make the T.E.C’s construction and organisation complicated. Thus, the T.E demands multiple routs and new modes of T.E curricula (Macintyre, 1991; Whitty, 1993).

T.E has to be more flexible and differential, and enable: diverse duration of T.E programs (from a year to five years), diverse duration of courses and levels, modular studies, credit accumulation and accreditation of prior studies, splitting the studying (Whitehead et al. 1994; Tisher, 1995; Tulasiewicz, 1996). The different modes demonstrate alternative approaches to T.E, which do not necessarily exclude each other. What mostly matters is the level of integration the T.E curricula offer. Integrated T.E curricula enhance student teachers’ transfer from theory and practice (Korthagen and Kessels, 1999).

Eclectic courses that are neither organised as modules, nor divided to continuous units, arranged in distinctive parts, compose fragmented-non-systematic T.E curricula structures (Naish, 1990). Consequently, the association between the T.E.C’s main parts is
fragile, and prevents the construction of connected and coherent T.E curricula (Liston and Zeichner, 1990; Burstein et al. 1999; Fullan, 2001). Electives offered to students increase the T.E.C's non-coherency. Furthermore, the T.E curricula follow occasional / narrow teacher educators' interests instead of agreed organised principles (Holmes Group, 1986; Tamir, 1989; Corrigan, and Haberman, 1990; Doyle, 1990; Kremer-Hayon, 1991, 1992; Lamm, 1993; Stark and Lattuca, 1997; Ben-Peretz, 1998).

5.1 The T.E.C’s structure and organisation

The literature discusses two main perspectives when referring to the T.E.C’s structure and organisation - knowledge (Howey and Zimpher, 1989), and sequence (Tom, 1995; Silberstein, 1997). Yet, a third perspective, educational rationale, has to be considered, especially when referring to basic dilemmas, such as those mentioned in pp. 63-68, T.T versus T.E and/or the theory versus practice. The educational rationale has a vast impact on the required base of knowledge and the T.E.C’s sequenced response.

These three perspectives offer a tool for comparing and analysing T.E curricula. Three questions emerge when referring to knowledge perspective: 1. Which kind of knowledge should be learnt? 2. Which kind of knowledge should be learnt first? 3. What is the relative weight given to each kind of knowledge? As to the answer to the first question, the T.E curricula are composed of the three types of courses: disciplinary theoretical, educational-pedagogic and practical (Short, 1987; Cowen, 1990; Tulasiewicz, 1996). These correlate with three forms of knowledge: know that, know how, and personal knowledge (Howey and Zimpher, 1989). The theoretical component correlates with the 'know that' form of knowledge, and includes foundations and disciplinary academic
courses. The practical component correlates with the ‘know how’ form of knowledge, and focuses on acquiring skills and competencies and on understanding of schools’ regulations and problems. The educational component correlates with all three forms of knowledge. When referring to teaching and contents (Short, 1987), it correlates with the ‘know that’ and the ‘know how’ forms of knowledge. When referring to processes (ibid.) it correlates with the ‘personal’ form of knowledge. The answers to the other two questions depend on educational rationale, and will be discussed later.

Two questions evolve when referring to sequence perspective: 1. What kind of courses precedes, the pure academic courses or the practical courses? 2. Which interrelations do they have? T.E curricula demonstrate that the question of what comes first appears when courses are hierarchically organised. Then, theoretical courses come first, theoretical and practical courses are completely separated, and teaching is regarded as an applied science. When courses are interrelated, T.E curricula facilitate associations between theoretical and practical courses, support field experiencing and deepen professional development (Silberstein, 1997). The hierarchical organisation of courses offers gradual learning that introduces courses step-by-step. The interrelated organisation of courses offers integrated learning that demands integration of conceptual matters, skills and competencies, and / or integrated methods learning and experiencing (Tom, 1995). Hierarchical organisation of T.E curricula demonstrate technical rationality and vocationalism, whereas interrelated organisation demonstrates links between theory and practice (Schon, 1983; Smyth, 1987; Beyer, 1989; Schwartz, 1996; Korthagen and Kessels, 1999).
When referring to the educational rationale perspective one question arises: What is the T.E.C's central focus? The focus corresponds with answers given to the basic dilemmas of teacher preparation. When referring to the T.T. versus T.E dilemma, T.T oriented T.E.C usually go along with the ‘teaching’ organiser principle, which focuses on skills and competencies acquisition. T.E oriented T.E.C usually stick to the ‘process’ organiser principle, which enhance self-consciousness and “creative applications of existing knowledge” (Loergan, in: Hegarty, 2000, p. 461).

When referring to the practical versus academic oriented T.E.C, practical oriented T.E.C tend to go along with the‘teaching’ organiser principle mentioned earlier, and academic oriented tend to get attached to the ‘content’ organiser principle, as to enhance theoretical studies. Disciplinary oriented T.E.C still focus on the ‘content’ organiser principle, and enhance disciplinary specialisation studies. Interdisciplinary oriented T.E.C follow a ‘process’ organiser principle, as to develop integrated conceptual and affective understandings, and complex skills and competencies. The different organiser principles present keys to the nature of T.E.C.

The T.E.C’s rationales need to be carefully analysed, regarding their organiser principles, and the way in which they transmit the explicit intentions. Structures of T.E.C usually neglect clear rationales or organising principles; therefore they lack consistency and coherency, and are fragmented. There is no connection among the T.E.C’s main three components, nor are there links between courses included in each component (Bush 1987, in: Freiberg and Waxman, 1992; Goodlad, 1994; Flores, 2001).
The Israeli T.E curricula, for example, are inconsistent and fragmentary. The main components and the courses within the different parts usually demonstrate disconnectedness. Courses neither create developmental sequences, nor are linked to integrative organiser principles that cross disciplines (Faigin, 1991). However, Faigin and Ariav (1996), report that coherency and the sequencing of the T.E.C have lately improved.

Structures of T.E curricula vary and demonstrate preferred choices among competitive approaches, which cause curricular dilemmas. The dilemmas reflect different cultures of T.E that can be regarded as opposed or complementary (Tadmor, 2000). They can be presented either as extremes or as extremes on continua (Ginsburg, 1988; Reid et al. 1989; Lowry, 1993; Hoyle and John, 1998; Tadmor, 2000; Avdor, 2000; Burton et al., 2001). This study refers to dilemmas as extremes on continua.

The T.E curricula display four main aspects: social and educational vision; nature of preparation; nature of knowledge; and structure and organisation, which can be presented as extremes on continua. This corresponds with definitions chosen as most relevant to this study (see pp. 30-32).
Figure 2: Dilemmas presented as extremes on continua

The social and educational vision:
- Craft <-> Profession
- Training <-> Educating
- Monolithic culture <-> Multi-cultural
- Accepted reality <-> Reality given to criticism
- Pre-service preparation <-> Long-life learning

The nature of preparation:
- Product oriented <-> Process oriented
- Theoretic, Academic <-> Practical, Pedagogic
- Competencies acquisition <-> Professional-personal development
- College based <-> Field based
- Content-centered <-> Learner-centered

The nature of knowledge:
- Objective <-> Subjective
- Given <-> Questioned
- Public <-> Personal
- Molecular (split up) <-> Holistic
- Fixed <-> Flexible and developmental
- Imparted <-> Constructed

The structure and organisation:
- Disciplinary <-> Integrative
- Eclectic <-> Integrated
- Set in advance <-> Dynamic
- Compulsory <-> Electives

A. Cohen, 2002

The T.E.C can be located along each continuum, according to their preferred proposed foci. For example, the U.K current T.E curricula are mechanistic, practical and field
training focused (Hoyle and John, 1998; Macintyre, 1991). They offer a ratio of 1:3 between academic disciplinary studies and training courses. They emphasise application of previous academic studies to schools’ reality, while concentrating on disciplines relevant to schools’ curricula. Foundations and academic studies are offered as an advanced program for in-service further training (Macintyre, ibid.).

Choosing one extreme or another reflects different beliefs, and demonstrates, so believed, the preferred directions for teachers’ preparation. The choices influence curricula’s nature, their structure and organisation, and determine their organiser principle (Short, 1987) or organising elements (Goodlad, 1994). The next sections elaborate on the disciplinary versus integrative dilemma, and the possible organiser principles for structuring the T.E.C.

5.2 Knowledge and curriculum organised according to disciplinary preference
The disciplinary approach regards the disciplinary model as the ultimate way of organising curricula. Believing that, disciplines are conceived of as “vehicle(s) for learning” (Stark and Lattuca, 1997, p. 19), and that they are associated with the theory of ‘forms of knowledge’ (Totterdell and Lambert, 1997). The integrative approach argues for cross-disciplinary curricula organisation, which focus on issues, phenomenon processes etc. (Miel, 1964; Tanner and Tanner, 1975; Mason, 1996).

The disciplinary approach has been the most ancient and central in the course of history, and has been anchored in the positivistic concept of knowledge (Miel, 1964; Ball and
McDiarmid, 1990; Kremer-Hayon, 1991; Ben-Pertz and Connelly, 1991; Zeichner and Tabachnick, 1991; Lamm, 1993). Its strength derives from two reasons: 1. The belief that the disciplines represent best the real objective world, enables to logically conceptualise reality and create meaningful knowledge (Hirst, 1969, in: Young, 1998a; Lawton, 1975; Bernstein, 1982; Stark and Lattuca, 1997), 2. Many scholars support this approach, thus it has professional and political backing (Stark and Lattuca, 1997).

However, this approach undergoes pragmatic and essential development, pertaining to the 'structures of knowledge' perception that has emerged and offered a professional academic framework for teaching-learning processes (Bernstein, 1982; Phenix, 1964, in: Lamm, 1993; Bruner, 1965; Stark and Lattuca, 1997). As a consequence, since the late 1950s, its dominance has strengthened.

The disciplines' 'structure of knowledge' approach has influenced the structuring of the distinct subject matters that construct schools' curriculum (Tamir, 1989; Ben-Peretz and Connelly, 1991; Goodlad and Su, 1992). As, "content sequence and integration, teaching method and learning style are all related to the concept of structure adopted" (Finegold and Connelly, 1991, p. 157). This approach has been regarded as a means of overcoming rapid growth and the explosion of the academic knowledge. It concentrates on the quality of knowledge rather than quantity (Kremer-Hayon, 1992; Pesig, 1997; Ariav, 1997; Goodson, 1991). It has been argued that this approach fosters active heuristic learning that deepens meaningful understanding. Further, it enables learners to elucidate essential principles of phenomena, re-use knowledge and transfer it to new and unforeseen situations or problems. Yet, it helps to create new knowledge (Bruner, 1965; Schwab,
Since the 1970s scholars have agreed that disciplinary boundaries are artificial human constructs, thus situated and tentative (Lawton, 1975; Popkewitz, 1987; Kremer-Hayon, 1992; Gardner and Boix-Mansilla, 1994; Ariav, 1997). Scholars have agreed that disciplinary conceptual and syntactical structures are dynamic, and given to the influence of scientific, societal-political and educational beliefs (Schwab, 1962; Lawton, 1975; Adams, 1975; Kremer-Hayon, 1991; Eisner, 1992; Goodlad and Su, 1992; Marsh, 1997; Ariav, 1997). These influences determine which competing structures of knowledge will be chosen, which derived subject matters will be included, optional or excluded (Eisner, 1992; Goodlad and Su, 1992; Ariav, 1997).

The discipline approach has been the subject of intense criticism. 'New sociology' adherents, since the early 1980s, have protested against socio-political ideologies' bias, against so called 'objective truths' and necessitated reality that is external to the learners, but determines their schooling (Apple, 1979; Young, 1998a). Others have claimed that distinct forms of disciplines influence curricula's structure, limit thinking processes, and the potential for generalising and transferring across disciplinary skills (Eraut, 1991). Yet, others have argued that disciplines' borders need to be broken, as to enable cross-curricular integrations, and enhance the understanding of the integrative nature of real life phenomena (Miel, 1964; Beauchamp, 1971; Goodlad and Su, 1992; Kremer-Hayon, 1992; Cornish et al. 1994; Bell, 2001).
5.2.1 Disciplines as an organiser principle

Developing the T.E curricula is a complex matter. It needs an organiser principle that offers the appropriate answer to the multi-dimension considerations that affect: general education beliefs, the preferred 'ideal graduate teacher' type, T.E conceptual paradigms, and different conceptions of knowledge.

Many discipline-oriented T.E curricula are fragmental, and neglect an overall structural view, as they regard knowledge as molecular rather than holistic (Ginsburg, 1988). Such curricula include a collection of distinctive disciplines that raise different questions, aim at different and not necessarily complementary objectives, procedures, methods, and results (Bruner, 1965; Lawton, 1975; Silberstein, 1977; Hegarty, 2000).

The disciplinary curricular tradition is deeply rooted, and it will not fundamentally get changed (Goodlad, 1994; Ariav, 1997). The traditional T.E curricula are focused on the accumulation of everlasting and objective truths organised in disciplines, as a means for acculturation. In the course of history, the T.E.C's focus has become more empirical-analytic, and concerned with scientific knowledge (Giroux, 1981). Teachers at the end of the 1800s, were supposed to “demonstrate knowledge of subject matters as a prerequisite to teaching”, whereas knowledge of theories and teaching methods used to “play decidedly secondary role of the qualifications of a teacher” (Shulman, 1986, p. 5).

During the 20th century disciplines have been conceptually and syntactically organised as exclusive, coherent and ordered academic ‘bodies of knowledge’ (Schwab, 1962; Bruner, 1965; Johnson, 1967; Adams, 1975; Lawton, 1975; Tanner and Tanner, 1975; Giroux,
1981; Schubert, 1982; Goodlad and Su, 1992; Eisner, 1992; Stengel, 1997). Since the mid 20th century the perception of 'structure of knowledge' has thoroughly influenced schools' curricula and the T.E.C. The disciplinary 'bodies of knowledge' have become more than basic patterns of knowledge (Levine, 1998).

Schwab (1964) argues that disciplinary 'structures of knowledge' represent different truths and norms, thus more than one paradigm. This encourages re-examining knowledge that should be learnt, dismissed or added (Aviram, 1997). Still, in some western countries, for instance, the U.K, the national curriculum enforces the traditional disciplinary orientation on the schools, including the T.E (Goodson, 1991).

Academic disciplines have always underpinned schools’ subject matters (Rosso, 1998). There are three alternative relations between academic disciplines and school subjects: continuous, discontinuous and related relations. In continuous relations academic disciplines precede schools’ subjects; in discontinuous relations schools’ subjects precede, and in related relations academic disciplines and school subjects have dialectic relations (Scheffler, 1991, in: Stengel, 1997). Two alternatives are mostly relevant to T.E - the discontinuous and the related relations. These two relations remove the limiting boundaries of the disciplines, and enable widening the focus and scope of learning beyond specific disciplines.

The discontinuous relations emphasise conceptual-educational purposes independent from disciplinary constraints (Stengel, 1997). They elaborate teachers’ role and responsibility, and enable creating contextual T.E.C, society and moral concerned. The
dialectic relations as part of the related relations facilitate individual growth, while integrating accumulated knowledge presented in the academic disciplines and the derived school subjects. These relations demonstrate three concerns: pedagogical, pragmatic and existential. The Pedagogical concern (Shulman, 1986) refers to the learners’ actual benefit from the accumulated wisdom organised in the disciplines. The Pragmatic concern (Dewey, 1960) integrates the practical and disciplinary knowledge. The Existential concern (Nodding, 1992, in: Stengel, 1997) questions, “Whether ‘knowledge’ is the point of education at all” (ibid. p. 600). It emphasises that curricula should meet learners’ real interests and problems (Stark and Lattuca, 1997). The pragmatic and existential concerns characterise ‘divergent’ and ‘applied disciplines’ (Stark and Lattuca, 1997, p. 147). These concerns foster “concrete experiences and reflective observation”, rather than “abstract conceptualisation and active experimentation” (ibid.).

Scholars argued that mastering disciplinary knowledge in higher education deepens disciplinary understanding, improves pre-service teachers’ ability to plan meaningful units and sequences of instruction, and supports professional teaching and personal knowledge (Shulman, 1986; Hashweh, 1987, in Ball L. D. and McDiarmid, 1990; Ben-Peretz, 1991a; Gardner and Boix-Mansilla, 1994). T.E curricula that follow this attitude use disciplinary knowledge in a contextual and applicable way, as a means for “gaining control over everyday, real-world problems” (Ball and McDiarmid, 1990, p. 438). Such T.E curricula limit the gathering of information and memorising accepted truths, and concentrates on real problem solving (Gardner and Boix-Mansilla, 1994).
Such T.E curricula regard disciplinary knowledge as an educational lever to other kinds of essential knowledge, such as: pedagogical content knowledge, and curricular content knowledge. It promotes pre-service teachers’ professional growth, skill acquisition, and acquisition of tools for further self-learning in dynamic content frameworks (Shulman, 1986; Bloom, 1988; Kremer-Hayon, 1992; Doyle, 1992; Moon, 1995; Pesig, 1997; Stark and Lattuca, 1997; Darling-Hammond, 1998b; Berliner, 2000; Brisard and Hall, 2001). It fortifies teachers’ ability to "explain why a particular proposition is deemed warranted, why it is worth knowing, and how it relates to other propositions" (Shulman, 1986, p. 9).

Moreover, pre-service teachers’ previous experience and knowledge create hidden curriculum that implicitly influences the learning and the actual teaching. These need to be exposed and reconstructed, as part of the official learning processes (Ball and McDiarmid, 1990). Such processes encourage teachers to reinterpret their experiences and studies, thus empower them.

5.2.2 Integrative approach as an organiser principle

The integrative approach and discipline approach continuously compete (Baldwin, 1987). Integration and cross-curricular organisation create relevant environment for teaching-learning processes, enhance learners’ mental development, and foster efficient learning (Lawton, 1975; Cornish et al. 1994; Levine, 1998). Such organisation increases curricular coherence and connectedness. Thus, in the course of the history of schooling, repeated attempts to integrate allied disciplines emerged (Miel, 1964; Beachump, 1971; Goodlad and Su, 1992; Stark and Lattuca, 1997). These attempts have failed because:
1. Integration and cross-curricular organisation have been complex and too demanding (Gardner and Boix-Mansilla, 1994; Korthagen and Kessels, 1999; Bell, 2001).

2. Managing such curricula caused difficulties. Integration has increased the threat of superficiality (Stark and Lattuca, 1997; Kysilka, 1998).

Although disciplinary knowledge is conceived of "as virtually second nature" (Schrag, 1992, p. 278), adherents of the integrative approach assume that for most people disciplinary organised curricula are detached from the real life, and from learners' authentic interests (Dewy, 1960; Schubert 1986; Stark and Lattuca, 1997). Adherents believe that: reality is integrative in nature; disciplines are means rather than aims; personal narratives - beliefs, interests and experiences - are the most appropriate basis for knowledge organising, and meaningful and fruitful teaching-learning processes (Miel, 1964; Glatthorn and Foshay, 1991; Young, 1998a). Besides, integrative curricula foster learners' motivation, authentic leaning and relevant problem solving (Beyer, 1989; Rosso, 1998), and consequently foster comprehensive understandings of phenomena and recognition of the multifaceted world (Hirst, 1969, in: Young, 1998a; Goren, 1995). Such curricula move "from matchboxes to tea chests" (Frid and Reeden, 2001, p. 51). Consequently, integrative curricula refer to the learners as whole entities, encourage their 'natural curiosity', 'spontaneous inquiry', creation of "different forms of knowledge" (Pring, 1972, p. 269, in: Young, 1998a).

Integrative curricula offer different frameworks and levels of integration (Drake, 1993, in: Levine, 1998). They can be developed in four forms – correlated-subjects within disciplines; multidisciplinary studies; interdisciplinary studies, and trans-disciplinary

Integrative T.E curricula consider questions and principles that examine common cross-disciplinary themes (Young, 1998a). They “concentrate . . . on inter-disciplinary work on the content of education” (Lawton, 1978, p. 280). Still, it needs to keep a balanced integration between the three kinds of knowledge - disciplinary, pedagogical content and practical, while emphasising the relevance of theoretical knowledge to the pedagogical and practical knowledge (Shulman, 1986; Kremer-Hayon, 1992; Moon, 1995; Mason, 1996; Burstein et al. 1999). The integration between these kinds of knowledge encourages teacher educators to develop their own conceptual teaching frameworks, and adapt them to diverse disciplinary and interdisciplin ary teaching-learning processes.
(Rosso, 1998). Nonetheless, the integrative approach has some deficiencies, mainly concerned with teachers’ limited scope and depth of knowledge (Klein, 1991).

"Instruction in dim situations ... should open circles ... for doubts ... and development. Thus a non-flexible approach ... focused only on disciplines' 'structure of knowledge' might be harmful" (Kremer-Hayon, 1992, p. 70). Integrative curricula are quite challenging, and two examples demonstrate this argument. The first example refers to a reform in “Hoover College”, in the U.S.A (Beyer, 1989); the second one refers to a reform in “The University of New England”, in Australia (Frid and Reeden, 2001). The motivation to develop these alternatives differs, but both reforms have a clear vision, supplemented by underlying theories. Both reforms recognise the significance of the integrative nature of education, and offer integrative curricula that synthesise methodologies, issues, areas of research, and perspectives from disparate disciplines. Yet, both reforms do not underpin courses that have been believed to be foundations of education; rather they examine their relevance and contribution to the development of educational understandings.

The T.E curricula need to: 1. integrate disciplinary studies that foster “understanding in greater depth the concepts of disciplines”, and integrative studies that enhance “competent in analysing broad problems” (Glatthorn and Foshay, 1991, p. 161); 2. Offer different and complementary kinds of knowledge, relevant for T.E (Rosso, 1998).

The next section elaborates another organiser principle – the competency-based principle. This organiser principle exposes a dilemma concerned with competencies acquisition versus personal development.
5.2.3 Competencies-Based organiser principle

'Competencies-based teacher education' (C.B.T.E) approach has emerged out of a confluent of two external influencing factors – a new societal setting: teachers’ surplus, shift of demands for better schooling and accountability, and new academic research on instruction and learning processes. An internal influencing factor joined to the development of the C.B.T.E – the students’ dissatisfaction with the T.E.C (Hall and Jones, 1976). C.B.T.E has been associated with the belief that a systematic, “well-sequenced and coordinated” T.E.C (Hall and Jones, 1976, p. 221), focused on practical-technical field-experiencing interests (Kelly, 1999; Back, 2002a), and on ‘developmental mechanisms’, guarantees best acquisition of basic skills for practice, and improves teachers’ qualifications and instructional expertise (Fullan, 2001). It said that C.B.T.E prepares ‘Good Employees’ (see, p. 95). Teachers of this type own clear and specific observable series of predetermined desired teaching behaviours, so called, competencies (Hall and Jones, 1976; Lawton, 1990; Diez, 1999; Tarrant, 2000; Burgess, 2000; Delandshere and Arens, 2001; Gore and Morrison, 2001; Apple, 2001). Thus, they trigger learning, based on clear objectives and assessment criteria (Freiberg and Waxman, 1991; Back, 2002a).

C.B.T.E represents two questions that have reappeared in the last hundred years. The first question focuses on good teaching attributes and standards for teachers’ tasks (Kliebard, 1973, in: Kliebard, 1992; Wragg, 1994; Cochran-Smith, 2000a). This question has become mostly prominent from the early 1950s through the 1960s, as a result of Tyler’s conception of objectives that has canalised the T.E.C towards mastering good teaching attributes. The second question “What are the teaching strategies and processes used by
effective teachers, and what T.E processes ensure that initial teachers learn these strategies" searches for a more comprehensive answer (Cochran-Smith, 2000b, p. 331). It is concerned with teachers' effectiveness, requires integrating academic and complex mental abilities into the T.E.C, such as reflection, not only mastering good attributes in teaching's tasks (Wragg, 1994; Cochran-Smith, 2000b; Ward and McCotter, 2004).

This answer has widened the orientation of competencies. Competencies are associated with necessary skills and knowledge, specific attitudes and directed experiences that guarantee good functioning. Competencies have even been associated with performances interrelated with cognitive, developmental, and contextual processes, that are less arbitrary, foster dynamic abilities (Wood and Power 1987; Wragg, 1994; Drake and Dart, 1997; Bell, 1999a; Westera, 2001), and enhance "successful behaviours", "in non-standardised situations" (Westera, 2001, p. 86).

The current 'standards movement' is rooted in a narrow version of the C.B.T.E conception, as part of the T.T trend (Back, 2002a). Thus, competencies have turned into obligatory technical educational standards that emphasise limited experiencing, and abandon wide educational and theoretical concerns (Wragg, 1994; Kelly, 1999; Bell, 1999a, Westera, 2001). The 'standards movement' has become a worldwide approach and a common organiser principle for T.E curricula (Lawton, 1990; Schwartz, 1996; Reynolds, 1999; Poppleton, 1999; Fullan, 2001). It reflects political and economical influences (Lawton 1990; Barber, 1995; Bell, 1999a; Burgess, 2000; Whitehead, 2000; Brisard and Hall, 2001), and educational concerns (Young, 1998a; Tarrant, 2000; Gore
and Morrison, 2001). In the U.S.A the ‘standards-based teaching’ has become a leading approach for T.E (Wang and Odell, 2002; Delandshere and Petrosky, 2004).

Adherents suppose that ‘standards-based T.E curricula increase: pre-service teachers’ confidence in their ability to control their work (Kelly, 1999); success according to agreed criteria; and, achievement of high teaching standards and excellence (Beyer, 1987; Reynolds, 1999; Bell, 1999b; Cochran-Smith, 2001a; Delandshere and Arens, 2001; Fullan, 2001). Thus, standards’ supporters believe that T.E curricula should adopt the ‘standards-based’ organiser principle that guarantees a coherent and integrated conceptual framework. The ‘Standards-based’ organiser principle:

1. Determines observable criteria for “what teachers need to know and be able to do” (Diez, 1999), beyond technical skills and competencies (Whitty, 1993; Cochran-Smith, 2001a), 2. Enhances a high level essential educational discourse that “prepare(s) prospective teachers who are skilled change agents” and are aware of “moral purposes” (Cochran-Smith, 2001a, pp.180), 3. Improves teaching-learning processes, widens the meanings of teaching and schooling, fosters field-experiences’ observation analysis and accountability (Shulman, 1986; Cruickshank, and Metcalf, 1990; Freiberg and Waxman, 1991; Cochran-Smith, 2000b; Back, 2002a), 4. Formulates reflective behaviours as series of monitored competencies (Whitty, 1993). These characteristics cover: planning and teaching demands; class managing; observing, assessment and accountability (Burgess, 2000), and correspond with current socio-political demands for accreditation and licensing, and continuous professional development (Cruickshank and Metcalf, 1990; Reid, 1994; Fullan, 2001).
Opponents claim that standards-based T.E curricula are not based on sufficient research that systematically analyses teaching tasks and the consequences to T.E processes (Wang and Odell, 2002). Such T.E curricula enhance predetermine linear and prescriptive processes of learning, obstruct integrative, creative and flexible processes and create an unvaried basis for assessing the quality of training (McCulloch, 1994; Reynolds, 1999; Bell, 1999a; Burgess, 2000; Cochran-Smith, 2001a). Thus, they do not:

1. Recognise that the sum of all competencies does not necessarily guarantee good teaching (Whitehead, et al. 1994),
2. Regard teaching as “a complex activity in which personal judgment and values . . . are called into play” (Reynolds, 1999, p. 258),
3. Refer to “wisdom of experience, intuition, creativity and intervention with learners” as central for good teaching (Schwartz, 1996),
4. Encourage producing required behaviours through constructivist processes (Tarrant, 2000; Delandshere and Arens, 2001),
5. Consider that the arbitrary standards, uniformly acquired, applied and assessed ignore learners’ needs and interests inhibit real growth and improvement (Delandshere and Arens, 2001).

Yet, opponents notice that this approach reflects two conflicting tendencies that coexist—a conservative versus a liberal. The emerging conservative tendency encourages homogenous national standards, which serve as guidelines for outcome-based performances. The widespread heterogeneous ‘liberal’ tendency invites competition, diversity, autonomy and choice, and more comprehensive market-based considerations and accountability (Schwartz, 1996; Bell, 1999b; Apple, 2001).

It is not yet clear whether the standards truly change the nature of teaching (Howey, 1995). So far, despite the belief that C.B.T.E and standards have the potential to meet
complex and comprehensive teaching aspects, they actually serve as a technical-
mechanistic limiting ‘quality control’ factor (Short, 1987; Doyle, 1990; Hegarty, 2000;
Gore and Morrison, 2001), and enhance apprenticeship (Bell, 1999a), rather than
transformational and intelligent behaviour (Giroux and McLaren, 1987; Hegarty, 2000).
C.B.T.E and standards oppress critical intellectual thinking, limit developmental and
empowering processes of becoming autonomous professionals, sensitive persons and
citizens, (Barrow, 1984; Bell, 1999a; Canen, 1999; Tarrant, 2000; Apple, 2001). They
ignore inherent situated teaching processes (Drake and Dart, 1997), contextual schools’
reality, and do not leave room for different T.E.C’s cultures (Gore and Morrison, 2001).
Besides, they disregard personal hidden factors that influence teaching, and alternative
possible ways to conduct efficient teaching (Kliebard, 1973, in: Kliebard, 1992).

Opponents demand limiting C.B.T.E and training for standards, instead of encouraging
personal development through continuous dialogues, reflective and critical thinking, and
challenging learning processes (Beyer, 1988; Bengtsson, 1995; Flores, 2001). Other
researchers offer integrating reflection into standards for T.E processes, not for
formulating reflective behaviours, but as to deepen awareness and responsibility of
experiencing, and to get a more round picture of personal meanings of teaching (Ward
and McCotter, 2004). The next section elaborates this on issue.

5.2.4 Personal development approach as an organiser principle

T.E curricula that aim at personal development is mainly concerned with the process of
becoming teachers and self-fulfillment (Barber, 1995). Therefore, teachers’: background,
gender, previous experiences, beliefs, knowledge, influence pre-service teachers’
personal contexts, their thinking and doing (Clandinin and Connelly, 1991). Thus, personal development is regarded as the heart of the T.E curricula.

Reflective thinking, in and on action (Schon, 1983; Liston and Zeichner, 1990), stemming from humanist, developmental theories (Ben-Peretz, 1991a) has become mostly relevant to pre-service teachers' personal development as whole entities (Schon, 1983). Moreover, reflective knowledge, and constructivist, critical, narrative and inquiry oriented learning processes, create an alternative organiser principle for the T.E curricula, which emphasises cognitive, mental and practical developmental aspects. This organiser principle facilitates pre-service teachers' deep pedagogical knowledge, autonomy, and personal and professional identity, along with technical and practical skills. It fosters the ability to: analyse teaching, be conscious of what actually happens and of the options of choice, be aware of social, ethical and moral aspects of teaching and learning, and to be sensitive to learners' diverse needs (Zeichner 1983; Felix, et al. 1995; Reiman, 1999b; Ovens; 2000; Todd, 2001).

T.E curricula that aim at teachers' whole personal development integrate the reflective knowledge with other kinds of knowledge, through constructivist processes, as to increase: self/ego, intellectual and moral development (Reiman, 1999b). They, thus, are process oriented and coherent (Flores, 2001). They regard 'good teachers' (see, p. 103) as empowered teachers, reflective and collaborative, as long life learners who integrate action / self-study research into their work.
5.3 Summary

The T.E.C's structure and organisation reflect answers given to the dilemmas that underpin the T.E.C's development. These answers refer to the T.E.C's main components: disciplinary, pedagogical and practical, their organisation, and relative weight given to them. The T.E.C's structure and organisation represent directions they lay emphasis on, especially regarding preferred kinds of knowledge. These emphases can be presented as extremes on continua, or as different organiser principles. The extreme of continua include four main topics, the: social and educational vision; nature of preparation; nature of knowledge; and, structure and organisation. Complementary answers across the topics guarantee coherent T.E.C.

The T.E.C consider four possible organiser principles. 1. The Disciplinary organiser principle, which guides T.E.C that concentrate on contents, and is the most common and anchored organiser principle; 2. The Integrative organiser principle, which bridges practice and theory, enhances the T.E.C’s coherency and consistency, but is demanding, thus less common; 3. The Competencies-Based organiser principle currently appears as Standards, which complements the Disciplinary organiser principle, and gets the western countries governments’ support, including Israel, is dominant, despite scholars’ criticism; 4. The Personal development organiser principle, which emphasises constructivist and reflective processes, and integration of other kinds of knowledge, is marginal. The two possibilities either the one arranged as extremes of continua, or the one presented as organiser principles offer different answers to central questions: what is the profile of the "good teacher"? How to educate them? This is discussed in the next section.
6. Future directions of T.E and T.E.C

T.E has been undervalued and given to continuous criticism. Policymakers doubted whether un-trained teachers are as good as formal trained teachers (Darling-Hammond, 1990, 1999). These doubts increased since the late 1960s (ibid.). Since the 1970s, due to new social-cultural, political as well as new pedagogical concerns T.E has been given to ongoing changes (Tisher, 1995; Imig and Switzer, 1996; Porat, 1998; Darling-Hammond, 1999; Back, 2002b). The changes present different, even contradictory agendas, which reveal disagreements concerning the good teacher's characteristics, and the preferred ways for preparing tomorrow's teachers (Totterdell and Lambert, 1997; Darling-Hammond, 2004).

Thus, T.E's future cannot be forecast (Naish, 1990). Current changes are not sufficient. They neither question basic educational beliefs and assumptions, nor significant historical conditions. They use common strategies, instead of taking risks and trying new strategies, for enhancing educational changes (Baldwin, 1987; Beyer, 1987; Porat, 1998). It is believed that T.E needs comprehensive and radical changes in order to adjust to the current reality and the derived demands (Zeichner, 1980, 1983; Tom, 1995; Wideen, 1995; Buchberger, 1996; Stark and Lattuca, 1997; Rhodes and Bellamy, 1999; Back, 2001a; Flores, 2001; Hallinan and Khmelkov, 2001).

However, the future of T.E cannot be detached from the 'multidimensional ecosystem' within which it exists. T.E curricula have to consider: socio-political, economic contextual conditions, which produce divergent expectations and projections, existing trends that represent the educational beliefs' range (Beyer and Zeichner, 1987; Lawton,
1990; Kliebard, 1992; Wideen, 1997; Fucks, 2000; Pitzsimmons, 2001; Darling-Hammond, 2004). They need to consider academic research on teaching and learning (McIntyre, 1997; Berliner, 2000). These influences may cause ‘macro level’ changes (see pp. 55-56). Similarly, T.E need to consider institutional and staff’s influences, as individuals or as groups, (Howey, 1995; Totterdell and Lambert, 1997), which may cause ‘micro level’ changes (see p. 66). Eventually, there are four alternatives for the T.E curricula development: 1. Keeping the existing T.E curricula 2. Responding to the social reality and adopting the competition and the competencies’ based culture 3. Getting monitored by the government’s predetermined demands 4. Creating a flexible and life based T.E curricula, free of external limiting influencing forces (Wideen, 1997).

The four alternatives answers all represent contradictory. Many scholars regard the fourth alternative as the most desired, as it aims at establishing new autonomous relations between school subjects, between them and the real world, and between: foundations, educational studies, and practical experiences (Baldwin, 1987). This alternative facilitates personal professional development and a moral approach (ibid.). It facilitates all kinds of knowledge, and encourages independent, intellectual and critical thought. Thus, it empowers teachers and inspires them to explore their work, teaching aims, educational purposes, and to construct personal-professional comprehensive concepts (Young, 1998a; Darling-Hammond, 1998b; Burgess, 2000).

Still, social-political pressures have a vast impact on T.E curricula development, therefore alternatives 2 and 3 cannot be ignored (Lawton, 1990). Future T.E curricula should be bifocal, and address specific behavioural competencies and skills (alternative
2), and teachers’ humanistic personal development (alternative 4). Integration between these alternatives will enhance the “vision of T.E excellence” (Reiman, 1999b, p. 253).

Undoubtedly, the T.E curricula prepare “teachers to work in the rapidly changing social environment ... and to meet the complex learning needs of students” (Hallinan and Khmelkov, 2001, p. 177), thus they cannot remain stagnant (alternative 1). A re-conceptualisation of the T.E policy is required (Totterdell and Lambert, 1997); in order to generate a “change in values, people, society, culture and basic assumptions about what constitutes education and the good life” (Zais, 1976, p. 46). The new T.E policy should enhance moral and critical consciousness in regard with reality (Beyer and Zeichner, 1987; Beyer, 1988; Young, 1998a), and foster the influencing factors’ confluence (Pitzsimmons, 2001).

Yet, a real change in T.E will not occur unless re-conceptualisation is coupled with reconstruction (Feiman-Nemser, 1990; Wideen, 1995; Grimmett, 1995; Rhodes and Bellamy, 1999). This complexity explains partially why “there have been no fundamental or substantive changes in T.E during the past decades”, despite the efforts for change (Freiberg and Waxman, 1992, p. 622). A substantial change is needed to the transform the T.E and the T.E curricula, and put in place a whole renewed organisational-pedagogical setting (Ariav and Kleinard, 2000; Cochran-Smith, 2000b; Back, 2002b).
Chapter Three Methodology

This chapter begins by restating the key arguments, the study's purposes and aims. Then, it refers to the location of the study concerning: a. The chosen methodology tradition; b. The research method, and c. The theoretical context association with the conceptual framework developed in the L.R. Then, it explains issues concerning the data collection and the analysis process, and refers to procedures taken as to ensure trustworthiness. Subsequently, the chapter refers to generalisability, the study's limitations, and its ethical concerns.

The main purpose of this study is to deepen the understanding of the T.E.C's main characteristics, while focusing on the factors that influence it. Consequently, the aims of the study are:

1. To determine the external factors, which influence the primary school departments' T.E.C, in Israeli C.F.T.E
2. To determine the internal factors, which influence the primary school departments' T.E.C in Israeli C.F.T.E
3. To identify areas of commonality and difference, and the factors that influence them, in the primary school departments' T.E.C, in different Israeli C.F.T.E
4. To extract existing major directions or trends that characterise the primary school departments’ T.E.C, in Israeli C.F.T.E.

1. The Methodological tradition

This study has adopted the interpretive methodological tradition. The study assumes that reality is “a construct of the human mind” (Bassey, 1999, p. 43); thus, is given to human beings’ interpretations (Johnson, 1994; Schwandt, 1994; Stake, 1995; Husen, 1997;
Bassey, 1999). Human beings’ understandings of the world, therefore, do not represent
the objective world that exists apart from them (Guba and Lincoln, 1985, in: Schwandt,
1994; Borg and Gall, 1989; Walker and Evers, 1997). This interpretive oriented tradition
is regarded as: subjective, constructivist, hermeneutical, and humanistic in nature. These
methodological characteristics justify and legitimate the use of participants’
interpretations of the factors that influence the T.E.C’s nature in the departments to which
they belong, and in some cases, manage.

This tradition strives to construe understandings based on confluent interaction between
the subjective participants’ perspectives and those of the researcher’s (Guba and Lincoln,
1994; Schwandt, 1994). It seeks for a better “understanding (of) the complex world of
lived experience from the point of view of those who live it” (Schwandt, 1994, p. 118).
This legitimises the researcher’s intention to build another level of interpretation, based
on the participants’ interpretations.

This methodological tradition assumes that human behaviour is situated, and depends on
people’s own understandings on the meanings they give to the world, which reflect their
values or needs, and determine their goals and behaviours (Guba and Lincoln, 1994;
Schwandt, 1994; Johnson, 1994; Walker and Evers, 1997; Bassey, 1999; Cohen et al.
2000; Wisker, 2001). It facilitates contextual interpretation of local and specific
constructed realities focused on the factors that influence the T.E.C in the primary school
departments in Israeli C.F.T.E. Accordingly, it endeavours to reveal beliefs and values
that underpin the development of the T.E.C.
2. The research method

Within the interpretive tradition, the study has adopted the qualitative research method, when analysing the survey and a complementary case study. This method does not worry about positivistic concerns of objectivity and rigidity (Walker, 1992). It is concerned with meanings and not with cause, and with contextual perspectives that reveal significant influences on researched phenomena (Finch, 1986). Therefore, the qualitative research method emphasises benefits of cautious subjectivity, flexibility and softness (Burgess, 1985). Additionally, it encourages the use of a qualitative multi-method approach that enables the gathering of rich and complex data, questioning, challenging current policy. Yet, it promotes creation of conceptual reorientations (Finch, 1986).

Thus, curriculum research in general, and in this study in particular, benefits from the adoption of the qualitative research method and the use of different, though complementary, research methods. This kind of research enables a better understanding of the T.E.C as a holistic phenomenon. It enables the study of mental matters that are in the heart of curriculum, such as: interests, beliefs, actual values, thoughts concerning educational and socio-political considerations; purposes and plans concerning contents, processes, logic of sequencing, and time organisation (Walker, 1992). Yet, it allows for developing a comprehensive understanding of the factors that influence the T.E.C’s policy making in different colleges.

2.1 Justification of the research method applied in the study

The qualitative research method regards cautious subjectivity as legitimate, and allows exploring, describing, and appreciatively and reflectively interpreting researched phenomena (Hargreaves, 1978, in: Hammersley, 2000). This method is particularly
suitable for studying the changes caused by the ‘Academism’ process operated in Israeli C.F.T.E since 1981. It enables revealed changes over time in macro and micro policy, and consequent changes of concepts (Finch, 1986; Frankel and Wallen, 1990). Concurrently, it enables the illuminating of major directions or trends that have characterised the T.E.C in this period.

From a different perspective the qualitative research method facilitates scrutiny of the hidden rationale of the T.E.C. It contributes to a conscious analysis of T.E.C, including conceptualisation of participants’ interpretations, as reflected in their tacit knowledge and personal attitudes. Although “Revealing the complexity of what goes in the education system may not always be welcomed . . . its general effect can be salutary” (Hammersley, 2000, p. 397). Because, this kind of research allows viewing holistically researched phenomena, and revealing areas of inherent complexity (ibid. 2000). Thus, this research method contributes to a deep understanding of current T.E.C policy making concerns.

As already mentioned, this method appreciates contextual orientation. It practically encourages gathering rich data, and contextually analysing it. Contextual orientation is vital to this study, because researching the T.E.C phenomenon requires carefully analysing both general and local environmental factors that influence the T.E.C in different colleges. Contextual perspectives specifically enable researchers to reach the roots of the T.E.C’s local characteristics. They enrich the way each T.E.C can be described, explained and interpreted. Concurrently, contextual perspectives allow analysis of salient areas of commonality or difference emerged from the data analysis, and creating a general picture of the researched phenomenon.
The research instruments have been designed so as to widen and deepen the present study's contextual perspectives. They consider participants' readiness to communicate their personal perspectives of local circumstances. The questionnaire's open part allows participants to openly describe the T.E.C in their departments, including contextual factors that influence it. The interviews as part of the case study encourage participants to portray the T.E.C's unique characteristics, and their real influencing factors. The gathered documents, for the case study, represent local contemporary concerns, which illuminate actual contextual perspectives. Furthermore, the use of the different and complementary research instruments has enabled integration between results and significant contextual characteristics (Burgess, 1985).

The study has adopted a qualitative multi-method approach that allows gathering different kinds of data, as single methods cannot provide gathering of such complex data. It allows reconciliation between methods, comparing data produced by the different methods and corroborating the findings. This approach is used to describe and interpret the multifaceted and complex reality that deserves deep explanations; based on the participants' multiple perspectives (Burgess, 1985; Bridges, 1989; Walker, 1992). Furthermore, it promises a rounded understanding of the researched phenomenon, and rich insight into it (Finch, 1986; Frankel and Wallen, 1990; Yarger and Smith 1990; Denzin and Lincoln, 1994; Guba and Lincoln, 1994; Strauss and Corbin, 1996; Arsenault and Anderson, 1998; Bassey, 1999; Hammersley, 2000; Cohen et al. 2000).

The study, as already mentioned, uses both a survey and a case study as complementary methods (Johnson, 1994). Case study further examines the survey's results in a specific situation.
2.1.1 Survey

A survey can be regarded as an approach (Nibet and Watt, 1984, in: Johnson, 1994, p. 24). It can also be regarded as a research strategy (Denscombe, 1998). This study regards the survey as a research strategy mostly appropriate for gathering information from the relevant population at a certain point of time, and the use of a questionnaire as the survey’s main method. A survey allows, "To view (any chosen instance) comprehensively and in detail," or "obtaining data for mapping" (Denscombe, 1998, p. 6). It allows "eliciting equivalent information from an identical population" (Johnson, 1994, p. 13). These complementary meanings clarify possible advantages of a survey as a research strategy, and justify its use in this research.

Using a survey in this research:

a. Enables getting a "panoramic view" of a researched phenomenon from a widespread identified population, at a specific period of time (Denscombe, 1998, p. 6). The questionnaire, specifically developed for this research, is sent to all current and their former H.O.D, in all nine primary school departments in Israeli, state, secular C.F.T.E. Thus, it is a 'census' survey that covers the whole possible relevant population, and consequently the study's results represent the nature of the T.E.C phenomenon in this kind of department. In order to get a whole picture of the researched phenomenon, the questionnaire is built in two parts – (see Appendix no. 1) a close part that collects standardised data, and an open part that allows free complementary responses. The data gathered by the questionnaire’s open part enriches the comparison, and increases the credibility of its results.

b. Eases the process of the data gathering from all participants, through a standardised and a specific postal/emailed questionnaire, and allows its comparison (Johnson,
The questionnaire in this study allows comparing actual T.E.C’s characteristics from all researched departments, regarding the impact of the different factors that influence it.

c. Enables mapping of the T.E.C’s characteristics, and consequently, selecting the significant and / or the most representative case to be further and deeply studied.

2.1.2 Case study

Case study is an approach that allows the use of different methods in different contexts (Descombe, 1998). It enables the researcher to holistically research specific and contemporary phenomena - programs, institutions or processes, while concentrating on “how” and “why” questions (Merriam, 1988). The case study, here, researches the specific primary school department within the T.E.C.

Researchers avoid defining a ‘case study’, and tend to describe its characteristics, and emphasise aspects they conceive of as central and important for the process of research and its results. Descombe, (1998) though, has offered a broad definition, which considers three characteristics: studying an instance, providing in-depth descriptions, at a specific point of time.

"Case studies focus on one instance (or few instances) of a particular phenomenon with a view to providing an in-depth account of events, relations, experiences or processes occurring in that particular time" (ibid, p. 32).

Other researchers elaborate either on one of the above-mentioned characteristics or on more than one. Some elaborate on aspects that characterise the case study’s research, for example the interest that drives the case study’s research. Stake (1994; 1995), for instance, claimed that a case study research can either have an intrinsic interest in researched cases, or it might have an instrumental interest in researched cases. An
intrinsic interest in the researched cases reveals a real eagerness to study a particular case in order to better understand its nature. An instrumental interest in researched cases reveals a desire to go beyond the case, and develop general significant principles out of the gathered results (ibid.).

Three reasons justify the use of a case study in this study.

a. This study is interested in studying the complexity of the T.E.C, by: 'thick' descriptions, comprehensive understandings and interpretations, and by enlightening specific educational policies (Merriam, 1988; Stake, 1994; 1995; Bassey, 1999; Cohen, et al. 2000). Studying a case allows: illuminating understandings of a researched phenomenon, confirming what is known, and discovering new meanings (Merriam, 1988). The present study shows both an instrumental interest in revealing areas of commonality and difference across cases, and an intrinsic interest in describing and analysing the particular cases.

b. This is a small-scale research, and the case study approach allows in-depth study of the phenomenon researched in the natural and real-life context (Stake, 1994; Yin, 1994a, 1994b; Descombe, 1998; Bassey, 1999; Cohen, et al. 2000). The study concentrates on investigating T.E.C in one primary school department, which is conceived of as "bounded system(s)" (Cohen, et al. 2000). Still, as the study focuses on a very specific issue, the data gathered will be strictly directed to this issue, and not to cover other possible aspects that the researched case study allows. General aspects, such as: the department's culture or its interrelations with the college will be described only if they contribute to a better understanding of the research phenomenon.

c. Case studies facilitate developing a holistic picture of the researched phenomenon (Descombe, 1998). In this study – the changing nature of the T.E.C, concerning the various factors that have influenced it since the 1980s, and the considerations,
concerns and interests that have an impact on their development. The influencing factors have already been organised into a conceptual framework, based on the L.R that assists generalisation (Anderson, 1998). Concurrently, the framework will serve as criteria for analysing the data and testing the underlying theory.

The study is interested in developing a whole picture of the changing nature of the T.E.C since the 1980s; aiming at gathering data that will fully represent this period of time. Relevant data is gathered by interviewees, mostly ‘Heads of Departments’ (H.O.D), and some other functionaries, and by documentary research.

3. Theoretical context and the conceptual framework

“No unified theory of teacher education exists” therefore “research in this area must be viewed as exploratory rather than confirmatory” (Yarger and Smith, 1990, p. 25).

There are only isolated points of an organised T.E research agenda. Existing T.E.C research focuses on exploring three main areas that stand on their own or are interconnected: precursor conditions, process and outcomes, and all kinds of linkages among them (Yarger and Smith, 1990). This study is concerned with the precursor conditions assuming that:

“Much of the T.E.C is shaped by outside influences relatively free from the institution’s concern for quality training – and that these areas are a much neglected realm of research . . .” (Yarger and Smith, 1990, p. 28).

It assumes that precursor conditions refer to both external and internal influencing factors, which were determined in the L.R (see Figure 1, p. 53). The external influencing factors include the: society’s expectations; state’s, especially the M.O.E’s requirements; technological innovation; universities’ relevant research; colleges’ research; and, schools’
reality and expectations. The internal influencing factors include the: colleges' mission, organisation; departments' culture including staff's beliefs; and, students' characteristics.

The T.E.C is caught between these influencing factors. The interrelations among the factors might correspond; they might reveal complementary or conflicting interests. These factors inspire the policy and the guiding principles that underlie the actual developing of the T.E.C in the C.F.T.E. Thus, the actual T.E.C's development reflects local and contextual preferences of curricular concerns, stemming from the influencing factors (Stark’s et al., 1986; Elmore and Sykes, 1992; Hartley, 1993; Stark and Lattuca, 1997).

Yarger and Smith (1990, p. 27) have defined T.E as "The context and process of educating individuals to become effective teachers or better teachers". This restricted definition considers two components - factors and activities. This study focuses on the context, namely the factors that influence the T.E as revealed in the T.E.C, assuming that the context influences the processes, namely activities operated in the T.E.

The local context of T.E and the T.E.C is associated with the influencing factors and takes account of "student selection, program structure, student and faculty characteristics, physical environment, and political/social context" (Yarger and Smith 1990, p. 27). These conditions "shape, direct, or dictate the nature of the T.E processes, (and consequently outcomes) due to their mere presence" (ibid. p. 28). The present study is mainly interested in the T.E.C's actual structure, in the linkage between T.E's central processes, as resulting from the T.E.C, and the precursor conditions. Additionally it is interested in the relative weight each factor has on the T.E.C's development.
Stark et al. (1986) and Stark and Lauttuca's (1997) have developed conceptual frameworks, which are mostly relevant to this study. This study has adopted and adapted these conceptual frameworks to a departmental level of curriculum development in C.F.T.E. These conceptual frameworks consider three kinds of influencing factors: external, internal and organisational factors, and associate the general precursor conditions with local-environmental contexts. The influencing factors directly and indirectly hinder or facilitate the T.E.C.'s development (Imig and Switzer, 1996).

This study focuses on the external and the internal influencing factors. It regards organisational influences as internal factors, assuming that at the departmental level, such influences are part of the internal college’s influence. The T.E.C, within the chosen conceptual framework, has been mutually linked with both external and internal influencing factors, with T.E processes, and with teaching-learning processes. All components the have been mutually linked with the ideal graduate teachers, and represent the T.E phenomenon (see Figure 1, p. 53).

T.E.C, as part of the T.E, has been regarded as an object for educational evaluation (Borg and Gall, 1989; Simons, 1989; Sturman, 1997). The present study is ‘evaluative’ (Merriam, 1988) or ‘explanatory’ (Yin, 1984 in: Cohen, et al. 2000) in the sense that: a. it analyses the policy that underpins the T.E.C, regarding the influencing factors, as a whole program, in different colleges, b. it examines current changes in the T.E.C, in regard with the needs and the problems these changes aim to solve, and, c. it re-conceptualises the T.E.C. This study is not evaluative in the sense of judgment (Finch, 1986).

This study has some characteristics of historical research, as it is interested in tracing macro and micro changes, which occurred in the primary school T.E.C, since the 1980s,
and their origins. It mainly considers the comparison of T.E.C's rationales, identifying, interpreting and explaining appearance/disappearance/reappearance of courses, and other changes revealed in the curricula (Iram, 1982). Inquiry of the T.E.C as a phenomenon from this perspective has not been examined, and this study desires to it.

This clear conceptual framework including the T.E.C’s influencing factors and their mutual relations limits the bias of “personal values and interests” (ibid. p. 824), but leaves enough room for ‘open’ interpretations. It helps identifying, describing and interpreting the influencing factors and the interrelationship among them, and present them conceptually and graphically. Yet, it guarantees cautious interpretations that consider general conceptions and local perspectives.

4. Data collection

4.1 Ways of data gathering

This study uses a multiple method approach that allows the use of several research instruments, and various data sources, to collect different kinds of evidence. Data will be gathered by: a postal written questionnaire; a case study that includes semi-structured interviews, and documentary research, based on local official documents and bulletins, records and departmental documentation; and, semi-structured interviews not as part of the case study, with ‘key players’ who represent the state level.

4.2 Identification of the research sample

Participants identified as relevant for this study belong to one of these three circles: the M.O.E’s circle; the circle of the primary school departments in Israeli state C.F.T.E, and the circle of the chosen primary school department in a specific college.
The M.O.E’s circle includes four central policymakers in the M.O.E who have been identified as relevant for the present study. Two of them are in-charge of official state primary schools’ policy, and the other two are in charge of the official state T.E policy.

The circle of all primary school departments in Israeli state C.F.T.E is the most significant circle. It regards H.O.D as the most relevant participants for this study, because the present study focuses on the factors that influence the primary school T.E.C, and the H.O.D have a vital role in the development of the T.E.C. Thus, all current, and their former H.O.D, of the nine primary school departments in the Israeli state C.F.T.E have been identified as the appropriate population for the study. The limited number of participants has influenced the nature of the study. It has contributed to the decision to operate a qualitative research, while giving up concerns about sample and statistics.

At the College’s circle, one case study has been selected for this study. Within this case, several functionaries will be identified as relevant participants for the study. The current H.O.D and the Department’s former ‘Head’ have been identified as essential interviewees. Then, depending on the interrelations or processes revealed from the H.O.D interviews, some other functionaries, such as the: academic organiser, and / or ‘Head of college’, and/or other functionaries, may be identified as relevant/ needed.

The selection of the case study will result from the Questionnaire’s close part and open part results. Three indications will guide the selection of the Case: a. The H.O.D’s cadence duration will be long enough, as to get a sufficient historical perspective, b. The chosen Case will reveal various perspectives in most areas of influence, c. The Case will represent unique salient considerations regarding the different areas of influence, as to better understand the tension between the external and the internal factors. Consequently,
the Case will complement the Questionnaire’s results and allow extricating areas of commonality and difference regarding the factors that influence their T.E.C, and the nature of the T.E.C. Two indications will guide the selection of the Case as a result of the Questionnaires’ open part: a. The chosen Case will offer a noteworthy opportunity to learn about the T.E.C phenomenon, b. The Case will expose a dynamic T.E.C, a T.E.C given to changes resulting from different influencing factors.

The Case, chosen according to these indications, enables a further inquiry, a more intrinsic inquiry, concentrating on the essential elements that influence the T.E.C. Investigating the essential elements is crucial for understanding the nature of the researched phenomenon (Descombe, 1998; Stake, 1994; Yin, 1994a, 1994b). Subsequently it allows cautiously predicting on the outcomes while linking to the theory (Descombe, 1998).

4.3 The context of the research population

As already mentioned, this study focuses on the factors that influence the primary school T.E.C; accordingly the most relevant population is the group of H.O.D, who are in-charge of the T.E.C’s development. Besides, several officials in the M.O.E’s level are relevant – namely those in charge either of the T.E policy or of the primary school policy. When relating to the case study, several functionaries have been identified as relevant research population - current and former H.O.D, ‘Academic Organiser’ who is involved in developing the T.E.C at the college level, and other functionaries that are involved in developing the College’s policy.

The research population is considered as highly educated and qualified. Respondents’ knowledge has been taken into account when designing the questionnaire, so the
language used could be fairly high. Still, the statements' are rigorously formulated as simple as could be, while minimising the use of technical terms (Johnson, 1994). The interviewees selected for the case study have been beforehand aware that their selection resulted from the fact that they are "key players", who are able to "give privileged information" (Descombe, 1998, p. 111).

4.4 The development of data collection instruments

All instruments developed for this study focus on the factors that influence the T.E.C. They were especially designed to facilitate gathering the relevant information.

4.4.1 The Questionnaire

The Questionnaire (Appendix 1) has two parts. Its first part is composed of close questions, a semi-open ranking scale question and comments. The second part offers two open questions.

The first part includes the eight sections. It keeps a consistent layout of close-ended responses that enable gathering consistent, precise and standardised information in terms of wording, amenable to analysis. Each section covers possible impacts of a single factor that influences the T.E.C. The statements are constructed after itemising all key elements, thus reflecting the eight influencing factors originated in the L.R. The numbering of the statements is continuous from 1 to 64, though the layout is sectional, as such numbering eases referencing and orientation in the Questionnaire.

The eight sections relate to the following influencing factors: Academic, Society, Schools, Colleges, Departments, Technological Innovations, M.O.E, and Learners. Each section begins with a preface that introduces its purpose, as to increase the
questionnaires' clarity, overall logic and coherence, followed by boldly and attractively displayed instructions (Cohen et al. 2000). Each section begins with this preface: "This section includes statements that represent possible ______ influences on the TEC in your department. Please circle the number most suitable as to how the statement fits the actual TEC in your department". Each section sets simple and inflexible close-ended responses, based on a rating-scale that is particularly useful for eliciting respondents' perceptions and beliefs (Descombe, 1998; Cohen et al. 2000). The rating scale continuum offers an even number of possible responses in order encourage respondents to decide. Thus, it consists of a four-point-scale: 1 - Totally disagree, Partially disagree, Mostly agree, and 4 - Totally agree.

The questions in each section are designed in a way that promotes responses that focus on the actual T.E.C; regarding the discussed influencing factor, and that illuminate hidden values, and educational beliefs. For example: statement 3 "Theoretical courses complement the learning from field-based practice", or statement 4 "Theoretical courses are basis for field-based practice". These statements represent opposed academic influences on the T.E.C, and the given responses shed light on common and widespread or rare and limited different educational beliefs.

This part of the Questionnaire minimises 'threatening' or 'sensitive' statements and avoids creating a 'mood' or a 'mind-set' (Descombe, 1998; Cohen et al. 2000). Rather, it offers various possible interpretations to the different possible factors that influence the T.E.C. Each section has an internal sequence. Each section includes indirect generalised statements, as well as more specific ones that increase the reliability of the questionnaire. For example: statement 50 "The departmental T.E.C represents the M.O.E's societal-political policy" is general, whereas statements 54 "Reading courses have changed due to
the M.O.E's policy" or 57 "The M.O.E's "Standards" policy causes changes the foci of the T.E.C" are more specific. This structure allows identifying minor and/or specific influences caused by the discussed factor. It enables elaborating on its characteristics, and revealing the actual directions and extent of impact the discussed factor has.

The statements allow for gathering fairly straightforward information, relatively brief in content. They are designed to provide the most accurate information. A rigorous effort was made to design clear statements that minimise ambiguity and confusion, and to enable reflection of one variable at a time. The statements focus on central issues, and avoid duplications. The statements are formulated in a way that makes the responders' task comfortable and quick (Descombe, 1998; Cohen et al. 2000). This formulation encouraged indicative responses, which indirectly hint upon personal and/ or staff's attitudes and beliefs. Furthermore, the statements' formulation facilitates a reasonable analysis of the data, as the statements can be easily coded and analysed.

Additionally, the semi-open ranking scale question offered in each section requires choosing "the three most important statements . . . by the order of their importance". This question draws respondents' attention to rethink their decision-making (Cohen et al. 2000). The comments’ option, at the end of each section, enables respondents to freely respond, and raise doubts or cover gaps the Questionnaire failed to attain.

The next part of the Questionnaire, questions nine and ten, offers an open-ended format of questions that accordingly, requires open-ended responses, which "set the agenda, but do not presuppose the nature of the response" (Cohen et al. 2000, p. 248). Respondents are invited to use their wording, the kind of matters they wish to raise and the length of their answers. This part strives to get deeper into the "essence of the department's TEC", 

143
and asks to shortly describe it. Additionally, it asks to describe actual “changes / innovations”, explain the motivation for the innovations, the expectations from them, and how they were integrated into the existing T.E.C. This format is attractive for small-scale research, and supplies rich, authentic and unique information, from the identified respondents, as mentioned before, and not limited to bounding categories that have been set in advance. The combination of the close-ended and the open-ended parts of the questionnaire increases respondents’ responsibility to the information they present.

The Questionnaire has been developed after having a clear plan of action in mind. Then, four current and former H.O.D and the ‘Academic Organiser’ in the college, where the author teaches, piloted the Questionnaire. As a result, the Questionnaire was refined, so that “the final version contains a full range of possible responses as can be reasonably foreseen” (Cohen et al. 2000, p. 248). The Questionnaire’s final version includes three kinds of changes.

First, the number of questions was reduced, from a total of 75 statements to a total of 64 statements; ambiguous and unclear statements, as well as statements that seemed to be duplicated, were cut out. For example, two statements “The T.E.C is obliged to the M.O.E’s and the ‘Guide-lines’ policy” and “The M.O.E determines the T.E.C purposes” were combined in the refined questionnaire into one statement “The departmental T.E.C represents the M.O.E’s societal-political policy” (statement 50). The reduction of statements caused changes in the statements’ placing within the sections.

Second, the sequencing of the statements was changed. In the piloted Questionnaire there was not one sequence, and each section was sequenced separately, from no. 1. In the final Questionnaire all statements created one sequence, from 1 to 64.
Third, wording of some questions was changed, for several reasons. Statements were changed as to enable a focus on what actually exists in the departments. For example, the statement “The courses’ requirements ought to emphasise high academic abilities” was refined to “The courses’ requirements emphasise high academic abilities” (statement 2). Statements were elaborated, for example, the statement “The T.E.C offers courses for mixed Jewish and Arab students” was changed to “The T.E.C offers mixed Jewish and Arab courses in order to bring closer Jews and Arabs” (statement 16). Statements were simplified or specified, for example, the statement “The T.E.C predetermines the field-based program in the schools” was changed to “The department imposes a fixed field-based curriculum on the training schoolteachers” (statement 22).

4.4.2 Case study

The present study uses a single Case study that represents typical and unique matters that characterise curriculum development. It is interested in investigating the nature of the T.E.C, in one Department, focusing on the factors that influence the T.E.C. The Case complements the data gathered by the Questionnaire. It presents elaborated information, which enables deepening the understanding of the researched phenomenon, and getting critical understandings and insights, concerning the T.E.C’s development (Guba and Lincoln, 1994; Husen, 1997; Cohen et al. 2000).

The case examines, describes and explains the T.E.C in the researched department. It is portrayed in a way that enables illuminating its development, unique characteristic, through the conceptual analysis, while relating the findings to the proposed conceptual framework based on the literature review. This allows developing cautious generalised understandings (Borg and Gall, 1989).
The Case, thus, presents both unique and general critical concerns (Yin, 1994a; Stake, 1994). It will show major and complementary interests - an interest in revealing the uniqueness of each T.E.C and the departmental processes, and a specific, predetermined interest in investigating the T.E.C and revealing general concerns. Thus, the Case combines intrinsic and instrumental concerns (Stake, 1994; 1995).

Relevant facts to the T.E.C’s development, in the particular area of coverage – the impact of the influencing factors on the T.E.C – are gathered by two research instruments - interviews and documentary materials, in order to supply multiple sources of evidence, and an in-depth inquiry (Sturman, 1997).

Regarding the interviews - in each case study both current H.O.D and former H.O.D are interviewed, assuming that they are key players in developing the departmental T.E.C. The H.O.D’s interviewing may reflect a need to broaden the circle of participants. They may indicate upon certain functionaries, from the level of the whole college, who actually influence the departmental T.E.C. So, the boundaries of the units of research - the departments - may broaden. Possible functionaries, such as: Academic Organisers’, and / or ‘Heads’ of colleges, and / or the ‘Head of the Primary Section’, from the college’s level, may be identified as significantly influencing the departments’ T.E.C’s development, and consequently will be interviewed. As the study focuses in the factors that influence the actual T.E.C, interviewing lecturers or students, who are not fully familiar with the whole T.E.C, may contribute limited relevant information.

Regarding the documentary research - relevant documents, internal or published will be collected both from the departments’ files and from the colleges’ archives. The documents will be analysed in a way that will enable relating the contents revealed to the
aspects and themes that will emerge from the other research tools (Robson, 1994; Stake, 1995; Cohen at al. 2000). The case study will complement the data gathered by the questionnaire, and will offer unique and critical understandings, and research insights regarding the T.E.C's development (Guba and Lincoln, 1994; Husen, 1997; Cohen et al. 2000).

The data will be analysed and interpreted as "convergent evidence" (Yin, 1994a, p. 150). The evidences will fortify the conclusions. It is assumed that evidence gathered in other individual cases can replicate emerged conclusions.

**Interviews** (Appendix 2; 3) enable the gathering of specific but complex information, to identify variables and relations, to discover and portray multiple views of the researched phenomenon (Stake, 1995; Cohen et al. 2000; Johnson, 1994). Accordingly, they facilitate the testing of the proposed conceptual framework, and even challenge it. The interviews will be designed in a semi-structured format, assuming that such a structure would enable following questions that were carefully developed in advance (Stake, 1995). Additionally, such a structure promises a comprehensive and in-depth response. It allows extricating explanations and justifications of given facts, and eliciting reach and authentic information (Wisker, 2001). This type of interview is regarded as most appropriate for such a small-scale research. Yet, it was assumed that this type of interview would provide the desired information, and still allow a less formal, flexible style of communication, and a respectable and supportive atmosphere. Eventually, the interviews can be adapted to the respondents' personality and to the actual circumstances, assist communication, gain interviewees' cooperation, and encourage open, true, deep and autonomous responses concerning facts, beliefs, values and feelings (Borg and Gall, 1989; Bridges, 1989; Descombe, 1998; Cohen et al. 2000).
Accordingly, interviews take place in the H.O.D’s and other functionaries’ offices, in their natural professional setting. Each interview lasts about an hour.

**The H.O.D’s interviews:** H.O.D are asked at the beginning of the interview to freely respond to five main issues that correspond to the research objects (Appendix 2): educational beliefs and assumptions that influence the T.E.C; aims and emphases of the T.E.C, and concerns about balance between different or controversial beliefs; factors that influence the T.E.C; considerations for T.E.C’s organisation and sequence; and, recent changes of the T.E.C - reasons, directions and the rationale behind it. These issues are presented to the interviewees orally and in a written format that offers open-ended questions, for example: Question 5 - “How does the T.E.C change? What encourages or limits changes? What is the rationale behind the changes? What are the new directions? What do they emphasise?” These questions allow revealing a comprehensive picture of T.E.C’s nature, and leave enough room for the emergence of the interviewee’s voice.

**Other functionaries’ interviews:** Functionaries are asked at the beginning of the interview to freely respond to six main issues, which focus on their perspective on the factors that influence the primary school T.E.C’s development (Appendix 3). The process of the interviews repeats itself. Interviewees’ specific roles or responses may cause adaptations and specific and unplanned in advance sub-questions.

The questions are elaborated with “prompts and probes” throughout interviews, in accordance with emergent situations (Morrison, 1993, in: Cohen et al. 2000, p. 278). Elaboration includes request for: examples, more details in order to enrich the information at certain relevant points, clarification of doubtful points. Elaboration also includes repeating interviewees’ words in order to be sure that their ideas are well
understood etc. Thus, the interviews may get a "conversational style" (Cohen at al. 2000, p.269; Borg and Gall, 1989). Hence, they are 'intert subjective - neither subjective nor objective" (Laing 1967, in: Cohen et al. 2000, p.267). They facilitate the collection of pure, multifaceted information, though biased, which needs to be carefully controlled (Borg and Gall, 1989; Cohen at al. 2000). Elaboration and use of conversational style "encourages co-operation and helps establish rapport" (Cohen et al. 2000, p. 275).

In order to overcome the problem of bias two distinctive steps are be taken. One step relates to a bias stemming from interviewees' personal perspectives. In this case, the interviewing of both current and the former H.O.D, and the joined responses enable to draw a less biased picture of the researched phenomenon. The other step relates to bias stemming from the process of interviewing. In this case, attention is given to the atmosphere, to reduction of interruptions, to rapport, and to minimise interviewer’s predispositions and preferences when responding to the interviewees' responses (Borg and Gall, 1989). The interviews are tape-recorded; however field notes are also taken during the interviews, mainly in order to point out hints about possible associations and hidden intents (Descombe, 1998). The interviewees are aware of the fact that they will receive their interviews transcripts in order to approve them.

**Documentary research**, as noted, is another research instrument, which complements the data gathered by other research instruments, and enlightens the data from different perspectives (Descombe, 1998). The documentary data is based on official bulletins, published by the colleges; relevant web site pages; records of meetings held in the departments relevant to the T.E.C, and records of official, directly observed meetings, of the 'Primary School H.O.D's Forum'. The first two types of documents - official bulletins and web site pages, present straightforwardly proposed intentions. These
documents present general information, written curricula, course outlines, and timetables. This kind of data is usually representatively designed, published and / or publicly distributed. Documents from the first type will be gathered from the colleges’ archives, aiming to go as far in time as possible to beginning of the ‘Academism Process’ in the specific colleges. The other type of documents - recorded documents, meetings transcripts, is designed only for internal use. These documents present partial and sporadic events, and reflect specific and narrow perspectives rather than general directions and conceptions.

The documents provide authentic information and “non-reactive” printed materials (Robson, 1994, pp. 237; Johnson, 1994). This evidence is “to some degree retrospective” and provides relevant information from dated or more current information (Johnson, 1994, p. 25). The documents contribute evidence for the research purposes despite the fact that they were produced for other purposes, and the information they communicated is “unwitting” (Robson, 1994, pp. 238; Stake, 1995).

4.4.3 Separated interviews

Four semi-structured interviews, apart from the interviews planned as part of the case studies, were held with ‘key players’ who represent the state level. These interviewees have a central role in developing the primary school policy-making or in developing the T.E policy-making in the M.O.E. The data gathered helped in designing some statements in the questionnaire, in the M.O.E’s section influence, as it contributed to a better understanding of the state-influencing factor, the recommended directions for the T.E in general, and the primary school T.E.C in particular. The data gathered may also
contribute to the analysis and the conclusions, when comparing the data gathered by the different methods, and referring it to the theoretical framework.

These interviews were arranged by the official coordinator of the ‘Primary School Heads of Departments Forum’ as part of the Forum’s formal work meetings, which the author, as a H.O.D, attended and played an active part. The interviewees were orally asked to: 1. Present the M.O.E’s priorities for primary schools, 2. Introduce their own perceptions regarding the existing and the needed T.E and, 3. Explain their expectations from the primary school departments’ graduates, and their reflections on the T.E.C. After each interview, there was an opportunity for clarifications and interchanging ideas. Formal reports from these interviews were disseminated to the interviewees and to all H.O.D.

5. Administrative procedures

Administrative procedures are considered in the course of the research process mainly at two critical stages. One critical stage is deciding how to distribute the questionnaire. Another critical stage is designing the case studies and getting access to identified colleges and departments.

At stage one, the dissemination of the questionnaire, three administrative procedures were taken:

1. Informing the coordinator of the ‘Heads of Departments Forum’ about the study; sending her a letter that explains the study’s purposes and emphasises the potential importance of the study to all members of the ‘Forum’, and; asking her to transfer this letter to all members of the ‘Forum’ in order to encourage them to participate in the study, since the study’s potential scope of participants is limited. Additionally, getting from her the list of the H.O.D’s addresses and telephones.
2. Contacting all current H.O.D, re-emphasising the importance of their participation in order to get their personal approval to participate in the study, and to get telephone numbers of the former H.O.D whom they replaced.

3. Sending / emailing the questionnaire, including a covering letter to all contacted participants. This procedure ensures that the particular and selected respondents will receive the delivered questionnaire, complete it and return their responses.

At the second critical stage, the stage of operating the case study, three administrative procedures were taken: 1. Getting access to operate case studies in the chosen departments/ colleges. This included getting permission to interview selected functionaries, to search in the colleges’ archives and in the departments’ offices for relevant documentary information, and to photocopy relevant documents. 2. Asking the ‘H.O.D’ and other functionaries to confirm the interviews’ scripts, and comment on them. 3. Sending the interviewees the semi-structured interview’s questions in advance, if they are interested.

6. Analysis

Data, from all research instruments, will be qualitatively analysed.

**Questionnaire’s analysis** - The data gathered by the close part of the Questionnaire is first organised into eight distinctive tables, in accordance with the influencing factors. The tables (Appendix 5 – an example) show all responses, divided into the eight sections, and two kinds of total sums. One kind of total sum presents current and former H.O.D’s responses, divided into low score responses, high score responses and non-scored statements. The other kind of total sum shows the total score for each Head of Department, in regard with each specific section. The data is further organised in two separated sets of diagrams. The first set of diagrams (Appendix 5d – an example) shows
the distribution of current and former H.O.D’s score, from the highest to the lowest, in the different areas of influence. The second set of diagrams (Appendix 5a) shows current and former H.O.D’s distribution of the scores, for all questions, in the distinctive areas of influence.

The analysis shows the extent of consent or refusal among the responders. It enables the pinpointing of significant controversial orientations among responders in the different areas of influence, and identifying the most influential factors. The separated tables display salient consents, modest consents and controversial orientations, in all areas of influence. The information is verbally explained and interpreted. Then, general understandings, still in the level of the distinctive influencing factors, are summarised. Comments on this part of the Questionnaire are analysed in order to deepen the understanding of responses and to strengthen aspects that the H.O.D considered as worth commenting on them.

The rating question is analysed separately, according to the frequency of the statements that H.O.D considered as important, in each area of influence (Appendix no. 5e – an example) and then together, according to the rating in all areas of influence (Appendix 5f). Statements are determined as important when more than half of the responders rated them in one of the three first places. Two indicators demonstrate the importance of the influencing factors – the number of responders who rated the statement as high, and the extent of agreement regarding the statements’ importance.

Data presented by the **open part of the Questionnaire** (questions I and J), the **interviews** and the **documents** was separately content analysed.
The first stage of organising and analysing the data gathered by the Questionnaire's open part is classifying and categorically aggregating the H.O.D's responses to the eight areas of the influence. Then, each area of influence is sub-divided, even more than once, to specific categories that emerge from the data. This sub-division allows creating distinctive units of meaning while using the communicated H.O.D's authentic wordings.

The data division of the eight comprehensive categories is determined in advance, in accordance with the theoretical framework that considered eight distinctive areas: Academic, Societal, College's, Departmental, Schools', M.O.E's, Technological Innovation, and Learner's, which influence the T.E.C. But, the categorisation within the classified eight influencing factors stems directly from the H.O.D's responses.

The same process is repeated in the next stage, in organising and analysing the data gathered by the interviews. The interview's scripts are content analysed. Each interview is separately classified and categorically aggregated into the different influencing factors areas, set in advance. Then, the areas of influence are sub-divided into specific categories, in accordance with data, and lastly, when needed the data is be further subdivided to distinctive units of meaning, based on participants' authentic wording.

As the analysis process progresses, after the stage of separately analysing the interviews in each case study, a lateral analysis combines the whole data gathered by the interviews. However, the pattern of the eight areas of influence is the basis for the comparison process. The data, consequently, is accordingly compared, jointly comprehended, reanalysed, synthesised and interpreted. Specific categories, especially in different sub-division levels get refined and recoded, if needed, in order to include complementary data.
from different interviews, and/or in order to meet new understandings that emerge out of the comparison process.

Next, the documentary data gathered in the department chosen to be case study is separately organised and analysed. Again, the data organisation follows the pattern of the eight areas of influence, and is sub-divided according to issues and units of meaning that emerge from the data. Then the data gathered by the interviews and documentary research in each case study is reorganised and reanalysed, in order to enable to holistically describe the T.E.C phenomenon in each department as distinctive entities.

Eventually, as part of a further analysis process, all data (the data gathered by the different research instruments and from the different participants) is blended and triangulated; subsequently first impressions are rethought. Reappearance of perceptions, beliefs, ideas, themes, issues, items, associations, wordings etc. and correlations among the T.E.C's characteristics that emerge from the data within the eight categories of the influencing areas are reorganised and reanalysed comprehensively. Unique responses and deviations are, then, analysed. Consequently, new understandings are crystallised, synthesised, and reinterpreted. The findings are organised in accordance with the offered theoretical framework are analysed and they may confirm, complement or refute the offered theoretical framework. The phenomenon of the primary school T.E.C in the Israeli C.F.T.E can then be theorised.

Literature is carefully used, at the analysis’ stage, for three purposes. It is used as a complementary source for the coding (Strauss and Corbin, 1996). It is used for stimulating questions during the analysis. It is also used as a complementary reference for re-ensuring the findings, or showing other alternatives that do not come up from the
analysis. The entire analysis process reveals a better understanding of the researched phenomenon, and more reliable and meaningful results (Stake, 1995; Wisker, 2001).

7. Procedure

Procedures in this study aim to promise trustworthiness. Trustworthiness corresponds with credibility - paralleling to internal validity in quantitative research, transferability - paralleling to external validity, dependability or impartiality - paralleling to objectivity, and confirmability - paralleling to reliability (Guba and Lincoln, 1994; Sturman, 1997).

This study promises trustworthiness, by utilising rigorously the qualitative methods, and offering a systematic and consistent content analysis, while leaving room for interpretation (Sturman, 1997).

Trustworthiness in the present study is increased in several ways.

Credibility is this study is increased by some procedures, offered by Sturman (1997): a. The procedures of data gathering were transparently explained. b. All data is considered, and the study avoids any selection of data. c. Primary evidences are distinguished from secondary evidences and from assertions. d. The analysis process follows a sequence of organising, codifying and then analysing the data, displaying it transparently and allowing re-analysing it. e. Respondents’ approve the transcribed interviews and their analysis. f. Descriptions are distinguished from interpretations. g. Triangulation is operated throughout the analysis. h. A procedure, suggested by Guba and Lincoln (1994), repeating the same procedures, throughout the interviewing process and the interviews’ and documents’ analysis is adopted.
Confirmability in the present study is increased by some procedures, suggested by Howey and Zimpher (1989) and Stake (1995). a. Operating a pilot of the questionnaire and the semi-structured interview with colleagues, and accordingly refining them. b. Taping and transcribing the interviews, writing notes. c. Overlooking the documentation throughout the process of analysis; and, d. Operating a procedure of triangulation.

Triangulation among the multiple sources of evidence gathered in this study contributes to clarify meaningful understanding by identifying different perspectives concerning the factors that influence the T.E.C and their developing on the one hand, and by recognising repeated interpretations on the other hand. It enables extricating replicated or similar results and gain generalisations (Yin, 1994a, 1994b). It decreases inaccuracies, and increases the confidence that presented assertions, derived from the different sources of evidence and provide similar results, are appropriate (Johnson, 1994). Triangulation among the gathered data allows the critical analysis of participants’ perspectives, while considering contextual, value-laden, and subjective realities. It enables consideration of both particular and general concerns that deepen the analysis, and contributes to the better understand the complex T.E.C phenomenon (Redfield 1948, in: Walker, 1992).

The present study utilises two kinds of triangulation that increase confirmation. First, interpretation’s credence, and secondly demonstrate areas of commonality in findings. It operates both “data source triangulation”, with data gathered from different participants within each research instrument, and “methodological triangulation” with data gathered across the multiple research instruments (Stake, 1995, p. 112).

**Dependability** or **impartiality** is attained by different procedures: a. A procedure of data triangulation that enables revealing multiple viewpoints of the T.E.C. b. Procedures of
looking forth and back on the data in order deepen and refine the understandings. c. A consistent procedural way of interviewing that enables all interviewees to get the same questions in the same order, in a similar atmosphere on the one hand, and on the other hand enables fluent and free response. d. A procedure of examining in advance the usefulness of different documents, in accordance with the research purposes, in order to keep things on track, yet the same time, paying attention to unexpected data, and allowing new perspectives and understandings, concerning the T.E.C's nature, to emerge. Another procedure, suggested by Stake (1995) and Strauss and Corbin (1996) allows increasing of dependability or impartiality. e. Eliciting the interpretations after identifying the variables that are mostly useful for alternative explanations, refining or substantiating them while linking to the conceptual framework, and accordingly adjusting or changing the framework.

The last procedure, which leads to a possible adjustment or change of the conceptual framework, increases the dependability or impartiality of the analysis process. It suggests an increased awareness of contextual settings; allows interpretations to correspond with participants' perspectives; and finally limits researcher's personal influence (Bridges, 1989; Stake, 1995; Strauss and Corbin, 1996).

As noted, the procedure of triangulation is interwoven in all characteristics of trustworthiness. It enhances credibility, confirmability and dependability or impartiality. Yet, it ensures "that the meaning of the data has some consistency across methods and that the findings are not too tied up with particular method" (Descombe, 1998, p. 85).
8. Generalisation

Generalisations are cautiously made in three different levels:

1. The first level of generalisation relates to generalisations that carefully characterise the distinctive areas that influence the T.E.C, as revealed from the survey, basing on the analysis of the close part of the questionnaire. The results, then, are generalised in the sense that they pinpoint upon the most and the least prominent factors that influence the T.E.C in the primary school departments, in Israeli C.F.T.E, as stemmed from the survey (the close part of the questionnaire).

2. The second level of generalisation relates to generalisations that emerge separately from the analysis of the data gathered by all research instruments used in this study - the questionnaire, the interviews and the documentary research. These generalisations separately consider the entire survey results, and the results of the case study.

3. The third level of generalisation is the level of triangulating all results from the former levels, considering the entire picture of the factors that influence the T.E.C.

Generalisations, then, may be reinforced and confirmed or rejected.

This process increases, reliability (credibility) and validity (confirmability and/or transferability) (Johnson, 1994). If the interviews and documentary research results support or complement the generalisations developed from the survey’s results, then generalisations are solid. They may, then, reveal salient areas of commonality and difference concerning the factors that influence the T.E.C, the degrees and directions of their influence. If the interviews and documentary research results reject the generalisations developed out of the survey’s results, then the offered generalisations will be restricted. Consequently, the study may expose “conceptual reorientations . . . questions of a more fundamental kind about existing policies” (Finch, 1986, p. 162).

Generalisations stemming from the actual findings are linked back to the literature, and examined by theoretical lenses originating on the conceptual framework. The literature, therefore contributes to the analytic tactic of “pattern-matching” (Yin, 1994a, p. 145). Eventually, it increases the internal validity of the research. This process enables the development a refined ‘conceptual structure’, or ‘theory’ resulting from the findings (Stake, 1994; Morse, 1994). Accordingly, the T.E.C influencing factors’ theoretical framework will be refined. This ‘theoretical inference’ provides a thorough justification for the possible generalisations (Gomm, et al, 2000, p. 100).

9. Limitations of the study

This study is interpretive in nature and the data is qualitatively analysed. Therefore, it can be blamed for absence of a so believed “real” truth, and for limiting critical evaluation of the T.E.C, as a consequence of the researcher’s involvement in the research (Schwandt, 1994). It can also be blamed for reducing objectivity by relating to theories and facts as interdependent (Guba and Lincoln, 1994). In order to overcome these possible limitations the study takes some measures:

Limitation of trustworthiness – Trustworthiness relates to: credibility, transferability, dependability and confirmability (Guba and Lincoln, 1985, in: Sturman, 1997). The study aims at portraying a multifaceted and complex picture on the T.E.C in the Israeli context,
and not showing a determined truth. Therefore, it has adopted the interpretive tradition and a qualitative research method. Trustworthiness is endangered because interpretive research is blamed for being too contextual, subjective, and for its limited or biased generalisations. The study, then, has two main limitations regarding trustworthiness.

1. One possible limitation derives from the qualitative research method is the danger of subjectivity, originated in the researcher's personal and biased interpretations and reckless generalisations. The study uses both multiple methods and research instruments, which are, so believed, mostly appropriate for investigating the T.E.C, and rigid procedures that help to overcome these limitations. The instruments, especially the questionnaire (Appendix 1), are based on the conceptual framework developed in the literature review (Appendix 9). This procedure decreases a possible bias of "personal values and interests" (Borg, and Gall, 1989, p. 824). The questionnaire, for example, is shaped in distinct sections, which represent all areas of influence mentioned in the conceptual framework. The use of the multiple methods and research instruments facilitates the gathering of rich and varied data, compares and triangulates it, and consequently creates cautious generalisations explaining the researched phenomenon. Besides, the use of different research instrument encourages constructing alternative interpretations and explanations for the diverse T.E.C's developing and enables to better represent the complex phenomenon.

2. Another limitation stems from the fact that the study relies on participants' subjective responses. The study is aware of the fact that the gathered data is subjective. It even tries avoiding possible restricting conditions that may reduce participants' willingness to openly share their beliefs and ideas with the author. Thus, attention is given to create a sympathetic and supporting atmosphere, so to enable gathering of honest, open and sincere information. Rigorous, though supportive, methodological
procedures are taken, so that participants would truly and honestly respond without being biased towards the researcher's agenda, either when responding to the questionnaire or when participating in the interviews. The study takes rigorous procedures when triangulating and analysing the data in order to increase the degree of objectivity, and cautious subjectivity. These procedures will limit the possible bias caused by the researcher's subjective personal view, as mentioned by Walker (1992) and Stake (1995). The questionnaire is designed in a way that avoids offensive, misleading, irritating statements. The interviews are semi-structured so as to increase participants' relevant responses on the one hand, and as to allow free and fluent response on the other hand. Thus, the analysis and the generalisation processes consider balancing between objectivity and subjectivity, as suggested by Strauss and Corbin (1996). The interviews analysis are subject to rigorous procedures, while keeping an open eye on the data, in order to allow development of fresh, independent, unexpected and critical viewpoints. T.E.C, then, is critically evaluated.

**Limitation of documentary use** – two main kinds of limitation characterise the use of documentary research.

1. Undeveloped documentation culture in the researched departments may cause absence of historical documents, and existence of recent sporadic documents. In such a case the data gathered by the documentary research is limited. Although there is an access to the departments' offices and to the colleges' archives, and although the author tries to get all-relevant documents available, the historical perspective of the factors that influence the T.E.C, and the entire picture T.E.C's nature may be limited.

2. The use of documents that were not especially prepared for the research purposes may cause misunderstanding and misinterpretation of the real contexts. Documents reflect local, contextual, political, cultural and ideological concerns (Johnson, 1994).
Their analysis, therefore, demands a cautious process of coding and interpreting the data, in order to avoid misinterpretations and disrespect of participants’ perspectives.

**Limitation of participants’ scope** - The present study can be blamed for its limited scope of participants. In fact, it is aware of the limited scope of potential participants that could participate in it, due to interest in the factors that influence the T.E.C’s development and in the T.E.C per se. The present study recognises that its focus demands concentrating on the participation of key players - policymakers in the departmental, institutional and state level. Moreover, it assumes teachers and students are only narrowly aware, if at all, of the whole T.E.C in general, and specifically to T.E.C from the perspective of its influencing factors. Therefore, it regards teachers’ and students’ contribution as partial and casual, and even misleading. Consequently the study makes efforts to expand the scope of appropriate participants.

This study would attain all current H.O.D from all relevant departments, in the nine state’s C.F.T.E. It would attain all former H.O.D who were replaced by the current ones, who are still members of the Departments or the Colleges. It would not attain those who retired and others who are not anymore part of the College, assuming that people who have left the system can hardly trace back seriously the T.E.C and the factors that influence the T.E.C’s development.

Both former and current H.O.D, in the selected Case study, are personally asked to participate. Other key players who have a significant active role in the T.E.C’s development, at the institutional level, are asked to be interviewed when a need emerges from the H.O.D’s interviews. Thus, the potential population that participates in the study broadened, and even more than doubles itself.
10. Ethics

The study faces six ethical concerns: personal informed consent, confidentiality, anonymity, non-tractability, personal risk, and credibility.

**Personal informed consent** - H.O.D are personally requested to participate in the study. They are personally informed about the study’s nature and purposes; personally and voluntarily give their consent to participate in the study. All participants can withdraw at any stage. They can also choose not to complete certain items in the questionnaire and/or object to the inclusion of any information presented in the interviews.

**Maximising personal confidentiality** – The study guaranteed confidentiality by avoiding access or transference of data, and by paying attention to keep the data secure.

**Guaranteeing anonymity and non-traceability** - Steps for guaranteeing anonymity and non-traceability were taken. Guaranteeing anonymity and non-traceability were critically important because of two reasons. 1. The scope of participants is limited 2. All participants are well known in their professional milieu. Names of participants, H.O.D and colleges and other functionaries, are therefore symbolised. But, the study can hardly guarantee anonymity and non-tracing in the case study, as information is easily spread in such a small milieu.

**Minimising participants’ risks** – The study is interested in extracting, and then interpreting, the Departments’ educational beliefs, stemmed from the factual information, and the credos reported by the H.O.D, regarding the actual T.E.C. It is not interested in the H.O.D’s beliefs per se. Moreover, as all participants have been appointed to their roles, the educational beliefs and attitudes they presented are well known, so they are not in a risky situation, and their position is not under threat.
Credibility - There is a diminished problem of credibility as all participants approved their participation, the transcripts, the analysis and the interpretations, and even were asked to comment on them and recognise 'off the record' data that could not be reported, as suggested by Simons (1989). So, not only was informed consent guaranteed, but also the research process revealed a transparent audit trail (Morse, 1994; Cohen at al. 2000).

Representative documentary - The documentary research made every effort to identify significant documents fully representing the departments' and / or colleges' intentions, beliefs, and programs. The sample included published documents, representing official policies; existing official protocols, representing actual dilemmas, conflicts or issues, and; authentic reports not necessarily representative, but contributing to understanding processes and internal conflicts occurring in the department / college, with regard to factors influencing the T.E.C. Evidence was re-examined and subjected to standards of trustworthiness, as recommended by Guba and Lincoln, (1985, in: Sturman, 1997). Moreover, a real attempt was made to interpret data, while keeping loyal to the participants on the one hand, and considering a wide range of perspectives when generalising and concluding on the other hand. These procedures increased the ethical dimensions of the study (Stake, 1995; Cohen et al. 2000).

Finally,

This chapter presents conceptual and procedural considerations to ensure that the study properly answers methodological aspects of trustworthy and ethical concerns. The chapter demonstrates the study's rigorous attempts to follow the necessary procedures so the results fairly show the T.E.C as a complex phenomenon from different perspectives, and these findings can be replicable by others, in other settings.
Chapter Four  Findings and Analysis

This chapter is divided into four sections. The first section presents the findings from the questionnaires' close part responses. The second section presents the case studies. The third section presents the findings from the documents. The fourth section summarises all the findings and analyses them.

The presented findings are separated into two groups: findings associated with the external factors that influence the T.E.C, and findings associated with the internal factors influencing the T.E.C.

This way of analysis reflects the aims of the study, namely:

1. Analysing the external factors that influence primary school departments’ T.E.C in Israeli C.F.T.E.
2. Analysing the internal factors that influence primary school departments’ T.E.C in Israeli C.F.T.E.
3. Analysing existing directions or trends in primary school departments’ T.E.C in Israeli C.F.T.E.
4. Identifying areas of commonality and difference, which signify the impact of the influencing factors on the T.E.C, in the different primary school departments, in Israeli C.F.T.E.
1. The questionnaire’s close part

This section is divided into three sub-sections of the questionnaire – the grading part, the rating based on the choice of the “most important statements”, and the comments.

1.1 The grading part

The questionnaire was divided into distinctive sections, according to the different areas of influence. Thus, in order to achieve a whole picture of the external and the internal factors influencing the T.E.C, the H.O.D’s responses are rearranged according to the extent of their agreement or disagreement with the statements. This process allows extricating three types of responses from Tables 1A-9A and Diagrams 1D-8D (Appendix 5a). These groups are sub-divided to three types of response:

a. Salient consent (S.C) that represented consent among 7-9 current H.O.D (S.C.C.H) and 6-7 former H.O.D (S.C.F.H), who either scored high (3-4) or scored low (1-2) the statements.

b. Moderate consent (M.C) that is considered as consent between 6 current H.O.D (M.D.C.H) and 5 former H.O.D (M.D.F.H). And,

c. Mixed responses (M.R) that show a split between H.O.D’s responses. M.R appear between current H.O.D (M.R.C.H) and former H.O.D (M.R.F.H) in the same departments and / or between H.O.D from different departments. It is considered as consent between 4-5 current H.O.D and 3-4 former H.O.D.
The findings are arranged, within these distinct groups, according to two principles, in Tables 31A-36A (Appendix 6):

1. The types of H.O.D's responses -
   - A type of response that demonstrates S.C by both current and former H.O.D, in both external and internal areas of influence.
   - A combined type of response that demonstrates S.C by both current and former H.O.D, in both external and internal areas of influence, and alternatively their M.C or M.R.
   - A combined type of response that demonstrates M.C or M.R by both current and former H.O.D, in both external and internal areas of influence.
   - A type of response that demonstrates M.R by both current and former H.O.D, in both external and internal areas of influence.

2. The different levels of the H.O.D's agreement with the statements.

An overall view of the four types of responses, regarding current and former H.O.D's responses, divided to external and internal influences, based on the Tables presented in Appendix 6, is demonstrated in Tables 7-9.
Table 7 - External influences - an overall view of the four types of responses, as demonstrated by current and former H.O.D

<table>
<thead>
<tr>
<th>Type of response</th>
<th>Academic influences</th>
<th>Society's influences</th>
<th>Schools' influences</th>
<th>Colleges' influences</th>
<th>Technological innovation influences</th>
<th>M.O.E's influences</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.C</td>
<td>2 S.C cu 2 S.C fo</td>
<td>2 S.C cu 2 S.C fo</td>
<td>5 S.C cu 5 S.C cu</td>
<td>-</td>
<td>-</td>
<td>1 S.C cu 1 S.C fo</td>
</tr>
<tr>
<td>Combined type of response, with S.C by either current or former H.O.D</td>
<td>2 S.C cu 1 M.C fo 1 M.R fo</td>
<td>1 S.C cu 1 S.C fo 1 M.C cu 1 M.R fo</td>
<td>1 S.C cu 1 M.R fo</td>
<td>-</td>
<td>-</td>
<td>2 S.C cu 2 S.C fo 2 M.C cu 1 M.C fo 1 M.R fo</td>
</tr>
<tr>
<td>M.C or M.R responses</td>
<td>3 M.C cu 3 M.R fo</td>
<td>2 M.C cu 1 M.C fo 1 M.R cu 2 M.R fo</td>
<td>2 M.C cu 1 M.C fo 1 M.R cu 2 M.R fo</td>
<td>-</td>
<td>-</td>
<td>3 M.C cu 3 M.R fo 2 M.C cu 2 M.C fo 1 M.R cu 1 M.R fo</td>
</tr>
<tr>
<td>M.R</td>
<td>1 M.R cu 1 M.R fo</td>
<td>4 M.R cu 4 M.R fo</td>
<td>-</td>
<td>-</td>
<td>6 M.R cu 6 M.R fo</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 8 - Internal influences - an overall view of the four types of responses, as demonstrated by current and former H.O.D

<table>
<thead>
<tr>
<th>Type of response</th>
<th>College's Influences</th>
<th>Departmental influences</th>
<th>Learners' influences</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.C</td>
<td>2 S.C cu 2 S.C fo</td>
<td>2 S.C cu 2 S.C fo</td>
<td>-</td>
</tr>
<tr>
<td>Combined type of response, with S.C by either current or former H.O.D</td>
<td>2 S.C cu 1 S.C cu 2 M.C fo 1 M.R cu</td>
<td>3 S.C cu 1 M.C fo 2 M.R fo</td>
<td>4 S.C cu 3 M.C fo 1 M.R fo</td>
</tr>
<tr>
<td>M.C or M.R responses</td>
<td>2 M.C fo 2 M.C fo</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.R</td>
<td>-</td>
<td>-</td>
<td>1 M.R cu 1 M.R fo</td>
</tr>
</tbody>
</table>
The H.O.D’s responses in the questionnaire’s grading part demonstrate some significant results, which help to answer the questions derived from the research aims.

a) The results of the grading part demonstrate the impact of the different external and internal influencing factors on the T.E.C. They hint at the impact of the different external and internal influencing factors on directions or trends that characterise the T.E.C, in the different primary school departments. They indicate the impact of the different external and internal influencing factors on areas of commonality and difference in T.E.C, in the different primary school departments. The directions and the areas of commonality and difference will be elaborated in the Discussion.

✓ The leading external influencing factor is the Schools’ area of influence.

The questionnaire’s grading part results (Appendix 6, Table 21A) show that five out the nine statements in Schools’ area of influence (~55%) demonstrate S.C between current and former H.O.D, and four out of the five statements H.O.D’s responses show vast extreme agreements / disagreements (score 1 or 4).

H.O.D’s responses to three statements demonstrate remarkable agreement (statements 21, 23, 25), and H.O.D’s responses to two statements demonstrate remarkable disagreements (statements 22, 27). The H.O.D’s responses to statement 21 and 23 demonstrate a consensus between current H.O.D (nine out of the nine), and almost a consensus between former H.O.D (six out of seven). In statement 21 five out the nine current H.O.D and two out of the seven former H.O.D demonstrate score 4, totally agreeing, “The schools’ agenda influences the field-based T.E.C”. In statement 23 four out of the nine current H.O.D, and five out of the former H.O.D, demonstrate score 4, totally agreeing, School-College partnership have helped to
integrate the theoretical and the field-based T.E.C. This is the only case where the
former H.O.D demonstrate a more extreme agreement then the current H.O.D. The
H.O.D’s responses to statement 27 demonstrate one out of the three consensual
current and former H.O.D’s responses across this questionnaire, totally disagreeing
(score 1) “Schoolteachers are part of the college department’s staff.

✓ The most controversial and the least intrusive external influencing factor is the
Technological Innovation area of influences (Appendix 6, Table 33A). This area of
influence demonstrates M.R in six out of nine statements. S.C is not at all
demonstrated in this area of influence. The statements included in the
‘Technological Innovation’ area of influence demonstrate complementing aspects.
These statements can be divided into three groups – a main group of four statements
that relate to the impact of this area of influence on either teachers or students: “I.T
has changed lecturers' teaching-learning processes in many courses” (statements 44);
“Mentors interweave I.T in training courses” (statement 45); “I.T has influenced ways of
communication between staff and students” (statement 46); and, “The use of technologic
tools have significantly changed the teaching-learning processes in many courses”
(statement 49). The other two statements represent two distinctive aspects.
Statement 42, “I.T has made T.E.C courses more flexible”, relates to the impact of
Technological Innovation on the general character of the T.E.C, and statement 43,
“The T.E.C operates some distance-learning courses”, demonstrates an example of this
area of influence. H.O.D’s responses show aspects of M.R, and they do not
demonstrate extreme responses. Their agreements with statement 46 “I.T has
influenced ways of communication between staff and students current H.O.D” is the
highest agreement in this type of response. It demonstrates that four out of the nine
current H.O.D (~44%), chose score 4, the “Totally agree” response. All other extreme agreements or disagreements show low percentages of support.

The leading internal influencing factors are the College’s and the Department’s areas of influence. It demonstrates S.C by both current and H.O.D in two out of five statements in this area, and three responses that show either current or former H.O.D’s S.C. The departmental area of influence demonstrates S.C by both current and H.O.D only in one out of the five statements in this area.

H.O.D’s extreme responses to three statements in the College’s and the Department’s areas of influence demonstrate remarkable agreement. In the College’s area of influence, statement 30, seven out of the nine current H.O.D and six out the seven former H.O.D, agreed that the T.E.C in their departments were influenced by the College’s approval on “Adding/changing courses”. This statement demonstrates an aspect of the departments’ dependency on the college when shaping the T.E.C. In the case of statement 35, still in this area of influence, all nine current H.O.D and all seven former H.O.D agreed, “The College enables departmental staff development, due to departmental preferences”.

In the Department’s area of influence, statement 39, eight out of the nine current H.O.D and all seven former H.O.D agreed, “The departmental educational belief determines the guiding principles for the field-based T.E.C”. These three statements, although limited in number, demonstrate consensus between all H.O.D, and eventually illuminate the significant impact of the Department’s and College’s influence on the shaping of the T.E.C. Actually, H.O.D’s responses to statements 35 and 39 demonstrate not only the most prominent H.O.D’s agreements regarding the
Departments’ influence on the T.E.C, but also the foremost agreements across the whole questionnaire.

The least prominent internal influencing factor is the Learners’ area of influence. This area demonstrates current H.O.D’s S.C in four statements, and indicates conflictive attitudes towards different aspects in this area of influence. These four statements demonstrate the fractionalisation and the in-decisiveness of the Learners’ influence. On the one hand current H.O.D disagree, “Students’ abilities influence the T.E.C” (statement 58), and “The T.E.C considers students’ previous knowledge” (statement 60). On the other hand they agree, “The T.E.C is differential...”(statement 63) and “The T.E.C offers inquiry processes that meet students’ personal interests...”(statement 64).

H.O.D’s responses to statements of this type of response demonstrate relatively low percentage of extreme disagreements or agreements (the highest agreement demonstrates 55%, statement 64, and the highest disagreement demonstrates -42%, statements 31, 34, 38 and 63), (Appendix 6).

b) Three statements (27, 35 and 39) across the questionnaire demonstrate consensual S.C, and decisive responses, which show the highest percentages of extreme agreements and disagreements. Statement 27 belongs to the Schools’ area of influence, which is the most influential external factor, according to the results of the questionnaire. Statement 35 represents the College’s area of influence, which is the most influential internal factor, according to the results of the questionnaire’s close part. The last statement, 39 represents to the Departmental area of influence. The
consensual extreme agreements and disagreements increase the impact of these areas of influence.

c) The results of the grading part demonstrate a phenomenon of repeated gaps, across the questionnaire, between current and former H.O.D's extreme agreements / disagreements (Appendixes 5b, 5c, 6). Deep gaps appear in twenty-three out of the sixty-four statements (~35%). Gaps are regarded as deep when they show a difference of more then 10% between the current and former H.O.D's results. The gaps appear in two modes. One mode appears when a difference of more then 10% is demonstrated between current and former H.O.D's results. The other mode appears when current H.O.D or former H.O.D show extreme agreements / disagreements with the statements. Their results demonstrate a difference of more then 10%. Most gaps of both modes demonstrate deep gaps in favor of current H.O.D's responses, which demonstrate more extreme responses then former H.O.D demonstrate. Only five statements show deep gaps (~26%), in favor of former H.O.D's responses. They demonstrate more extreme responses then current H.O.D demonstrate. The regularity of H.O.D's responses revealed that current H.O.D seemed to be quick and decisive, whereas former H.O.D seemed to be distanced and hesitative.

Regarding the external influencing factors - Sixteen out of the twenty-three responses (~70%), including both modes show deep gaps, in favor of the current H.O.D’s extreme agreements or disagreements. Statements 2, 16, 19, 21, 46, 55, and 57 demonstrate both kinds of H.O.D’s extreme agreements or disagreements, and statements 4, 17, 26, 28, 41, 47, 48, 49, and 56 demonstrate only current H.O.D’s extreme agreements or disagreements. Four out of out of the twenty-four responses, including both modes, show deep gaps, in favor of the former H.O.D's
extreme agreements or disagreements. Statements 7, 23, and 27, demonstrate both kinds of H.O.D's extreme agreements or disagreements, and statement 20 demonstrates only former H.O.D's extreme agreements or disagreements.

✓ Regarding the internal influencing factors - Three out of the twenty-three responses (~13%), including both modes show deep gaps, in favor of the current H.O.D's extreme agreements or disagreements. Statements 40 and 58 demonstrate both kinds of H.O.D's extreme agreements or disagreements. Statement 61, demonstrates only current H.O.D's extreme agreements or disagreements. No former H.O.D show extreme agreements or disagreements.

✓ A remarkable difference appears between the number of gaps demonstrated in the external influencing factors and in the internal influencing factors (Appendix 6, Tables - 28, 30, 32 and 34). Schools' appear to be the most remarkable area of influence in the group of the external influencing factors, with six gaps. Then appears the T.I area of influence with five gaps, and the Society's and Academic areas of influence with three gaps. There are no remarkable areas of influence in the group of the internal influencing factors. Except, the College area of influence that does not demonstrate any gap.
Table 9 - Gaps between the external and the internal influencing factors

<table>
<thead>
<tr>
<th>Areas of influence</th>
<th>External influencing factors</th>
<th>External influencing factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Academic</td>
<td>College</td>
</tr>
<tr>
<td>Number of gaps</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Society</td>
<td>Departments</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Schools</td>
<td>Learners</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Technological Innovation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.O.E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

The analysis demonstrates a phenomenon of extreme opposed responses given by the same kind of H.O.D. This phenomenon points towards the impact of the different external and internal influencing factors on the T.E.C’s directions. This phenomenon also points directly towards the impact of the different external and internal influencing factors on areas of difference in the T.E.C, in the different primary school departments. In twenty out of the sixty-four statements (~30%) current H.O.D demonstrate extreme opposed responses in identical areas of influence, and in fifteen out of the sixty-four statements (~23%) former H.O.D’s do so. This phenomenon demonstrates aspects of difference in the varying areas of influence.

Two areas of influence lead to this sort of disharmony - the Technological Innovation area of influence, and the Society’s area of influence. The Technological Innovation area of influence demonstrates five current H.O.D’s extreme opposed responses and two former H.O.D’s extreme opposed responses. The Society’s area of influence demonstrates four current H.O.D’s extreme opposed responses and four former H.O.D’s extreme opposed responses. For example:

*Current H.O.D and former H.O.D demonstrate the most extreme of opposed responses in statement 16, the Society’s area of influence. Current H.O.D show
total disagreement (score 1) in three out of the nine responses (~33%), and total agreement (score 4) in four out of the nine responses of (~44%) with that "The T.E.C offers mixed Jewish and Arab courses in order to bring closer Jews and Arabs". Former H.O.D show total disagreement (score 1) in two out of the seven responses (~28%), and total agreement (score 4) in two out of the seven current responses (~28%).

✓ Current H.O.D also demonstrate extreme opposed responses in statement 41, the Technological Innovation area of influence, extremely agreeing score 4, with three out of the nine responses (~33%), and extremely disagreeing, score 1, with two out of the nine responses (~22%), that the "I.T has influenced the overall TEC".

e) The analysis demonstrates a phenomenon of disharmony between current H.O.D's extreme responses and former H.O.D's extreme responses. This may signify two issues. First a change of direction for the T.E.C. Secondly, areas of commonality and difference of the T.E.C in the primary schools departments in Israeli C.F.T.E, over the course of time.

✓ In eight out of the sixty-four statements (~12%) either current or former H.O.D demonstrate extreme responses; thus, their extreme responses do not correspond. This phenomenon is demonstrated in four areas of influence, the: Schools, M.O.E, Learners, and Technological Innovation.

✓ In three out of the nine statements in the Schools' area of influence (20, 26 and 28) only one kind of H.O.D extremely responded. In statement 20 two out of the seven former H.O.D (~28%) demonstrate extreme disagreement (score 1); in statement 26 two of the seven former H.O.D (~28%) demonstrate extreme agreement (score 4);
and, in statement 28 two of the nine current H.O.D (~22%) demonstrate extreme disagreement (score 1).

✓ In two out of the seven statements in the Learners’ area of influence (60 and 61) only one kind of H.O.D responded. In statement 60 two out of the nine current H.O.D (~22%) demonstrate extreme disagreement (score 1); and, in statement 61 three of the nine current H.O.D (~33%) demonstrate extreme agreement (score 4).

✓ In two out of the nine statements in the Learners’ area of influence (53 and 56) only one kind of H.O.D responded. In statement 53, one out of the nine former H.O.D (~14%) demonstrate extreme disagreement (score 1); and, in 56 three out of the nine current H.O.D (~33%) demonstrate extreme agreement (score 4).

✓ In one out of the nine statements (44) in the Technological Innovation area of influence only one kind of H.O.D responded, demonstrating current H.O.D’s score 4, agreeing with the statement. This reveals disharmony that will be later discussed.
1.2 The Rating part

This part of the analysis concentrates on rating the importance of the influences based on the choice of the “most important” statements, in the different sections of the questionnaire. Statements are regarded as most influencing when more than half of the responders placed them as one of the three most important statements. An area of influence is regarded as more important than another area in two conditions – when statements are chosen by a larger number of responders, and when agreements on the degree of certain statements’ importance among respondents are higher.

**Table 10 - Rating statements according to their importance**

<table>
<thead>
<tr>
<th>Level of influence</th>
<th>Kinds of influencing factors</th>
<th>Areas of influence</th>
<th>Statements Placed first</th>
<th>Statements Placed second</th>
<th>Statements Placed third</th>
<th>Total number of electors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Highest level</td>
<td>Internal</td>
<td>Departmental influence</td>
<td>39</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>38</td>
<td>9</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>B. Moderate level</td>
<td>External</td>
<td>College's influence</td>
<td>31</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>35</td>
<td>2</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>C. Lowest level</td>
<td>External</td>
<td>Schools' influence</td>
<td>23</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>Academic influence</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Internal</td>
<td>Learners' influence</td>
<td>63</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>64</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>Society's influence</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>MOE's influence</td>
<td>55</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>Technological innovation influence</td>
<td>46</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 10 demonstrates three different levels of influence: The highest level of influence is demonstrated in the Departmental and College’s areas of influence, which represent the internal kind of influence; the moderate level of influence is demonstrated in three areas of influence: the Schools and the Academic, which represent the external influences, and the Learners area of influence, which represents an internal influence. The lowest level of influence is demonstrated in the Society’s’, the M.O.E’s and Technological Innovation external areas of influence. The distribution of the external and the internal influencing factors in this part of the questionnaire, and their association to the results demonstrated in the other parts of the questionnaire will be later discussed.

1.2.1 The highest level of influence

The most salient influencing factors are: the Departmental and the College’s influences.

1.2.1.1 The Departmental influence (statements 36 – 40)

In this section three statements revealed as most important. Fourteen H.O.D chose statement 39 “The departmental educational belief determines the guiding principles for the field-based T.E.C” and statement 38 “The departmental educational belief determines the guiding principles for the education and pedagogy courses” as important. Both statements show that the departmental educational belief plays a central role in shaping the T.E.C, especially in its pedagogical and practical parts. The gap between these statements’ ratings is insignificant. The rating of statement 36 “The departments’ staff is involved in shaping its T.E.C” is significantly lower, as only eleven, still more than half of the H.O.D rated it as important. Eleven out of sixteen H.O.D chose statement 36 as important, ten even agreed that this is the most important statement in this section.
The importance of statement 39 is identical to the result revealed in H.O.D's responses to this statement in the close part of the questionnaire. The scoring of H.O.D's responses to this statement has been the highest response throughout the close part of the questionnaire. Eight current H.O.D and five former H.O.D scored it at 4. This complete harmony between the two results reinforces the importance of departments' influence on the T.E.C in general, and its centrality in shaping the practical part of the T.E.C.

The placing of statement 38 as second in degree of importance, and statement 36 as third in degree of importance reflects the different types of H.O.D's responses to these statements in the close part of the questionnaire. Current H.O.D showed salient consent to both statements, and eight out nine high scored it. They agreed strongly that the department influences the education and pedagogy courses (statement 38), and that staffs are involved in shaping the T.E.C (statement 36). However, former H.O.D's showed only moderate consent to statement 38 and a controversial response to statement 36. These gaps between current and former H.O.D, probably, illuminate a change in departmental cultures in recent times. Change in the department's position in the college, and/or change of departmental pattern of decision-making processes. No wonder, then, that the number of respondents who chose these statements decreased.

1.2.1.2 The College's influence (statements 29 – 35)

In this section three statements are revealed as most important. Thirteen out sixteen H.O.D chose statement 35 "The College enables departmental staff development, due to its preferences"; twelve chose statement 31 "The College enables the department to shape its own T.E.C according to its educational belief"; and nine chose statement 32 "The
College enforces cross-department fundamental courses", as the most important statements.

The rating of statements 35 and 31 are competitive, because although thirteen H.O.D chose statement 31, only two placed it as first, whereas only twelve H.O.D chose statement 35, and eight placed it as first. It seems, therefore, that statement 31 is more important than 35. This rating illuminates the department’s autonomous position in the college. However, it also hints at an ambiguous picture when relating to the college’s influence on the T.E.C. Rating statement 32 as third in importance in this section, re-emphasises the ambiguous picture. This statement seems to be in contrast with the other chosen statements in this section, seeming to reveal a paradox in this area of influence. This paradox has already been identified in the Questionnaire’s close part analysis.

Again, the College’s influence section results revealed in the Questionnaire’s rating part are identical to the results revealed in the Questionnaire’s grading part. When looking at each chosen statement separately, it seems that the rating results show a clear picture supporting the centrality of the College’s area of influence. It also seems that the rating results do not exactly match the grading results, which reveal that the Colleges and the Departments have complex interrelations, stemmed from conflictive interests. When looking at the statements jointly, however, it seems that the rating exposes the duality of relations between Departments and Colleges. This duality enables a perception of autonomy accompanied by restrictions. In fact, as resulted from both the rating and the grading responses the Departments’ autonomy seems to be restricted, and the T.E.C shaping depends on local Colleges’ circumstances and decision making, as already revealed from the Questionnaire’s grading part.
1.2.2 The moderate level of influence

1.2.2.1 The Schools’ influence (statements 20–28)

In this section three statements are revealed as most important. Eleven H.O.D chose statement 23 “School-college partnership has helped to integrate between the theoretical and the field-based T.E.C”; and, nine H.O.D chose statement 21 “Schools’ “agenda” influences the T.E.C”, and statement 28 “Mentors, schoolteachers and students create a learning community” as important.

The number of H.O.D who marked these statements as most important is lower then in previously analysed sections. Still, more than half of those H.O.D who chose these statements agreed that the statements should be placed first.

These three statements complement each other and reflect not only upon the most important statements in this section, but also upon the current preferred and widespread direction this influence facilitates. Schools’ are conceived of, as revealed, partners in T.E, and as such, they significantly influence the T.E.C, by encouraging the integration between its theoretical and practical parts. Schools’ programs influence the practicum schedule. Further, schools’ staffs are associated with the departmental staff and the students, and collaborate in a joint learning community. Apparently, partnership has recently become a preferred framework for strengthening and improving teacher education.

The rating of these statements only partially corresponds with the H.O.D’s responses demonstrated in the close part of the questionnaire. The rating corresponds to the H.O.D’s responses to statements 23 and 21. These statements show S.C, and current
H.O.D's consensual responses, and they are highly scored by most current and former H.O.D'. The high rating of statement 28 does not correspond with the H.O.D's responses demonstrated in the close part of the questionnaire. Whereas the rating shows a moderate level of influence as eleven H.O.D chose this statement as important, the responses show a controversial picture as only nine scored this statement highly.

1.2.2.2 The Academic influence (statements 1 – 8)

In this section two statements are revealed as most important. Eleven H.O.D chose statement 3 “Theoretical courses complement the learning from field-based practice”, and nine H.O.D chose statement 2 “The courses’ requirements emphasise high academic abilities”, as important.

These statements illuminate two distinct directions that the academic influence facilitated. These directions do not necessarily meet, but they are not conflicting. One route, revealed from the rating of statement 3, is the common belief that theory complements practice. This approach is constructivist in nature, and represents a current and widespread academic psychological learning theory. Another relatively widespread route, revealed from the rating of statement 2, is the emphasis of academic requirements that demand students’ high academic abilities.

The number of H.O.D who chose these statements did not significantly decrease, but only about half of those H.O.D actually chose the statement, which was placed first, as the most important one. This shows the problematic situation of academic influence, when comparing it to the other areas of influence previously analysed. Additionally, only two statements that have come up as important in this area of influence, because less than half
of the H.O.D placed the other statements as one of the three most important. This fact suggests that H.O.D do not highly appreciate the academic influence.

The rating of these statements corresponds with the H.O.D’s responses in the close part of the questionnaire. Current and former H.O.D’s responses show disagreement concerning these statements. A salient consent is revealed between current H.O.D, when relating to statement 2, whereas a more moderate consent is revealed between former H.O.D. When relating to statement 3 former H.O.D rather shows salient consent and current H.O.D shows a controversial response. The lack of agreement may further suggest the relatively limited academic influence on the T.E.C.

1.2.2.3 The Learners' influence (statements 58 – 64)

In this section two statements are revealed as most important. Eleven H.O.D chose statement 63 “The T.E.C is differential and adapted to students’ progress” as important, five placed this statement first, and five placed it second. Ten H.O.D chose statement 64 “The T.E.C offers inquiry processes that meet students’ personal interests in many courses” as important, seven placed it first and one placed it second.

These statements illuminate two distinct areas within the Learners’ influencing factor, which exemplify relatively common characterisations of the current T.E.C, originating in the Learners’ influencing factor. These areas complement each other in the sense that they reflect openness to considerations associated with learners needs and / interests. But, they are not sufficient to portray a whole picture of this influencing factor.

The rating of these statements corresponds with the H.O.D’s responses in the close part of the questionnaire. Current H.O.D’s responses to these statements show a salient
consent, whereas former H.O.D’s responses show a moderate consent leading to a controversial response. Additionally, current and former H.O.D’s responses to other statements in this section reveal gaps in five out the seven statements, and in other two statements H.O.D’s responses are controversial. H.O.D’s responses in the close part of the questionnaire indirectly explain why H.O.D chose these two statements as important, and more than half of them placed these statements as important, and why all other statements did not pass the fifty percent barrier. The questionnaire’s responses complement the picture portrayed through the rating, and explain the relatively low location of this influencing factor.

1.2.3 The lowest level of influence

1.2.3.1 The Society’s influence (statements 9 – 19)

In this section two statements are revealed as most important. Eleven ‘H.O.D’ chose statement 10 “The T.E.C reflects general humanistic values”. Nine chose statement 13 “The T.E.C fosters critical thinking by teachers”, as important. The two statements illuminate general concerns that form the heart of the Society’s influencing factor. These concerns skip over specific problematic Israeli concerns, but are still associated with ideas presented in the other statements.

The rating of these statements corresponds with the H.O.Ds’ responses in the close part of the questionnaire. Both current and former H.O.D’s responses to statement 10 show a salient consent and high scoring. H.O.D’s responses to statement 13 differ. In this case former H.O.D’s responses show a salient consent, whereas current H.O.D’s responses show only a moderate consent. Actually, most responses in this section show either moderate consent or a controversial response. These responses indirectly explain the low
impact of societal concerns. They also explain why only two statements out of the eleven statements in this section passed the half barrier, and more than half of the H.O.D placed them as important. The combination between the responses and the fact that less than half of H.O.D placed the two statements as first shows the limited impact of this factor.

1.2.3.2 The M.O.E’s influence (statements 50 – 57)

In this section only one statement is revealed as most important. Eleven ‘H.O.D’ chose statement 55 “Special education courses have been added to the T.E.C as a result of the M.O.E’s “Inclusion” policy”. This one statement illuminates a specific recent concern and not a general central concern that characterises the M.O.E’s influencing factor. It is the only statement in the close part of the questionnaire that both current and former H.O.D high and scored showed a salient consent.

It seems that H.O.D could not highly agree with a general or a comprehensive influence initiated by the M.O.E, as a result of their inherent resistance to imposed directives. This assumption corresponds with the H.O.D’s responses to most statements in this section. H.O.D’s responses show more moderate consents and controversial responses than salient consents. This kind of response explains why only one out of eight statements in this section passed the half way barrier, as more than half of the H.O.D placed it as important, although only five H.O.D placed it as first. The rating complements the H.O.D’s responses and explains low impact of the M.O.E’s influencing factor on the T.E.C.

1.2.3.3 The Technological innovation influence (statements 41 - 49)

In this section only one statement is revealed as most important. Eight H.O.D chose statement 46 “It has influenced ways of communication between staff and students”. This
one statement illuminates a relative outer concern and not a central concern that characterises the technological innovation-influencing factor. This statement, like most other statements in this section in the close part of the questionnaire, shows both current and former H.O.D controversial responses and gaps between current and former H.O.D. Still, eight out of sixteen H.O.D chose this statement as important, and it has just passed the half barrier, and only two placed it as first. No other statements in this section even passed this barrier.

This borderline situation represents best the limited influence of the Technological Innovation area of influence. It seems that the T.E system is not yet prepared to seriously integrate the technological innovations into the T.E.C, although, as revealed from the H.O.D's responses few colleges' revealed quite a developed technological culture.

Further reference to associations between the rating part, the comments' part and the grading part will be later discussed.
1.3 The Comments’ part

1.3.1 Analysis of comments across the specific external influencing factors

H.O.D’s comments on statements, referred to the external influencing factors (see Appendix 6a, Table 37), demonstrate three types of reference:

A. Reinforcement of beliefs that influence the T.E.C shaping,

B. Preferred or existing directions or trends that characterise the T.E.C, and

C. Elaboration or explanation of specific ideas/situations/examples presented in the questionnaire.

Eighteen out of the forty-seven comments (~38%) are associated with the third type reference of (C) - elaboration or explanation. Most of the comments of the C type refer to the ‘Technological innovation’ area of influence (6 comments) and the ‘Society’s area of influence (4 comments). Sixteen out of the forty-seven comments (~34%) are associated with the first type of reference (A) - reinforcement of beliefs. Most comments of the A type refer to the Schools’ area of influence (7 comments) and the M.O.E’s area of influence (6 comments). Thirteen out of the forty-seven comments (~28%) are associated with the second type of reference (B) - preferred or existing directions. Comments of the B type of reference spread in all areas of influence.

Most comments are associated with the T.I area of influence, with thirteen units of meaning, and then come the M.O.E’s area of influence, with twelve units of meaning, the Schools’ area of influence, with ten units of meaning, and the Academic area of influence, with nine units of meaning. The fewest comments are associated with the Society’s area of influence, with five units of meaning.
The comments on the T.I area of influence refer to the:

✓ Readiness or un-readiness of students, teachers, and / or schools for I.T uses (comments 16, 17, 19, 20, 21, 23)
✓ Advanced or limited I.T influence on the T.E.C (15, 18, 22)
✓ Satisfaction and doubts associated with the contribution of 'Technological innovations' to the improvement of learning / teaching (24, 25)

The variety of comments on this area of influence fortifies controversial approaches to the impact of the Technological innovation influence on the T.E.C shaping, demonstrated in the questionnaire's grading part mainly by M.R.

The comments on the M.O.E's area of influence refer to the:

✓ Dissatisfaction from the M.O.E's influence on the T.E.C (comments 26, 27, 30, 33, 35, 36)
✓ The M.O.E's directives (31, 32, 34)
✓ The M.O.E's influence on the T.E.C (28, 29, 37)

The comments on this area of influence reinforce the ambivalent responses to the M.O.E's influence on the T.E.C shaping, as demonstrated in the questionnaire's grading section.

The comments on the Schools' area of influence refer to the:

✓ Partnership between schools and the departments, including learning community (comments 42, 44, 45, 46, 47)
✓ The Schools' influence on changing elements in the T.E.C (41, 42, 43)
✓ Differences the Schools' influence on the T.E.C regarding pedagogical and disciplinary matters (38, 39, 40)
The comments strengthen the responses that show consent regarding the Schools’ influence on the T.E.C’s development. They also reemphasise the tension between pedagogical and disciplinary members of staff, as demonstrated in the questionnaire’s grading section.

The comments on the Academic area of influence refer to the:

✓ Dominance of academic orientation in the disciplinary courses, and the increase of academic orientation in the pedagogical and the practical part of the T.E.C (comments 1, 2, 3 and 4).

✓ Different approaches towards the association between the theoretical courses, the pedagogical courses and the practical experience – what precedes theoretical courses or practice? (5, 6, 7)

✓ Extent of the Academic influence on teachers (8, 9).

The comments on this area of influence point out the conflictive responses associated with the Academic influence on the T.E.C shaping, including the tension between pedagogical and disciplinary emphases, as demonstrated in the questionnaire’s grading part.

The comments on the Society’s area of influence are sporadic, and refer to the:

✓ Critical teachers that do not simply accept ideas / concepts (comment 10)

✓ Attractiveness of areas of specialisation (11, 12)

✓ Teachers’ public image (13)

✓ Students’ involvement in society (14)

The comments on this area of influence point out the diffusive responses associated with the Society’s influence on the T.E.C development, as demonstrated in the questionnaire’s grading section.
1.3.2 Analysis of comments across the specific internal influencing factors

H.O.D’s comments on statements, referred also to the internal influencing factors (Appendix 6a, Table 38), and demonstrate the same three types of reference that the external areas of influence demonstrated (see p. 187).

Six out of the thirteen comments that represent the internal influences (~46%) are associated with the third type reference (C) - elaboration or explanation. Four out of the thirteen comments (~30%) are associated with the first type reference (A) - reinforcement or rejection of beliefs. Three out of the thirteen comments (~13%) are associated with the second type reference (B) - preferred or existing directions.

Most comments are associated with the Departmental area of influence, with six units of meaning. Then comes the College’s area of influence, with five units of meaning. The least comments are associated with the Learners’ area of influence, which demonstrates two units of meaning.

The comments on the Departmental area of influence refer to the extent of conflict between the departmental and the disciplinary faculties’ interests or convergence of interests (comments 6, 7, 8, 9, 10 and 11).

The comments on the College’s area of influence refer to the extent of the Departments’ dependency on the College or the extent of their independence on College restrictions when shaping the T.E.C. (comments 1, 2, 3, 4, and 5).

The comments on the Learners’ area of influence refer to sporadic aspects, and their significance is limited.
2. The questionnaire's open part

Questions I and J, the open part of the questionnaire, required summarising the educational conception behind the T.E.C, highlighting changes, and explaining causes and triggers for these changes. At the first stage of the analysis H.O.D's answers were separated into distinctive units of meaning, and organised in categories associated with the different areas of influence. Then, the units of meanings were arranged according to the different areas of influence, sub-divided into two groups - external influences and internal influences, and accordingly reanalysed. Finally, all parts of the questionnaire were comparatively analysed.

H.O.D's answers, separated into units of meaning, (Appendix 6b) demonstrate the same three types of reference that the comments in the close part of the questionnaire demonstrate: A. Beliefs that influence the development of the T.E.C; B. Preferred or existing directions/trends that characterise the T.E.C; C. Elaboration or explanation of specific ideas/situations/examples presented in the questionnaire's close part.

The Following Table indicates the areas of influence, ordered by the number of units of meaning, in descending order.
Table 11 - Units of meaning – Questionnaire’s open part

<table>
<thead>
<tr>
<th>Areas of influence</th>
<th>Units of meaning</th>
<th>Areas of influence</th>
<th>Units of meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>31</td>
<td>Departmental</td>
<td>125</td>
</tr>
<tr>
<td>Academic</td>
<td>18</td>
<td>College</td>
<td>35</td>
</tr>
<tr>
<td>Society</td>
<td>9</td>
<td>Learners</td>
<td>23</td>
</tr>
<tr>
<td>Technology Innovation</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.O.E</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.1 **External influencing factors**

2.1.1 The Schools’ influence

The ‘Schools’ influences can be either direct or indirect. The ‘Schools’ indirect influences occur as part of the mutual relations between the schools and the departments. These influences will be presented as part of the M.O.E’s influence. The direct influences can be divided into five aspects:

a. Changing roles of those involved in the interrelations between schools and departments (23 units)

b. Changing the practical / educational parts of the T.E.C (3 units)

c. Operating continuous processes in schools, as a result of the interrelations between schools and departments (2 units)

d. Exposure to the schools’ curricula (3 units)
2.1.1.1 **Changing roles of those involved in the interrelations between schools and departments** (students, pedagogical, methodological counsellors, staff members etc.).

This is the most salient aspect kind of influence, with twenty-three out of thirty one units of meaning (Appendix 6b, Table 39A, units 2-8; 11-14; 18; 20-23; 25-31). It demonstrates different models of interrelations between schools and departments, and variations of partnership, which consider: a. Experiencing a wide range of school’s work; b. Getting deeply involved, as partners, in school life.

2.1.1.2 **Changing the practical / educational parts of the T.E.C**

This aspect is mostly significant to the T.E process, despite the limited number of units of meaning it demonstrates (units 9-10; 15). These units refer only to changes in the practical and/or the pedagogic parts of the T.E.C, and not to the disciplinary part.

2.1.1.3 **Operating continuous processes in schools, as a result of the interrelations between schools and departments**

As demonstrated in two units of meaning (units 17, 19), this kind of relationship allows cooperative continuous moves, relevant to both sides. These relationships are based on mutual agreements, influenced by the actual circumstances, possibilities, and the schools’, departments’, and students’ needs and preferences.

2.1.1.4 **Exposure to the schools’ curricula**

This aspect demonstrates a limited and undirected interaction between departments and schools, in three units of meaning (units 1, 16, 24). Students’ exposure to schools’
curricula appears in two ways: by learning the schools’ curricula as part of experiencing the schools’ life, and through sporadic occasions, separated from the regular experiencing.

2.1.2 The Academic influence

The ‘Academic’ area of influence, with eighteen units of meaning (Appendix 6b, Table 40A), demonstrates three aspects: expectations from the students, expectations from the Departments’ / Colleges’ staff, and expectations from the T.E.C.

2.1.2.1 Expectations from students

Students are expected to:

1. Specialise in a major discipline (units 2, 3, 4, 7, 18)
2. Prove academic competencies (units 8, 9, 16)
3. Experience inquiry (unit 1)

2.1.2.2 Expectations from staff members

Staff members are expected to:

1. Take part in the college’s academic community (units 11, 12, 13, 17)
2. Be involved in research (unit 14)
3. Publish research results (units 10, 15)

2.1.2.3 Expectations from the T.E.C

It is expected that ‘Academic’ characteristics will catalyse developing a more academic T.E.C (units 5, 6).
All three groups demonstrate the impact of the ‘Academic’ area of influence on the T.E.C in different levels: the Colleges’ level – the general academic atmosphere; the Departments’ level – change of the T.E.C; the staff members’ and the students’ level – the equivalent academic expectations, which show complementary relations, while keeping both populations’ unique needs and/or interests.

Units 2, 3, 4 demonstrate a dilemma stemmed from the ‘Academic’ influence on the T.E.C - the weight given to academic matters versus the weight given to educational matters and practice. Units 3, 5, 8, 11, 18 emphasise the current supremacy of the academic orientation on the educational orientation.

2.1.3 The Societal influence

The ‘Societal’ area of influence reveals two aspects: A general sensitivity to actual societal questions, and Implications of the societal influences on the T.E.C.

2.1.3.1 A general sensitivity to actual societal questions

Four units, out of nine, demonstrate this kind of impact (Appendix 6b, Table 41A, units 5, 6, 8, 9). Unit 6 refers to the importance of students’ involvement in societal matters; and, units of meaning no. Units 8-9 refer to tolerance towards multi-cultural issues and towards learners’ differences. Unit 5 elaborates on the belief in the importance of students’ involvement in societal matters.

2.1.3.2 Implications of the societal influences on the T.E.C.

Five units demonstrate this kind of impact (Appendix 6b, Table 41, units 1-4; 7). Unit no. 4 (ibid.) demonstrates a belief that the department should expand its interests in societal
matters. Units 1, 7 reveal local answers to actual societal concerns, so believed, relevant and attractive to students. The other two units (units 2, 3) elaborate on the local answers – new specialisation areas.

2.1.4 The Technological Innovation influence

Nine units (Appendix 6b, Table 42A) demonstrate three areas of the ‘Technological innovation’ influence on the T.E.C:

1. Change of the common class format – creating the digital class, which demands changes in the T.E.C’ development (units 1, 5).

2. Change of courses’ format, and the usual learning tasks by offering distance learning and communication by computer, and breaking the conventional frames of time devoted to formal learning (units 2, 6).

3. Change of teaching-learning materials and tools for improving teaching-learning tasks (units 3, 4, 7, 8, 9), by: equipping students with advanced teaching tools, adapted to the third millennium (unit 3); general contribution that needs to be researched (unit 4); computers’ contribution to academic literacy (unit 7, 8); and, computer’s contribution to other courses (unit 9).

2.1.5 The M.O.E’s influence

The M.O.E’s and the Committee for Higher Education’s (C.F.H.E) ‘Guidelines’, and other M.O.E’s directives, directly and indirectly influence the T.E.C (Appendix 6b, Table 43A).
2.1.5.1 Direct influences on the T.E.C

Three units demonstrate this kind of influence (ibid. units 1, 2, 5). Unit 1 supports the M.O.E’s recommended model for primary school teachers — ‘disciplinary proficient teachers’, as opposed to the model of the ‘comprehensive teachers’. Unit 5 shows that the M.O.E’s ‘Inclusion’ policy enabled to open a new specialisation area, the “teacher in the inclusive class”. Unit 2 elaborates on a specific department’s preferred direction, as result of the M.O.E’s policy towards Mathematic and Science studies.

2.1.5.2 Indirect influences on the T.E.C

Three units demonstrate this kind of influence (units 3, 4, 6). Units 3, 6 demonstrate a direction resulted from the M.O.E’s directives to the schools, which are transferred by the schools’ intercession to the departments, and accordingly influence the T.E.C. Units 4 exemplifies two specific implications of the M.O.E’s indirect impact – the introducing of the ‘Inclusion’ to students, and the introducing of the M.O.E’s recommended reading-writing strategies.
2.2 Internal influencing factors

2.2.1 The Departments’ influence

The Departments’ influence on the T.E.C is the most prominent. This area of influence includes the largest number of units of meaning – one hundred and twenty-six. The units of meaning can be divided into seven sub-areas of influence, organised from the most popular to the least popular between H.O.D:

a. Interrelations between departments and schools (28 units)
b. Students as learners (28 units)
c. Linking between courses and / or parts of the T.E.C (20 units)
d. Child and Childhood concerns (17 units)
e. The desired teacher – the academic ‘disciplinary proficient’ type of teacher versus the comprehensive and ‘educative’ type of teacher (14 units)
f. Values’ concerns - contribution to the society (12 units)
g. Teaching abilities and skills, and class management (7 units)

2.2.1.1 Interrelations between departments and schools

The interrelations between the Departments and the schools seem to be the most salient direction that T.E.C aims at, with twenty-six out of the hundred and twenty-five units of meaning. Table 44A (Appendix 6b) shows that partnership is the Departments’ current preferred direction, when considering students’ fieldwork. The twenty-eight units of meaning refer to:

1. Partnership as a general pattern
2. Learning community as a central means for facilitating partnership.
2.2.1.1.1 Partnership as a general pattern

Twelve units of meaning demonstrate general characteristics of the partnership pattern, stating three main aspects:

1. The partnerships' contribution to students' experiencing environment (units 48, 49, 73, 111)
2. Characteristics of the joint work (units 77, 78)
3. Benefits and professional growth (units 60, 81, 83, 116).
4. General interrelations between the department and the schools (units 33, 87).

Three units of meaning demonstrate clear beliefs in regard with partnership:

1. In a partnership pattern partners contribute and benefit (unit 81). For example, students create mutual relations with staff members (units 33, 48, 87); counsellors and training teachers share responsibility (units 77, 78).
2. Partnership facilitates better preparation of students for the schoolwork environment (unit 60). Students are cautiously attached to partner schools (unit 73), and are prepared to work in specific partner schools (unit 116).
3. Partnership enhances multifaceted aspects of the teachers' role (unit 50).

2.2.1.1.2 Learning community as a central means for facilitating partnership

Sixteen units of meaning refer to the learning community, as part of the partnership relations between Departments and schools, focusing on four aspects:

1. The learning community's contribution to the partners, its influence on the schools' atmosphere, and on the quality of teaching (units 47, 79, 80, 112);
2. Interests that the learning community facilitates (units 76, 114);
3. The partners, their roles, status, and unique contribution (units 44, 45, 46, 74, 75, 82, 115), and;

4. A general wish to fortify the learning community (units 32, 43, 113).

The units of meaning reveal two beliefs:

a. A belief that learning communities enhance mutual learning and increase the essence of belonging and common interests (unit 47). Units 32, 43 refer to need to nurture such learning communities. Units 45, 74, 75, 114 reconfirm the relevance of the learning community’s meetings to the partners.

b. A belief that learning communities enhance the creation of a common culture (unit 80). Unit 79 emphasise the meetings’ role in creating a mutual culture based on multifaceted perspectives.

2.2.1.2 Students as learners

‘Students as learners’ is a second direction that the Department’s T.E.C puts forward.

Twenty-five units out of the hundred and twenty-five units of meaning demonstrate this direction, and they can be divided to two main groups:

Group 1 – Characteristics of the independent students

Group 2 - Aspects of students’ empowerment

2.2.1.2.1 Group 1 - Characteristics of the independent students

Fourteen ‘units of meaning’ refer to the students’ characteristics, which illuminate four aspects:

1. Independency and assiduousness (units 10, 19, 50, 51, 123)
2. Research orientation (units 30, 57, 58, 86)

3. Dialogic, reflective and strategic abilities (units 16, 52, 55)

4. Critical thinking (units 20, 21, 88, 92).

All units of meaning elaborate on the four above stated aspects.

2.2.1.2.2 Group 2 - Aspects of students' empowerment

The seventeen ‘units of meaning’ refer to students’ empowerment reveal three aspects:

1. Students gain from constructive processes, as they enhance their personal development (units 17, 22, 35, 39, 40, 42). Units 39 and 42 indicate that the process of learning has an impact on the students’ personal and professional development. Units 17 and 40 point up the students’ role as ‘catalysers’ of their personal and professional development. Units 22, 35 re-emphasise the students’ responsibility for their personal development, and the T.E.C’s responsibility for setting an encouraging environment for such development.

2. Students develop when their individual needs get specific attention (ibid. units 34, 90, 97a, 107). The four units of meaning show systematic efforts to give appropriate answers to students’ needs.

3. Students have to deepen and widen their general knowledge and literacy (units 96, 100, 101). The three units of meaning show actual efforts made to enhance students’ enlightenment.
2.2.1.3 **Linking between courses and/or parts of the T.E.C**

This has been a third dominant direction that characterises the Departments’ influence. Twenty units out of the hundred and twenty-five units of meaning demonstrate this direction, and they can be divided into two main groups:

Group 1 - Linking theory to practice, with fourteen units of meaning.

Group 2 - Integration of courses, with six units of meaning.

2.2.1.3.1 **Linking theory to practice**

These units of meaning focus on two aspects:

1. The centrality of practice (unit 95)
2. Linking theory to practice (units 37, 53, 54, 56, 93, 105, 106, 118, 119, 120, 121, 122, 124)

The belief that practice is central to T.E (unit 95) is a basis for another two beliefs:

1. Linking theory to practice increases the relevance and the meaning of the theoretical studies and the learning process (units 54, 106)
2. Linking theory to practice increases the T.E.C’s coherency and consistency (unit 56)

Five units of meaning demonstrate actual steps stemmed from these beliefs, in different education courses (units 37, 53, 93, 118, 122). The other five units of meaning elaborate on linking theory to practice, for example: linking theory to practice - enables the deepening of authentic personal answers to actual problems or conflicts originated in practice (unit 120); constantly feeds the fieldwork with relevant theoretical ideas (unit 124); increases the students’ benefits from practice (unit 119); facilitated students’ better
understanding and improved connections between different areas of knowledge and practical teaching matters (units 105, 121).

2.2.1.3.2 Linking between theoretic courses

Six 'units of meaning' refer to three kinds of such linking:

1. Linking between disciplinary courses and pedagogical courses (units 70, 104)
2. Integration between disciplinary courses (units 27, 108, 109)
3. Interdisciplinary courses (unit 84)

Links between disciplinary and pedagogical courses, and between different disciplinary courses, do not, necessarily, have a direct impact on practice. Four units of meaning demonstrate actual steps Departments have taken in order to facilitate relevant and meaningful studies on the one hand, and to enhance coherent and consistent T.E.C. For example: integration between disciplinary areas of knowledge (units 27, 84); integration between disciplinary knowledge and pedagogic knowledge (unit 70); and integration of disciplinary knowledge in to other disciplines and into the practice (units 108, 109). Only unit 104 demonstrates a direct link between disciplinary matters and practical concerns.

2.2.1.4 Child and Childhood concerns

A fourth direction the Departments' T.E.C support, with seventeen out of the hundred and twenty-five units of meaning, is the child and childhood concerns. Table 44A (Appendix 6b) demonstrates that the T.E.C’s interest in children is subdivided into three directions:

1. The uniqueness of childhood (Appendix 6b, Table 44, units 1, 2, 3, 4, 14, 31, 68, 69)
2. A holistic view of school children (units 5, 41, 59, 97, 98, 99)

3. School children's needs (units 102, 110, 117).

2.2.1.4.1 The uniqueness of childhood

Three kinds of references demonstrate a focus on childhood's concerns in the Departments' T.E.C. Three units strengthen that the T.E.C in their Departments consider childhood concerns (units 14, 31, 68). Two units refer to the need to integrate these concerns to in the Departmental T.E.C. Yet, has been twice mentioned (units 1, 4). Another three units specify the childhood's unique characteristics (units 2, 3, 69).

2.2.1.4.2 A holistic view at school children

One basic belief presents this issue. It states that each child is unique and special (unit 99). Five units show different emphasises when applying this belief, for example: holistically referring to children (unit 5), professionally referring to children's different abilities and needs and developing them (units 41, 97), referring to children as human beings, educating them and developing their personality (units 59, 98).

2.2.1.4.3 School children's needs

Units of meaning that refer to this matter state that paying attention to school children's needs is important. Units 102 and 117 state that the students are encouraged to respond sensitively to school children's diverse needs. Unit 110 demonstrates a belief in the arts' contribution to the inclusion of disabled children in regular classes.
2.2.1.5  The desired teacher profile

The desired teacher profile is the fifth direction the Departments’ T.E.C’ development considers. Fourteen ‘units of meaning’ demonstrate two types of desired teachers:

1. Disciplinary proficient teachers (units 7, 12, 28, 61, 65, 66, 71, 85)
2. Comprehensive and educative teachers (units 6, 8, 9, 15, 64, 67)

2.2.1.5.1 Disciplinary proficient teachers

Eight units represent the idea of ‘disciplinary proficient teachers’. Three units demonstrate two beliefs that underpin all other units: 1. Disciplinary proficiency enriches the students’ knowledge (unit 12), 2. High disciplinary proficiency builds up the students’ teaching professionalism (units 28, 65). The other units elaborate on these beliefs, claiming for: encouraging the training of proficient teachers (unit 7); widening the basis of knowledge in different disciplines (unit 71); integrating academic literacy to the disciplinary studies (unit 85); and, reinforcing disciplinariespecialisations by extra hours in order to guarantee training of proficient teachers (units 66, 61).

2.2.1.5.2 Comprehensive teachers, educative oriented

Six units represent the idea of ‘comprehensive teachers, educative oriented’. For units generally support this idea (units 6, 15, 64, 67). Units 8 and 9 emphasise the educator teachers’ responsibility for pupils’ education, and time devoted to their education.

2.2.1.6 Societal concerns

Social concerns represent the sixth direction the Departmental T.E.C refers to, with eleven units of meaning. These units demonstrate two foci:
1. A focus on students' personal ideological/value development (units 13, 23, 29, 63, 89)

2. A focus on societal values and needs (units 11, 18, 36, 91, 94, 103, 116).

2.2.1.6.1 A focus on students' personal ideological/value development

Five units demonstrate the T.E.C's reference to these concerns. Four units (23, 29, 63 and 89) refer to the development of students' awareness to specific values: humanistic, Jewish, Zionist and democratic. The other unit (13) generally refers to the students' value development.

2.2.1.6.2 A focus on societal values and needs

The units expose two kinds of interests. One interest aims at keeping or improving certain societal concerns: increasing humanism (unit 94), decreasing social inequality (unit 103), preparing students for socialising into education system (unit 116), enhancing pupils' productivity (unit 91), and improving the environment (units 11, 18). Another interest aims at deepening students' involvement in society, believing that it would add to their personal ideological/value development, and to the environment (unit 36).

2.2.1.7 Teaching abilities and skills, and class management concerns

The Departmental T.E.C refers to this direction with seven units of meaning. These units demonstrate a 'B' type of reference, and elaborate on different aspects of the above-mentioned direction. They emphasise the need of training for: teaching competences (units 25, 38, 62), alternative teaching ways (unit no. 24, 72); preparing lessons plans (unit 26) and developing their reflective abilities to analyse educational processes (unit 125).
2.2.1.8  **In summary.**

The H.O.D’s references give a picture of the massive Departments’ influences on the mentioned above seven actual directions and / or aspects presented in the T.E.C. The weigh the Departments give to the different possible directions, and the interrelation between these directions ‘colour’ the T.E.C’s nature. The variety of directions reveals the complexity of the T.E and the T.E.C’ development.

2.2.2 The Colleges’ influence

Thirty-five ‘units of meaning’ refer to the College’s influence (Appendix 6b, Table 45A).

The units and present four aspects of the Colleges’ organisational culture:

1. Changes cooperatively or uncooperatively initiated by the Colleges (13 units)
2. The Colleges’ support of changes initiated by the Departments (9 units)
3. Competition and power struggles among departments / faculties (8 units)
4. Permanent or ad-hoc facilitation of a professional and cross-departmental / faculties dialogue (5 units)

2.2.2.1 **Changes cooperatively or uncooperatively initiated by the Colleges**

Thirteen units demonstrate cooperative or uncooperative initiatives of change, presented by Colleges’ management. Five units indicate cooperative initiations of change (units 1-3; 31; 33). The other eight units show uncooperative initiations of change that were not coordinated with the Departments or forced on them (units 4-5; 20, 24; 26-29).

Eight units introduce: new specialisation routes (units 1, 3); reducing demands (ibid. unit 4); requirements of compulsory courses (unit 20); change of traditional patterns of
pedagogical courses and practical experience (units 24, 28, 33); and, reorganisation of
the T.E.C’s part of the fundamental courses (unit 31). The other five units (units 2, 5, 26,
27, 29) elaborate on these aspects.

2.2.2.2 Colleges’ support of changes initiated by the Departments
Nine ‘units of meaning’ show the Colleges’ support of T.E.C’s changes initiated by the
Departments. Six units show local initiatives: a digital class (unit 6); a multi-
departmental route – N.H.R (units 17, 18); the ‘child and the childhood program (ibid.
unit 21); and, the integrated educational studies (units 32, 34). The other three units
elaborate on these initiatives (units 7, 18, 25).

2.2.2.3 Competition and power struggles among departments / faculties
Eight ‘units of meaning’ demonstrate competition and struggles, on prestige and
resources, among the departments / disciplinary faculties, which influence the
development of the T.E.C (units 8-15). Three units point toward two directions that
encourage competition and combats: 1. Cutting down teaching hours - An administrative
matter (units 8, 12), 2. Increasing the number of students’ enrollment by the teachers’
active role - a matter of work norms (unit 13). The other five units elaborate on these
matters.

2.2.2.4 Permanent or ad-hoc facilitation of a professional cross-departmental /
faculties dialogue
Five ‘units of meaning’ refer to the Colleges’ role in facilitating cross-departmental /
faculties professional dialogue that influence the T.E.C’ development (units 16, 19, 22,
26, 30). These units point toward a collaborative culture that facilitates professional discourse in different areas of collaboration: planning (units 16, 19), consulting (unit 22), approving (unit 26), and planning and operating - co-teaching of teachers from two departments, in a course designated for students from both the primary school and the special education departments (unit 30). This kind of culture positively influences the Departments’ and the faculties’ T.E.C, and invites the staffs’ professional development and growth.

2.2.2.5 In summary,

The H.O.D’s references give a picture of the T.E.C dependency on the Colleges’ influences. These influences represent the impact of different organisational cultures and mechanism on the T.E.C’ development.

2.2.3 The Learners’ influence

Twenty ‘units of meaning’, represent the Learners’ influence (Appendix 6b, Table 46A), and demonstrate direct and indirect impacts on the T.E.C’s development.

2.2.3.1 Direct Learners’ influence

Direct Learners’ influence demonstrates structural changes in the T.E.C’s practical and theoretical parts, resulted from the Departments’ communication with students.

2.2.3.1.1 Structural changes in the T.E.C

Seven units demonstrate direct influence, obtained by: feedback procedures (units 12, 17); directed and continuous communication processes (units 15, 16) students’
complaints (units 10, 21); and, low registration to courses (units no. 9). The direct communication generated, for example, a structural change, concerning the practicum days, in two Departments, and addition of new courses. One unit demonstrates the necessity of a directed and continuous communication with students (unit 15). Another unit pinpoints the ‘Student Council’ mechanism, which guarantees regular communication with the students (unit 16). One unit demonstrates students’ rejection of one of the offered courses, which eventually caused its cancellation (unit 9). The other four units elaborate on specific courses and new practical considerations influenced by students’ needs (units 10, 12, 17, 21). Students’ influence on the T.E.C’ development increases the relevance of the T.E.C to the students.

2.2.3.2 Indirect Learners’ influence

Structural changes in the T.E.C resulted from three main reasons:

1. Belief in the contribution of choice options to students’ growth (10 units)

2. Belief in the essentialness of caring for the students’ needs as to encourage their personal and professional development (4 units)

3. Decrease in students’ enrolment to the Departments (3 units)

2.2.3.2.1 Belief in the contribution of choice options to the increase of students’ enrolment

Seven units reveal a variety of choice options: choosing a kind of class – regular or digital (Appendix 6b, Table 46, units 4, 5); choosing routes for specialisation (units 6-9, 11); and, choosing courses and modular programs (units 18, 19, 20).
Choice is regarded either as a means for increasing students' enrolment, or as a means for fulfilling the students' needs, giving answers to their interests, and fostering new and challenging learning opportunities. Except unit 4, all other units refer to the second option. Three units reveal the importance of choice in increasing the T.E.C's ability to give answer to the students' real interests (units 18, 19, 20).

The other five units show actual local choice options, which give answers to what the staff believes, are the students' real interests (units 6, 7, 8, 9, 11). Unit 5 exemplifies a contradiction between the staff's hope and the students' dissatisfaction from a specific offered choice.

2.2.3.2.2 Belief in the essentialness of caring for the students' needs, as to encourage their personal and professional development

Four units demonstrate the different aspects of caring. 1. Caring for the students' needs and their personal development, as part of the educational studies (units 13, 14). 2. Caring for students' needs and their professional development, as part of the practical studies (units 22, 23). 3. Three units express the staff's belief in their responsibility to encourage the students' personal and professional development (units 13, 14, 22). 4. One unit elaborated this (unit 23).

2.2.3.2.3 Decrease in students' enrolment to the Departments

Decrease in the students' enrolment to the C.F.T.E in general, and to the primary school departments in particular, is a given societal situation, which the Departments insist to overcome in different ways. Three units refer to this problem, and offer attractive
combinations as to draw students’ attention (units 1-3). Two units demonstrate hope that attractiveness would guarantee increase in students’ enrolment to the Departments (units 2, 3). One unit elaborates on the need to attract students (unit 1).

Both expansion of choice and caring for the students’ needs and personal development are regarded as part of the Departments’ educational deep beliefs. Besides, they have a side effect that may contribute to the increase of students’ enrolment. But, choice requires large numbers of students, so decrease of students does not correspond with it. Yet, caring takes time and is staff consuming, and cannot be fully activated with small numbers of students. Thus, apparently the choice options and caring are not the right answers to the enrolment problem.

2.3 Summary

The picture revealed from these results has demonstrated a complex situation. The picture exposed that the Departments’ T.E.C have been differently influenced by the various factors. Besides, the Departments differently translated the influences to actual T.E.C’s dimensions, as a result of the Departments’ priorities, the College’s priorities, their organisational culture, and the local circumstances. All these powers have encouraged the Departments to generate local-contextual answers to general problems that characterise the Israeli T.E, and to specific-unique problems.

The T.E.C has been mainly influenced by two internal influencing factors - the Departments themselves and the Colleges. Thus, the interrelations between these critical
influences have determined, to a large extent, the unique characteristics of the Departments’ T.E.C.

The Schools represent the external most influential factor. But, their influence has been conditioned, and depends on the Departments’ educational credos, openness to the schools’ influences, and on the Departments’ actual interrelations and the educational discourse with the schools. Is has been also depended on the Colleges’ credos, the administrative culture and particularly the administrative flexibility to actually integrate needed changes into the T.E.C.

The Learners’ direct and the indirect influence has actually been a by-product of the Departments’ influence. This influence has been depended on the Departments’ proactive policy and on their reactive readiness to positively consider the students’ needs and interests.

The Academic influence comes next. Its influence has been also depended on the Departments’ and the Colleges’ priorities concerning the T.E and the T.E.C. The M.O.E’s influence, as revealed, seems to be minimised, although the M.O.E has been the catalyst for some major changes in the T.E system and the T.E.C. This will be later elaborated. All other external influencing factors - Society, T.I, and the, are less crucial to the T.E.C development.
3. The Case study – ‘A’ C.F.T.E

This case study used two research tools – interviews and documents:

1. Five interviews - two with the current and her former H.O.D, and three with central functionaries – the ‘Head of Teaching and Education Section’, the ‘Academic Organiser’, and the ‘Pedagogical Organiser’

2. Documentary analysis based on mission papers and articles; official bulletins; and, the college’s website.

The analysis of ‘A’ college case study is organised according to two principles:

1. Chronological sequence, based on documentary analysis of the College’s history, divided into five phases.

2. Reference to the different influencing factors, sub-divided to external and internal influences.

The analysis of the first three phases is based only on documentary analysis. The analysis of the fourth and fifth phases is based on both documentary analysis and functionaries’ interviews. The interview’s analysis complemented the documentary analysis. The functionaries’ answers, similarly to the questionnaire’s open part analysis, were separated into distinctive units of meaning, and organised in categories associated with the different areas of influence (Appendix 7, Tables 47-57). Finally, both kinds of data were comparatively analysed.

3.1 Background

‘A’ college is located in the Israeli northern region. It was established in 1951, by the “Kibbutzim” movement, as a branch of the “Kibbutzim” Seminary in Tel-Aviv, which was established in 1939 (Document 2, the “Academisation” proposal, 1986). It turned to be one
of the biggest C.F.T.E in Israel, with about 5,500 students in 2003-4. It markets studies in a wide range of academic areas, in different sections, and it bestows three kinds of degrees – B.Ed, B.A or B.Sc, depending on the study’s track (Document 2, the “Academisation” proposal, 1986; Document 15, Bulletin 2003-04). The ‘Education and Teaching’ Section, “is the largest section in College, with about 1,400 students, and the ‘Primary School Department’ is the smallest in this section” (A4, interview, 23.1.2004). From 2004-5 it will bestow an M.Ed degree (Document 15, Bulletin 2003-2004)

The College’s main mission is

“Educating teachers-educators, social-educational leadership, and a follow-up of their professional development”. This mission will be achieved “by giving an integrated emphasis on high quality academic knowledge and professional practical knowledge, which allow integrating and leading the educational and the public system. The College devoted itself to social involvement in the region level: the neighbour congregations, and in the international level - Jewish identity areas and connection with the Diaspora” (Document 15, Bulletin 2003-04, p. 9).

‘A’ college operates three central sections: Two pre-service sections - “The Education and Teaching section, which “trains educators for infant up to the end of the primary school”, the university section, "which trains educators for secondary and high schools”; and the in-service section, “The Institute for improving teaching, which offers completion courses for graduated teachers” (Document 3 – ‘A’ College’s Fifty’s anniversary, 2001).

> The Education and Teaching Section

This Section includes, according to its Head (A3), seven departments within three blocks:

a. “The first block includes three departments: the Kindergarten and the first two grades department; the primary school department, for 1st to 6th grades; and, the department for special education, which trains for primary schools and for secondary schools”.

217
b. "The second block is the art block, which includes a department for teaching art in primary and secondary schools”.

c. "The third block is the Bedouin block, which includes three departments: the Kindergarten and the first two grades department; the primary school department for 1st to 6th grades, and department for secondary schools.”

➢ The University Section

This section offers two tracks; both bestow a teaching diploma and a B.A degree for humanistic and social sciences or B.Sc for the science teaching studies. The science teaching track is linked to the College and the near university.

➢ The In-Service Section

This section offers advances studies in two tracks: license studies in different areas, such as: treatment by animals; art as an educational means, headmasters’ training etc; and M.Ed studies in multi-disciplinary studies.

Currently, ‘A’ college faces a complex situation that characterises the whole Israeli T.E system. Its ways of coping with the situation demonstrate, concurrently, typical common answers that appear in other C.F.T.E and unique answers that correspond with its unique structure and credo. The unique answers given to the complex situation stemmed from the Colleges’ origin, a Seminary for the Kibbutzim “Joint Education”, which declared “An educational belief that fosters a Zionist – Pioneer – Collective spirit” (Document 3 – ‘A’ College’s Fifty’s anniversary, 2001). The common answers, given at central historical turning points, demonstrate the College’s reactions to various factors that have directly and indirectly influenced the Israeli T.E system in general, and the T.E.C particular.
3.2 Historical phases

The T.E.C in ‘A’ college went through intensive external and internal influences since the early 1950s. The T.E.C responded differently to the influencing factors. In the last five decades five distinctive phases could be traced.

1. The ‘Idealistic’ phase, since the early 1950s until the late 1960s, demonstrated loyalty to the Kibbutz ideals, as a result of ‘Society’s’ influences, mainly socialistic beliefs. These beliefs had a vast impact on the College’s defined mission, and the T.E.C.

2. The phase of the ‘Reform’, since the late 1960s until early 1970s, mainly demonstrated the M.O.E’s influence on the T.E and the T.E.C.

3. The phase of ‘Academisation’, between the mid 1980s and the very beginning of 1990s. This phase demonstrated the widening of the educational perspectives in the T.E.C, as a result of a joint of three external influencing factors, the: Academy, M.O.E and the Society, and of the two internal influencing factors - the College and the Learners.

4. The “Post-Academisation’ phase in the early 1990s. This was a phase of a combat between the pure academic and educational focal points. It demonstrated the impact of three external influencing factors on the T.E.C, the: Society, Academy, M.O.E (the T.I influence was still marginal), and the impact of three internal influencing factors on the T.E.C, the: College, Department and the Learners.

5. The recent phase – the ‘Uncertainty’ phase - since the early 2000s. This phase indicates high level of discontent, stemming from a combination of reasons that encouraged a stream of creative T.E.C, as an answer to the challenging situation. The conflicting reality that demanded developing alternative T.E.C, on the one hand, and the threat to the College’s existence, in general, and the Primary School Department, in particular, on the other hand, has been intensively influenced by a combination of all the external and internal factors.
3.2.1 The first phase - the ‘Idealistic’ phase.

3.2.1.1 Structural characteristics

The ‘Kibbutzim Seminary’ formally split to two distinctive branches that kept the same ideology, but were administratively separated. The T.E.C lasted two years.

3.2.1.2 Pedagogical characteristics

The two branches of the ‘Kibbutzim Seminaries’, which meant to serve the Kibbutzim population, aimed at educating their graduates for: educating the young generation in the Kibbutzim, on the Zionist, pioneering values, and on the cultural heritage; encouraging labour, and in particular, agricultural labour values; bringing pupils closer to nature, as part of building their world view concerning their belonging to the land, and their commitment to settlement; developing pupils’ creativity and artistic abilities; leading the age group they are in charge of; encouraging active learning processes and integrative teaching; facilitating individual and group learning; becoming comprehensive teachers; adapting the educational actions to the children’s stages of ripening from all aspects (Document 1; The Kibbutzim Seminary Platform, 1953). Consequently, both Seminaries’ T.E.C included:

a. Psychology and educational studies, which will cause students’ full identification with the Kibbutz educational ways

b. General and Jewish social studies, in the Marxist spirit

c. Socialistic Zionist doctrine

d. Comprehensive though critical study of the Jewish heritage, while examining Bible and other Jewish books through historical, social and literary perceptions

e. Nature studied, which strive to intimately get to know the landscape, and biology.

f. Arts and physical education (ibid.).
Specific T.E.C from this phase, which demonstrates impacts of this ideology, was not found in the College’s archive. A limited indication to the atmosphere that characterised the College is demonstrated in A1’s interview:

(When I studied in this Seminary) “All teachers, even if they were not from the Kibbutzim transmitted the humanistic message, that teachers are educators. There was something very homogeneous, and the orientation was very clear, thus there was no need to verbally state it. I think that outsiders could not last in this atmosphere they would have been emitted”.

Other functionaries did not refer to their personal experience as students regarding this issue. Remnants from the ‘Idealistic’ phase, given to the Society’s external influences, though, could be traced in T.E.C from later phases.

3.2.2 The second phase - The phase of the ‘Reform’

The M.O.E’s ‘Reform’ stirred up the whole education system. It recommended two significant changes for the T.E system, by introducing significant structural changes.

3.2.2.1 Structural characteristics

The new structural characteristics offered:

1. T.E of three-year program instead of the former two-year program
2. A Primary school model, which focused on training schoolteachers for the third - sixth grades
3. A middle school model, which meant cutting down the primary school to sixth grades, instead of the former eight grades, and introducing middle schools’ departments in the Seminaries (Document 4 – ‘Towards a reform in T.E’, 1969).

Consequently, the Seminary widened its educational perspectives at this phase. It still kept
"Unique and defined educational belief, based on a social value system, and is able to create an educational atmosphere, which emphasises the children's central place, sensitivity to their needs, which develops open and friendly relations in a non-formal environment, which does not threaten the students, and leaves traces in the future educators' personality, and shapes their attitudes and behaviours" (Document 5 – ‘A’ College - T.E in the early 1980s, p. 13).

3.2.2.2 Pedagogical characteristics

The T.E.C in this phase reemphasised four directions that enforced the College’s ideology, and showed a multifaceted commitment to Israel as a homeland, already mentioned in the first phase:

(a.) Nature studies and studies of the Geography of Israel

(b.) Critical and innovative Jewish studies

(c.) Socialistic studies and labor values

(d.) Kibbutz studies and the “Joint education” (ibid.).

At that time the Primary School Department’s T.E.C offered courses that strengthened the mentioned above emphases. T.E.C from the second phase were not found in the archive, but the ideological directions appeared in T.E.C from the third phase.

3.2.2.3 The Second phase- Analysis of the T.E.C

The earliest T.E.C found in the College’s archive were from 1984-85, 1985-86, 1986-67 (Appendix 7, Tables 45A – 47A). They were developed at the 'Pre-Academisation' period. ‘A’ college submitted its ‘Academisation’ proposal in 1986.

The analysis of the three T.E.C from this phase demonstrated a similar layout. They started with the College’s preface. Afterwards the Department presented a list of courses, including
their outlines and timetables for each year and for each group of study. The analysis, based on Tables 47A – 57A (Appendix 7), revealed five major characteristics:

1. All T.E.C were composed of three main parts: Compulsory Studies, Educational Studies, and Disciplinary Studies. Another not defined part was called ‘Other Studies’. The weight each part had in the different T.E.C, in the each year of study, differed.

2. The T.E.C demonstrated constant restless that reoccurred in one general conceptual change and six kinds of specific changes.

   ▶ General conceptual changes

   a. **Change of courses’ organisation (sign +).** This kind of change demonstrated a general change in the organisation of the disciplinary studies. The sporadic disciplinary courses were reorganised in 1986, as part of the ‘Academisation’, as clusters of ‘Disciplinary Specialisations’. This reorganisation demonstrated the increase of the ‘Academic’ influence.

   ▶ Specific changes

   Six specific changes stemmed from conceptual matters that caused:

   a. **Change of courses names (sign *).** Change of courses’ names was salient in this phase, and thirteen courses had their names changed. In the first year of study eight courses that had their names changed appeared in the ‘Compulsory Studies’ part, and five in the ‘Education Studies’ part. In the second year of study another course from the ‘Compulsory studies’ part had its name changed. The College and the Department influenced the change of courses’ names (ibid.).

   b. **Addition of courses (sign ^^):** Thirteen courses were added in this phase. The addition of courses stemmed from four reasons:
I. **Deepening actual education studies.** The addition the courses: 'Does it matter to be boys or girls?' ‘Aesthetic education’, ‘Media and Education’ demonstrated Departmental-Educational and Society’s influences on the T.E.C.

II. **Giving answers to the students’ actual needs, and facilitating their personal growth.** The courses ‘Personal conversations’, ‘Personal work in a learning center’. The addition of these courses demonstrated Departmental-Educational ‘Learners’ influence on the T.E.C.

III. **Improving teaching competencies,** for example: the courses ‘Introduction to special education’, ‘Preparing Materials’, ‘Preparing for the educator’s role’. The addition of these courses demonstrates Departmental-educational, Schools’ and ‘Learners’ influences on the T.E.C.

IV. **Deepening academic concerns,** for example: the courses ‘Texts’ logical analysis’ and ‘Library’

c. **Change of courses’ scope (sign (i)).** The scope of seventeen courses was changed in this phase. Change of scope (addition or reduction of courses) resulted from the increased competition between the academic and the educational matters, which demonstrated three types of reactions:

I. **Academic superiority, which caused elaboration of the foundation studies.**

   English. For example: the ‘English’ course’s scope, for example, increased in 1986-87, in the first year of study, from 3 to 4 hours (Appendix 7, Table 47A).

II. **Educational-Departmental superiority, which caused widening of educational courses’ range, on the account of other courses’ scope.** For example: the ‘Psychology’ course, in third year of study, in 1984-85, had 2 hours. In 1985-86, and 1986-87 it was reduced to 1 hour. Instead, a new course ‘Educational Psychology’ of 1 hour was introduced (Appendix 7, Table 49A).
III. Continuous competition between Academic and Educational interests. For example:

- The scope of the ‘Psychological studies’ (two courses) in third year of study, 1984-85, was 4 hours. In 1985-86, and 1986-87 it was reduced to 2 hours, and one of the courses ‘The childhood’s psychology’ moved out.

- The Observation and practicum was reduced in 1986-87, in the third year of study, from 8 to 6 hours (Appendix 7, Table 49A).

d. Swap of courses (sign =). Swap of courses appeared mostly in the qualification courses. Besides, the course ‘The Jewish folklore cycle’ replaced the course ‘Holidays and special days’.

e. Course organised according to personal level (sign (")). In 1986-87 the course ‘Hebrew grammar’ responded to the students’ levels. The ‘Academisation’ proposal did not support this direction. Thus, Learners’ influence in this sense was limited.

f. Move of courses between years of study (sign @). The ‘Aesthetic education’ course moved from the second year in 1985-86 to the third year in 1986-87; The ‘Media and Education’ course moved from the third year in 1985-86 to the second year in 1986-87.

The massive change of courses’ names, addition of courses, change of courses’ scope, the swap of courses, and also move of courses between years, demonstrated intensive restlessness of the T.E.C in this phase.

3. The T.E.C considered the College’s unique pedagogical characteristics, regarding the four preferred directions (sign (a.), (b.), (c.) and (d.)). For example: in the first, the second, and the third year ‘Nature’ studies courses and ‘Geography’ courses represented the (a.) type aspect, which enforced and elaborated the College’s belief in the centrality
of studying ‘Nature studies and studies of the Geography of Israel’. Jewish studies courses, from the first year, represented the (b.) type aspect, which enforced and elaborated the College’s belief in the centrality of studying ‘Critical and innovative Jewish studies’. Courses that emphasised the ‘Build up of the Israeli State’, from the first year, represented the (c.) type aspect, which enforced and elaborated the College’s belief in the centrality of studying ‘Socialistic studies and labour values’. Courses that concentrated on the Kibbutz, from the second year of study, represented the (d.) type, which enforced and elaborated the College’s belief in the centrality of studying ‘Kibbutz studies’ and the ‘Joint education’.

The emphasis on these aspects in the different T.E.C in this phase kept a constant level. The (d.) type seemed to be least dominant. It appeared four times, whereas the other types appeared ten-twelve times. This exemplified both the Society’s influence, and the College’s decisive influence on the on the T.E.C.

4. The T.E.C offered mainly compulsory courses, in the compulsory studies’s part and the educational studies part, including the ‘The build of Israel’ Cluster. Students could choose courses only ‘Qualification’ courses, the disciplinary specialisation, and including the offered courses.

The ‘Academisation’, as appeared in 1986, showed three main changes in the T.E.C:

1. Reorganisation of the disciplinary courses (sign +). Sporadic disciplinary courses turned to clusters that created distinctive specialisations, which included specified in advance courses, and agreed scopes of hours.

2. Increase of the College’s autonomy in determining the ‘Education Studies’ courses. The College could freely specify the educational courses, as seen in the Tables (Appendix 7, Tables 47A-49A).
3. Reorganisation of the courses associated with the four directions central to the College’s ideology, to a compulsory cluster ‘the built up of the Israeli state’, as part of the ‘Compulsory Studies’.

3.2.3 The third phase - The ‘Academisation’ phase

In this phase the Seminary turned to an academic C.F.T.E. The Seminary was formally recognised as an academic C.F.T.E only in 1992, about ten years after the first Seminary turned to be an academic college, because of its unique structure, and its unique pedagogical setting. A1, the ‘Head of the Primary School Department’ described structural and pedagogical perspectives for the delay in the ‘Academisation’ recognition:

From a structural perspective:

"My College turned from a Seminary to a C.F.T.E only in 1992. Two main reasons caused the delay. One reason stemmed from the double degrees given in our Seminary – the B.A or B.Sc degrees that the high-school section, which was historically linked to a university, and at one stage even turned in some faculties to be its branch, bestowed to its students; and the teacher’s certificate that was given by the primary-school section to its graduates (the infant department; the primary school department and the special education department)."

From a Pedagogical perspective:

"Another reason for delaying the academic recognition was the fact that most teachers in the primary section were not academically qualified” . . . “I do know how it was in other Seminaries, but in our Seminary teachers were highly knowledgeable, without any formal diploma” . . . “There were teachers who performed excellent teaching, and as students we admiringly followed them”.

Buds of ‘Academisation’ could be already traced in T.E.C from the mid 1980s, during the preparation of the ‘Academisation’ proposal.
3.2.3.1 The College’s influence

3.2.3.1.1 Structural organisation

The College’s structural organisation since the ‘Academisation’ since the late 1980s until the beginning of the 1990s has vastly changed.

a. ‘A’ Seminary turned to be a distinctive section, one out of three sections that created a new institution - a C.F.T.E, which bestowed B.Ed degrees, instead of Teaching Diplomas.

b. At that time, the course of study stretched into a four-year program, still as an option not as a compulsory requirement (Document 9, Bulletin 1988-89).

c. The fourth-year program remained part of the Primary School Department’s responsibility. The completion of the fourth year was an open option, but not yet an integral part of an in advance planned program. Teachers could still end their studies with a ‘Senior Teacher Diploma’, after three years, or directly join the fourth year and get a B.Ed degree (Document 10, Bulletin 1990-91).

The old Seminary turned to the ‘Seminary section’, named “The T.E for primary schools” (Documents 6, 7, 8). It focused on preparing ‘teachers-educators’ for the infant age until the 6th grade. This section included, since, four blocks that demanded three years of study (as a result of the M.O.E’s reform, Document 4, ‘Towards a reform in T.E’, 1969): the kindergarten department for the 1st-2nd grade teachers; the primary schoolteachers department; the special education department. Besides, it offered three years preparation programs for art and music teaching, in special institutions, which were part of this section. Additionally, it included specific programs for: librarianship studies; nursery studies, which lasted two years; Jewish studies, and programs for immigrants that lasted a year, a relict from Seminary’s times (Document 6, Bulletin 1984-85).
In 1988-9 the primary school was part of the ‘Seminary section’. The section’s title focused on its origin. Then, the ‘Seminary section’ turned into the “Section for early and late childhood educators”, a title that focused on the graduates’ exact role (Document 9, Bulletin 1988-1989). The historical process of ‘Academisation’, which turned the whole Seminary into a ‘Seminary Section’, one of another three sections, formally ended in this phase, and the structural organisation of the College was settled, as mentioned by A1:

“Our College got divided to three sections - the ‘Primary section’, which includes the infant department, the primary school department and the special education department, the Bedouin department, and the art department, which historically has belonged to this section; The second section is the ‘Middle and High school Section’, which has historically has belonged to the nearest university, and now is an integral part of the college; The third section is the ‘Continuation Study Section’ and teachers completions and advanced studied”.

3.2.3.1.2 Pedagogical organisation

The transition to full ‘Academisation’ that the M.O.E and the C.F.H.E conducted, aiming at moving the teacher education to an academic route, had structural-technical characteristics, as already mentioned. But, “from the pedagogical perspective it demanded professional rearrangements, adapted to the scientific and in principle requirements of the academic learning” (Document 3 – ‘A’ College’s Fifty’s anniversary, 2001). Thus, the College’s pedagogical organisation, since the recognition of ‘Academisation’ in the late 1980s and the early 1990s, has significantly changed.

The College’s proposal for ‘Academisation’ declared: “The College’s aim is to prepare teachers-educators, for integration in the Israeli educational system” (ibid.). This declaration showed:
a. A consistency with the ideology, already stated nearly thirty years earlier, which regarded teachers first of all as ‘educators’, and

b. An inconsistency with the College’s devotion to the Kibbutzim unique interests. The College’s ‘Academisation’ proposal formally called for “integration in the Israeli educational system” (ibid.). It gave up the old Seminary’s unique spirit that fitted to the Kibbutz viewpoint, and influenced the nature of the graduates’ preparation and their character. This was be explained by two facts:

1. “The percentage of student originated in Kibbutzim significantly decreased”
2. “The administration, except the senior levels is not in the Kibbutzim member’s hands. Consequently, ‘A’ college does not anymore direct its graduates to the ‘working settlements, rather to the general Israeli population” (Document 3 - “A” College’s Fifty’s anniversary, 2001).

This inconsistency indicates that the ‘Academisation’ caused a fundamental compromise in the College’s credo – the belief in the College’s uniqueness, in its role in preparing ‘teachers-educators’ to educate the graduates for socialistic and labour ideals. This fundamental change demanded a new interconnected structural and pedagogical organisation of the T.E.C.

Hence, a mixture of three external influencing factors: Society’s, Academic, and the M.O.E’s caused a macro-level change in the Israeli T.E system, including ‘A’ college. Besides, two internal influencing factors, the College and the Learners, caused micro-level pedagogical changes in ‘A’ college.

3.2.3.1.2.1 The College’s general policy

The turning of the Seminary to a section in a C.F.T.E caused a problematic situation, and the functionaries tried hard to fit into the College’s new atmosphere. A1, the current ‘Head
in the institution. Thus, we believe in pluralism. There is no one preferred way or one preferred theory” (ibid.).

c. **T.E. has to develop the graduate’s personality**

“Actually it deals with personality development . . . We believe that there is no one way or one paradigm for teacher preparation . . . that the students are capable to judge, and mature enough to choose the way that mostly suits their personality and nature. Moreover, they are able to recruit appropriate methods or strategies for certain situations, and other ones for other situations” (ibid.)

d. **T.E that transfers trust to graduates would increase the students’ trust in pupils**

“All this, with the belief that this degree of trust would be accepted and adopted by the graduates, when they turn to be educators, and they will generously work like hat with their pupils” (ibid.).

c. **T.E should prepare teachers-educators who regard their work as a mission not as a task**

“The preparation is directed to nurture a teacher-educator that would regard his work as a mission, and will know to impart the teaching while understanding the pupils’ needs, and wishes, while considering the pupils’ social and personal situation. . . . The College’s aim is to develop graduates that will be aware to the society’s, state’s and nation’s problems, and will be able to contribute their part in education and teaching” (ibid.).

Two and Four years later, (Document 9, 10, Bulletin 1988-89 p. 7; Bulletin 1990-91, p. 5), still at the third phase, the ‘Academisation recognition’, ‘A’ college stated a similar, though, not identical credo, and emphasised six central aspects:

a. **T.E should be devoted to the kibbutzim ideals**

“We see in education a whole set that starts at the very young age and ends in end of the high-school, as common in the ‘joint education’ in the Kibbutzim Movement; as “A” college is the Kibbutzim Movement’s school for education. The beginning of the formal-state education at five is not a significant station in this comprehensive system, but a midway station”.

231
in the institution. Thus, we believe in pluralism. There is no one preferred way or one preferred theory” (ibid.).

a. T.E. has to develop the graduate’s personality

“Actually it deals with personality development . . . We believe that there is no one way or one paradigm for teacher preparation . . . that the students are capable to judge, and mature enough to choose the way that mostly suits their personality and nature. Moreover, they are able to recruit appropriate methods or strategies for certain situations, and other ones for other situations” (ibid.)

b. T.E that transfers trust to graduates would increase the students’ trust in pupils

“All this, with the belief that this degree of trust would be accepted and adopted by the graduates, when they turn to be educators, and they will generously work like hat with their pupils” (ibid.).

c. T.E should prepare teachers-educators who regard their work as a mission not as a task

“The preparation is directed to nurture a teacher-educator that would regard his work as a mission, and will know to impart the teaching while understanding the pupils’ needs, and wishes, while considering the pupils’ social and personal situation . . . The College’s aim is to develop graduates that will be aware to the society’s, state’s and nation’s problems, and will be able to contribute their part in education and teaching” (ibid.).

Two and Four years later, (Document 9, 10, Bulletin 1988-89 p. 7; Bulletin 1990-91, p. 5), still at the third phase, the ‘Academisation recognition’, ‘A’ college stated a similar, though, not identical credo, and emphasised six central aspects:

a. T.E should be devoted to the kibbutzim ideals

“We see in education a whole set that starts at the very young age and ends in end of the high-school, as common in the joint education in the Kibbutzim Movement; as ‘A’ college is the Kibbutzim Movement’s school for education. The beginning of the formal-state education at five is not a significant station in this comprehensive system, but a midway station”.

232
The commitment to the Kibbutzim ideals did not appear in the ‘Academisation’ proposal, nor did it appear in Bulletins from 1986-90. It reappeared in 1990-91, probably, because the ‘Academisation’ was already well established in the College, and the fourth year of study was for the first time offered to the students. This might have been an experience to preventively respond to the Kibbutzim movement’s buds of crisis, which showed ideological loosening, and demanded strengthening the students’ ideological beliefs.

b. **T.E demands combination between two kinds of knowledge – academic and practical.** (Identical to a. two years earlier)

c. **T.E is a complex matter.** It should not be simplified by reducing it to one obligatory theory, rather theories should be given to open interpretations, which enrich it and encourage the development graduates’ autonomous thinking. (Identical to b. two years earlier)

d. **T.E has to develop the graduate’s personality.** (Identical to c. two years earlier)

e. **T.E that shows that transfers trust in the graduates would lead to their trust in their pupils.** (Identical to d. two years earlier)

f. **T.E should prepare teachers-educators who regard their work as a mission not as a task.** (Similar to e. two years earlier, emphasising possible belonging to different kinds of social environments).

“The College’s aim is to develop graduates that will be aware to . . . and will be able to contribute their part in education and teaching in the society they will belong to, in the city or in the ‘Working Settlement’. (Document 10, Bulletin 1990-91, p. 5)

The change of the Seminary’s credo indicated best a change in the general atmosphere. As seen, the first item and the last item in the 1990-91 Bulletin emphasised things that were not presented in the former 1988-89 Bulletin. These items complemented each other.
in the sense that both directly considered the ‘Kibbutzim Movement’ or the ‘Working Settlement’. They demonstrated Society’s influences of the College’s renewed credo.

3.2.3.2 The Department’s policy

In the Bulletin from 1988-89, appeared, for the first time, the Department’s credo, not only the College’s one. It mentioned one main principle for the T.E.C’s development: “The curriculum has a holistic perspective. Thus each year’s curriculum considers both the former year’s curriculum and the next year’s curriculum, so a sequence of study is kept” (Document 9, Bulletin 1988-89, p. 35). Two characteristics derived from this principle:

1. “Each year the students are exposed to an integrative theoretical and applied study, through personal practice. The students are requested to consider the principles studied in the integrative course in their teaching units” (ibid.)

2. “Some courses are studied in spiral way, adapted to the students’ ripeness to teaching” (ibid).

These characteristics demonstrated the Department’s influence, at the local, micro-level, on the T.E.C’s development. The Department’s influence appeared as process of adopting and adapting theories and ideas from different influencing factors. The theories and ideas were rearranged through personal and collective filters as to crystallise educational beliefs that had a significant role in determining the mentioned above principles. The Department’s educational beliefs were mainly nourished by two influencing factors:

a. External Academic influences - the staff adopted ideas linked to the curricular fields of knowledge, such as: curricular sequence, and spiral organisation of the curriculum.

b. Internal Learners’ influence, which had a direct impact on the curricular spiral organisation of some courses.
The Department’s credo in the 1990-91 was laconic, and demonstrated a significant change. It differed from the former credo in its formulation and in its emphasis. It focused on the purpose of the teachers’ education and not on its process or on the rationale behind.

"The department’s purpose is to prepare teachers to be responsible for the child’s development; they are in charge of their education" (Documents 10 and 11, Bulletin 1991-92, pp. 56-57; Bulletin 1992-93, pp. 54-55).

The credo, then, elaborated on this purpose, and explained specific characteristics of the T.E purpose:

- "The T.E is designated to impart an ability to understand the child’s soul, and his developmental processes;"
- To understand the teacher’s role
- To impart: disciplinary areas a teacher has to teach, and tools for teaching these areas.
- The pupil (not student) will study educational studies and fundamental studies; and will specialise in couple of disciplines, which one of them will be his main specialisation. He will experience practical work in appropriate education institutions”.

These characteristics also demonstrated the Department’s educational belief, crystallised by staff’s filters, nourished by the two influencing factors mentioned earlier: External Academic influences, which focused on psychological aspects and theoretic disciplinary knowledge. The internal Learners’ influences, which focused on awareness to the students’ actual teaching needs, either by giving them teaching tools, or by letting them experience teaching in appropriate education institutions.
3.2.3.3 The third phase – Analysis of the T.E.C

Two T.E.C from 1988-89 and 1990-91 represented the period after submitting the ‘Academisation’ proposal, and before getting the M.O.E’s and the C.F.H.E official recognition. These T.E.C (Appendix 7, Tables 50A – 53A) were analysed. Their layout was similar. These T.E.C presented the general preface, which stated the College’s credo, and for the first time, the Departments’ preface and credo. Additionally, they included lists of courses, their abstracts, and the timetables for each year, and for each group of study.

3.2.3.3.1 Analysis of the T.E.C presented in Tables 50A-53A

These T.E.C revealed four major characteristics – two presented general conceptual changes and another two presented specific changes.

➤ General conceptual changes

1. They were composed of three main parts mentioned in the former analysed T.E.C (Appendix 7, Tables 47A-49A). Still, the weight each part had in the different T.E.C, for the each year of study, differed.

2. The T.E.C offered mainly compulsory courses, as already mentioned (ibid.).

➤ Specific changes

3. In spite of the serious work in preparing the ‘Academisation’ proposal, which demanded deep thought and severe decision-making, the T.E.C still demonstrated restlessness. There were no general conceptual changes in this phase, but eight kinds of specific changes, less intensive, reappeared. Changes stemmed from specific conceptual matters caused:
a. **Change of courses names (sign *)**. A drastic decrease in the intensity of courses' names changing occurred in this phase. In the first year of study six courses’ names were changed, in the second and the third years of study two names of other courses were changed (Appendix 7, Tables 51A-53A). The change of courses’ names hinted upon a continuous search for names that would better express the courses’ messages. The fact that most courses were part of the ‘Compulsory studies” part, except Psychology that was part of the ‘Education studies’ can be explained in two ways: 1. The ‘Compulsory studies” weight in the first year of study was more salient then in other years. 2. The College’s and the Department’s need to get involved in the Compulsory studies” part, which was restricted by the M.O.E’s and the C.F.H.E ‘Guidelines’. 3. The College’s and the Department’s greater satisfaction from the ‘Education studies’ courses’ names.

b. **Addition of courses or taking courses out (sign ^^^)’. Six courses were added to the T.E.C in this phase, one in the first year and the other five in the third year of study. The addition of courses stemmed from three main reasons:

I. **Deepening relevant education matters**, for example: the addition of courses ‘The irregular child’ and ‘Learning defects’ demonstrates Departmental-educational and Society’s influences on the T.E.C. The addition of the specific, mentioned above courses that focused on actual education studies demonstrates a turning point in the traditional primary school T.E.C.

II. **Improving teaching competencies**, for example: the addition of the course ‘Therapy teaching’ in Mathematic’ demonstrates Departmental-educational, Schools’ and ‘Learners’ influences on the T.E.C.

III. **Deepening academic concerns**, for example: the addition of the ‘Educational research’ course fostered academic interests.
In this phase there was almost no evidence of the fourth reason for adding courses (mentioned in the third phase) - giving answers to the students’ actual needs, and facilitating their personal growth, except the course ‘The educator’s role in class’ that reappeared in 1988-89, but disappeared again in 1990-91. This course represented the College’s belief in the equation teachers = educators, but in 1990-91 nothing remained from this belief.

Probably a combination of two reasons limited initiatives of introducing such courses to the T.E.C: the closeness to the ‘Academisation’ recognition, which determined quite a firm layout to the T.E.C, and the scope of the already learnt courses. This combination caused a hidden competition between courses, and demanded rigid decision-making. Perhaps, at that time, this kind of courses was not perceived as ‘Academic’ enough.

c. Change of courses’ scope (sign ()

The scope of nine courses was changed in this phase (about half of the courses in the former phase). The Change of scope (addition or reduction of courses) in this phase showed two main reasons:

I. Superiority of ‘Academic’ interests that caused elaboration of foundation studies. For example: the scope of the course ‘Science basics and their teaching’, designated for the first year of study, increased in 1990-91 from 3 to 4 hours; the scope of the course ‘Mathematics basics’, designated for the first year of study, was reduced in 1990-91 from 3 to 2 hours. Instead, a new course ‘Geometry’, with a scope of 2 hour, was introduced (Appendix 7, Table 50A).

II. Continuous competition between Academic and Educational interests.

Like in the previous phase the Practicum’s hours were under debate. But in 1990-91, four years after the ‘Academisation’, the number of hours in the first and the
second years of study increased from 4 to 5 (Appendix 7, Tables 50A-51A). Superiority of pure Departmental–Educational interests did not appear in this phase.

d. **Swap of courses (sign =)**

Swap between courses was limited. It appeared in the Language courses, as part of the ‘Compulsory studies, in the first and the second years of study, in 1990-91. It appeared mainly in the ‘Qualifications’ courses - the ‘Physical education’ swapped with ‘Movement’, ‘Drama’ swapped with ‘Theatre in school’, and ‘Creation’ swapped with ‘Integration arts into teaching’ etc (Appendix 7, Tables 50A-51A). The ‘Guidelines’ were loose in this kind of courses.

- It also appeared in the ‘Education studies” part in the Psychology courses, which seemed to be unsatisfying. The course ‘Psychological and social factors’ replaced in 1990-91 the course ‘Youth Psychology’. Again, the ‘Guidelines’ gave freedom in this part of studies, so the College could easily conduct changes.

c. **Courses organised according to students’ learning levels (sign (“)).** In 1988-89 the ‘Language’ course and in 1990-91 the English course turned to be organised according to the students’ learning levels. The ‘Academisation’ proposal did not support this direction. Thus, these initiatives remained occasional; and the Learners’ influence in this sense was limited (Appendix 7, Table 50A).

d. **Change of clusters’ names (sign #).** In 1989-90 the title submitted, as part of the ‘Academisation’ proposal, for the ‘Biology sciences” cluster was changed to the ‘Nature studies” cluster. This change is not casual. It demonstrates the College’s deep association to the Nature in general, and to Nature of Israel in particular.

g. **Move of courses between years of study (@).** Move of courses between years was not salient in these T.E.C. Two courses moved between years of study, as a result of the College’s pedagogical matters and/or administrative matters.
- The course ‘Media in Education’ moved from the third year of study in 1988-89 to the second year of study in 1990-91.
- The course ‘Psychology–Piaget’ moved in 1988-89 to the second year of study, and replaced the course ‘Introduction and developmental Psychology’ that was learnt in 1986, in the first year of study.

4. The two T.E.C considered the College’s unique pedagogical characteristics, regarding the four preferred directions (sign (a.), (b.), (c.) and (d.)). For example: ‘Nature studies’ courses, represented aspects of (a.) type, which enforced and elaborated the College’s ideology, emphasising ‘Nature studies’ and studies of the ‘Geography of Israel’ reappeared in every year of study. This aspect reappeared 11 times, either as courses in the ‘Compulsory studies’ courses, or as the ‘Nature’ cluster, in the course of the three years of study. Jewish studies courses represented the aspects of (b.) type, which enforced and elaborated the College’s ideology, emphasising ‘Critical and innovative Jewish studies’ reappeared in the first and the second years of study. This aspect reappeared 6 times, mainly in the ‘Compulsory studies’ courses. Courses that emphasised the ‘Build up of the Israeli State’, represented the aspects of (c.) type, which enforced and elaborated the College’s ideology, concerning the ‘Socialistic studies and labour values’. This aspect reappeared 6 times, mainly in the Compulsory cluster that focused on the Built up of Israel, in the second and third years of study. The course ‘Basic topics of the Zionist history’ that dealt with this aspect was added to the Disciplinary Specialisation part, to the History cluster. Courses that concentrated on the Kibbutz, from the second year of study, represented aspects of (d.) type, which enforced and elaborated the College’s ideology, concerning the ‘Kibbutz studies and the “Joint education”’. It appears only twice. The emphasis on these aspects in the two T.E.C, in these years, keeps a constant level. The (d.) type seemed to be least dominant;
it appeared only 4 times, whereas the others appear 9-12 times, similar to results presented in the analysis of the former T.E.C. This exemplified both the Society’s influence, and the College’s decisive influence on the T.E.C.

In summary, the ‘Academisation’ message, as formulated in 1986, has been quickly absorbed and assimilated, and the T.E.C adapted themselves to the new circumstances and demands. It seems that the College’s staff was, in some aspects, ripe for this change. Still, at some points, as already mentioned, there were initiatives for specific changes, which directly and indirectly demonstrated the influence of internal influencing factors: the College’s educational and managerial beliefs; the Departmental educational beliefs, and Learners’ needs. These changes also indirectly reflect the: Society’s, Academic and Schools’ external influencing factors, on the T.E.C.

3.2.4 The fourth phase - The ‘Post-Academisation’ phase

In this phase ‘A’ college established its ‘Academisation’ processes, and started activating the fourth year of study, towards bestowing B.Ed degrees to future graduates, when completing four years of study. This fact is clearly indicated in the 1991-92, and 1992-93 Bulletins: “The primary school age department, studies towards a B.Ed degree in teaching” (ibid. Documents 11, 12). ‘A’ college presented, then, for the first time, a whole layout of the T.E.C, as a list of courses, divided to four years of study. This step demonstrated a significant development in the T.E.C development. It revealed meticulous reference to the M.O.E’s and the C.F.H.E ‘Guidelines’, and showed confidence in the College’s educational way.
The Following Table indicates the areas of influence in this phase, according to the interview with A2, the former H.O.D. The table is ordered by the number of units of meaning, in a descending order.

Table 12 - Units of meaning - The fourth phase

<table>
<thead>
<tr>
<th>External influencing factors</th>
<th>Internal influencing factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas of influence</td>
<td>Units of meaning</td>
</tr>
<tr>
<td>Schools</td>
<td>8</td>
</tr>
<tr>
<td>Academic</td>
<td>7</td>
</tr>
<tr>
<td>M.O.E</td>
<td>7</td>
</tr>
<tr>
<td>Technology innovation</td>
<td>2</td>
</tr>
<tr>
<td>Society</td>
<td></td>
</tr>
</tbody>
</table>

3.2.4.1 Internal influencing factors

3.2.4.1.1 The College's influences

3.2.4.1.1.1 The College's structural organisation

The College’s structural organisation in the early 1990s did not change much. The ‘Section for early and late childhood educators’ (the former ‘Seminary Section’), remained the heart of the educational work, with the five departments, and with the four groups of specific programs, already mentioned earlier (in the third phase).

3.2.4.1.1.2 The College’s pedagogical organisation

The College’s pedagogical organisation in this phase did not significantly change. The direction that the ‘Academisation’ determined was generally kept. Still, there were some changes, extremely meaningful to the Primary School Department.

One change occurred in 1991-92 (Document 11, Bulletin 1991-92) - the range of the grades, the Primary School Department prepared for, widened. Instead of training for the
3rd-6th grades, the Primary School Department started preparing for the 1st-6th grades. This change was not just a technical-structural matter. It demonstrated a pedagogical conceptual change, which changed the Primary School Department’s status in the College, as it caused competition between the Primary School Department and the Infant Department, which historically was exclusively in charge of preparing teachers for the 1st-2nd grades.

What mainly influenced the College’s pedagogical organisation in this phase were the College’s specific needs, as stemmed from its unique structure and educational credo. In this phase the College was given to intensive debates, stemming from internal pressures and tensions based on different functionaries’ conflictive interests.

A2, a former ‘Head of the Primary School Department’, from 1991-92 until 1998-99 (two cadence), described in details the conflict the College faced in her time. She noticed a central dilemma that crossed the College’s pedagogical organisation - should the T.E focus on knowledge acquirement (academic / theoretic knowledge) or should it focus on knowledge development (constrictive learning processes)?

The College’s pedagogical organisation demonstrated conflict stemmed from this dilemma – a focus on knowledge acquirement, based on academic studies versus a focus on knowledge development, based on educational studies and a serious practicum. A2 regarded the ‘Academic Organiser’ and the ‘Heads of the Disciplinary Faculties’ as extreme knowledge acquirement focused. "The ‘Academic Organiser’ believes that the students . . . they have to stay all day long in the College . . . That is how they will gain more knowledge" (unit 57).
‘Heads of Disciplinary Faculties’ split when considering what kind of knowledge is most important for student teachers. Some supported a knowledge acquirement focus: “They (Heads of Disciplinary Faculties) were strict to the C.F.H.E ‘Guidelines’. They thought that T.E.C that follow the ‘Guidelines’ demanded reducing the portion of education, pedagogic, didactic studies, and the field experience” (A2, unit 58). Others supported linkage between knowledge acquirement and knowledge development. “Some ‘Heads of Disciplinary Faculties’ supported reducing theoretical studies for extending pedagogical studies and deepening the practicum” (ibid. unit 67).

Some disciplinary teachers, previously teachers, pedagogical counsellors (including A2) and the “Pedagogical Organiser’ focused on knowledge development, and demonstrated a deep interest in students’ professional development as part of their learning processes (Appendix 4b, units 60, 62-64, 103). This dilemma caused a real pedagogic combat between those who focused on knowledge acquirement and those who focused on knowledge development, and this combat influenced the T.E.C organisation.

3.2.4.1.1.3 The College’s general atmosphere

Two aspects shed light on the College’s general atmosphere – financial restrictions and tension between academic and educational emphases. A2 regarded that financial restrictions limited College’s ability to shape the T.E.C, they “caused cancellation of the co-teaching courses” (unit 37).

These restrictions were especially felt when activating unique projects or costly activities. They determined what would be included or excluded. This aspect will be elaborated when dealing with the M.O.E’s influence.
The establishing of ‘A’ college, as a C.F.T.E increased the tension and the continual struggle between those who were ‘Academic’ oriented, and those who were ‘Education’ oriented, and brought it to the surface. A2 regarded the ‘Academic Organiser’ as the promoter of the knowledge acquirement approach, and was critic about the race for more knowledge, as if it guaranteed a better T.E. She “resisted this compressed timetable that prevented autonomous learning, and did not enable the students to prepare themselves as independent learners” (unit 56a). She also believed that although the ‘Academic Organiser’ “fought decisively for extending the number of disciplinary studies, on the account of education studies . . ., for the long run, the pedagogical counsellors’ belief would win . . . it was really war” (units 56b, 66).

The general College’s atmosphere changed in this phase, as the consolidation of the ‘Academic’ focus increased, and caused a continuous combat. The terms: resisted (unit 56a), fought (unit 56b), and war (unit 66) noticeably show it.

3.2.4.1.2 The Department’s influences

The Department’s credo as appeared in 1991-92 and 1992-93 was exactly like the credo stated in Bulletin 1990-91. The Department developed its educational policy autonomously, without direct associations to other influencing factors. It kept the ‘Old Seminary’ norms of work and its basic educational beliefs for developing the advanced education and practicum parts of the curriculum. This kind of work demonstrated eagerness to shape T.E.C that give maximum answers to the staff’s actual beliefs. This demanded dynamic and flexible T.E.C, given to needed adaptations. This kind of work meant endless pursuit after a satisfying T.E. A2 enforced this feeling: “I was pleased that I changed the T.E.C, though not enough” (unit 231).
3.2.4.1.2.1 Characteristics that contributed to the increase of the Department’s influence

The Department’s organisational and pedagogical culture, as revealed from interview with A2, had nine characteristics, which enabled its influence on the T.E.C, despite the College’s pressures and other external pressures. The Department operated procedures of work, which deeply involved the staff in the decision-making. It developed clear educational credos, which inspired the T.E.C’s development.

The characteristics can be divided into two groups: characteristics of the -

a. Organisational culture of work: collective work, co-teaching

b. Pedagogical culture of work:

da. Organisational culture of work:
A2 indicated that the Department’s organisational culture followed the ‘Old Seminary’s traditional collective culture, which regarded the staff’s involvement in the decision-making as integral to the T.E.C’s development. A2 indicated two complementary directions: collective work (Appendix 4b, unit 223, 225, and 257) and specifically – co-teaching (ibid. unit 233).

b. Pedagogical culture of work
A2 referred to the T.E.C’s structure. She and the Department’s staff influenced the T.E.C’s development by determining the required pedagogical spiral sequence of study (ibid. units 269-271). It seems the Department did not have a significant influence on sequences in the disciplinary part of the T.E.C.

A2 referred to another pedagogical concern – differentiation. It seems that differentiation was limited to the Department’s pedagogical part of the T.E.C (ibid. units 236, 237). The
staff's awareness to differential needs did not develop to an effective general approach that has influenced the whole T.E.C. It influenced only at a limited personal level, and gave ad-hoc reactive answers to actual problems (ibid. unit 239).

Three pedagogical characteristics had a limited impact on the Department’s T.E.C: Choice options (ibid. unit 234); Integration (ibid. unit 246), and Relevance to reality (ibid. unit 241). They appeared to be more desired than realistic characteristics. Although A2 and the Department’s staff were aware of these characteristics they did not significantly influenced the Department’s T.E.C, even not its educational-pedagogical part.

The last two characteristics showed two pedagogical concerns that focused on processes that directly influenced the students – personal growth (ibid. units 259, 261), and long life learning (ibid. unit 258). The units demonstrated the centrality of reflective process for personal growth. Again, A2 referred only to the Departmental pedagogical-educational part of T.E.C. The long life-learning characteristic seemed to have a minor influence on the T.E.C.

The nine characteristics created a whole picture of the educational beliefs that lay beneath the Department’s T.E.C. They created a platform that enhanced a consistent and a professional work, and can explain the Department’s selective adoption and/or adaptation of external or internal forced influencing factors.

In fact, the Department’s educational belief could not stand on its own, and could not remain isolated from the surrounding external and internal influences, which directly and indirectly produced pressures and expectations on the T.E.C’s development. The Department’s policy, in this phase, as appeared in the Bulletins and the interview was
influenced by different external factors the: Academic, M.O.E’s, Schools’ and the ‘Technological Innovation’. The Society’s influencing factor and the Colleges, as an external influencing factor, were not salient. The Department’s policy was also influenced, except by itself and by the College, as an internal factor, as already discussed, by the Learners.

3.2.4.1.3 The Learners’ influences

A2 believed that the T.E.C should consider the students’ needs

“I cannot say that we fully gave answers the students’ needs, but we were aware of it, and tried to give our best” (unit 199).

Learners’ influence on the T.E.C derived from two sources, which were ambiguous.

a. Students’ direct needs and requests - The T.E.C responded to student’s interest in acquiring competencies that would help them in their actual work in class, by opening a new course: "integrating children with special needs in class" (unit 197). The ‘Academic Organiser’ supported this step (Appendix 4b, unit 68).

b. Students’ needs from the Department’s perspective

The Department only partially fulfilled the students’ needs and requests, because students’ requests represented immediate needs, and the staff’s answers represented long term concerns. The staff devoted time and energy to develop things they believed were the real students’ needs. A2 mentioned four indicators that represented the Department’s efforts to give answers to the students’ needs from its point of view: Development of values (Appendix 4b, unit 194), Courses’ adaptation to learners’ cognitive abilities (ibid. 195), Practical matters for the practicum (ibid. 198, 201), and Students’ empowerment (ibid. 202, 210).
3.2.4.2 External influencing factors

3.2.4.2.1 The Schools' influence

The Schools' influence had gradually increased in the fourth phase. It started with the Department's awareness to the schools' needs, and simple reactive adaptations of the Departmental curriculum to schools' reality, and can be divided into two stages:

a. The Department's adjustment to the schools' reality. Adjustments appeared in two main areas: computers and active learning (ibid. units 277, 278, 281, and 282).

b. Partnership relations. Lastly, the schools' influence has become part of established mutual proactive and continuous relations, part of partnership that fostered planned adaptation of the Department's T.E.C to schools' reality and the students' needs (ibid. units 280, 283 and 284)

3.2.4.2.2 The Academic influence

The Department, as part of the College, was given to the increased Academic influence, as mentioned earlier, in the College's atmosphere paragraph. A2 described the tension between the Department's educational interests, and the College's academic agenda. "There was a struggle between 'pure academic' and T.E concerns" (unit 102).

A2 referred to the Department's consistent and intensive efforts to:

1. Hold back the centrality and the exclusiveness of the 'Academic' influences (Appendix 4b, unit 93a)

2. Bridge between the two kinds of knowledge/interests, in order to facilitate professional pedagogical processes (ibid. unit 94)

3. Interweave educational matters to actual courses, and integrate pure academic knowledge with pedagogical knowledge (ibid. unit 97).
A2 mentioned the Department’s belief in the centrality of the education studies and the practicum for the T.E. She noticed the required link of the academic knowledge to the practical knowledge (ibid. units 95, 209).

3.2.4.2.3 The M.O.E’s influence

The interrelations between the College/Department and the M.O.E were complex. A2, a H.O.D, was a critic consumer to the M.O.E’s forces initiatives, as the M.O.E demanded frequent changes (ibid. unit 164). As a ‘H.O.D she was open to reconsider the T.E.C’s development, and was willing to selectively adopt/adapt relevant M.O.E’s initiatives, if needed (ibid. units 165, 166, and 171).

3.2.4.2.4 The Technological Innovation influence

In this phase, as A2 mentioned, the T.I had only a limited influence on the Department’s T.E.C (ibid. units 282, 286). The ‘Technological Innovation’ showed minimal influence on the Department’s T.E.C. Except the addition of 2-3 courses (4-5 hours) for a technical familiarity with the computers it did not leave any significant impact on the students, neither on their learning habits nor on their experiencing in teaching.

It is worth noticing that A2 did not directly refer to ‘Society’s’ influences on the T.E.C’s development.

3.2.4.3 The fourth phase - Analysis of the T.E.C

The 1991-92 and 1992-3 T.E.C represented a new period, a period far enough from the ‘Academisation’ proposal submission, and from M.O.E’s and the C.F.H.E official recognition. It allowed the College updating the T.E.C and even vastly renewing them. These T.E.C (Appendix 7, Table 54A) were analysed, and the analysis demonstrated
formative structural and pedagogical changes in their layout and in offered courses. Both
demonstrated conceptual curricular changes. In both T.E.C the presentation included a
general preface, which stated the College’s credo, and the Departments’ preface, which
stated its credo. Additionally, they included a plan, presented as a list of courses for the
four-year study, optional courses in the course of the different years of study, and
abstracts of all offered courses. The plan appeared as timetable for each year of study.

3.2.4.3.1 Analysis of the T.E.C presented in Table 54A

The presented T.E.C demonstrated four major characteristics – two presented general
conceptual changes, and another two presented specific conceptual changes.

▸ General Conceptual changes

1. The main three traditional parts that composed the T.E.C, the: ‘Compulsory Studies’,
‘Educational Studies’, and ‘Disciplinary Specialisations’ were re-organised in 1991-92
and 1992-93. The ‘Educational Studies’ appeared, firstly, as a list of courses, divided
into four sub-sections: ‘Introductions’; ‘Educational Topics’; ‘Psychology’; and,
‘Teaching and Didactic Theory’. The ‘Compulsory Studies’, which traditionally
appeared first and now appeared second, turned into ‘Foundation Studies’, a term that
better explains the reason for their inclusion in the T.E.C. The third traditional part –
the ‘Disciplinary Specialisations’ turned into ‘Specialisation Studies’, a term that
emphasises the centrality of the ‘Specialisation’ for itself.

2. The restlessness that characterised the previous T.E.C did not disappear. Apparently,
it decreased and occurred in a different dispersal and frequency. It appeared as one
general conceptual change and as nine specific changes. Five changes stemmed from
specific conceptual matters, and four stemmed possibly from mixed conceptual and
administrative matters.
a. **Change of organisation (sign +).** The reorganisation of the ‘Education Studies’ part to three sub-section caused a chain affect that demanded reorganisation of some courses:

I. The ‘Literature’ course, which was in 1986-87 a compulsory course, was swollen in the ‘Literature cluster’; part of the Disciplinary specialisation part, and in 1991-92 was moved again to the ‘Foundation studies’ part.

II. The courses – ‘The irregular child’ and ‘Basics in teaching therapy’ were regarded previously as ‘Education Studies’. In this phase they were determined as part of the ‘Educational Topics’ sub-section.

III. The course ‘Learning defects – diagnosis and care’, which was part of the ‘Educational Studies’, became part of the ‘Teaching and Didactic Theory’ sub-section.

> Specific conceptual changes

b. **Change of courses names (sign *).** Courses’ names were changed because of three reasons:

I. **Society’s influence.** The name of the course ‘Does it matter to be boys or girls?’ studied in 1986-67, was changed in 1991-92 to ‘Gender images and education’ after years of absence. The renewed name represents current societal agendas.

II. **Academic influences.** In this phase the academic concerns influenced the T.E.C’s development, for example:


- The name of course ‘General Teaching and Didactic theory, 1991-92, demonstrated a more ‘academic’ name then the former name ‘General Didactic’, offered in 1986.
- The name of the course ‘Introduction to research: Social research methods’, 1991-92, demonstrated a more specific academic focus than the former name ‘Educational research’.

- The name of the course ‘Psychological and Social factors in class’, 1991-92, demonstrated a change of ‘academic’ focus, as the former name defined in 1986 was ‘Psychological and Social processes in class’. The new name points toward the professional staff’s academic objectives.

III. The College’s influence. The course ‘The nature of our country’, determined in 1986 was replaced in 1991-92 by the course ‘Biological Studies - The seasonal fauna and flora’. This change cautiously indicates that the College was less committed to its traditional credo that represented a multifaceted association to Israel as a homeland, including its nature.

c. Addition of courses (sign ^^). Three courses were added - ‘Education and values’ was added to the group of the ‘Education introductions’ courses, ‘Measurement and Assessment’ to the ‘Educational topics’, and ‘Thinking and Moral development’ to the general ‘Education studies’. The addition of these courses demonstrated an increased interest in: social-moral aspects and a new Departmental-educational interest that emphasised accountability as part of teaching learning processes.

d. Choice courses (sign ~). The option of choice courses appeared in this phase, for the first time, in the ‘Educational studies’ part, and demonstrated the Department’s increased awareness to students’ as adult learners, responsible for their studies.
I. The courses ‘Thinking and Moral development’ and ‘Educational Psychology’ were offered as choice courses in 1991-92, and turned to be compulsory courses in 1992-93.


e. **Change of Cluster’s name (sign #).** The name of the cluster “The build up of the Israeli state”, stated in 1986, was changed into ‘Israel – legacy and revival’. This change illustrates a change of the cluster’s central message. Instead of focusing on recent history, it emphasised a focus on the link between ancient and recent history.

f. **Change of hours’ presentation (sign X).** This change demonstrated a conceptual change in the way pure pedagogic matters were presented. Instead of presenting distinctive hours for each course, the total amount of hours in the course of study was presented. This kind of presentation that the College’s represented a systemic approach appeared twice:

- The ‘General Teaching and Didactic theory’ course presented in 1991-92, the total number of 13 didactic hours, for all needed disciplinary studies (Appendix 7, Table 54A).
- The practicum in 1991-92 and 1992-93 did not define distinctive hours for each year of study; instead it determined, the total quota of 18 hours needed for practice (ibid).

> **Mixed conceptual and administrative changes:**

g. **Move of courses between years of study (sign @).**
I. The “Aesthetic education” course moved from the second year in 1985-6 to the third year in 1986-7, and to the first year in 1991-92.

II. The course ‘Thinking and Moral development’ moved from the second year of study in 1991-92 to the fourth year in 1992-93.

h. Courses given to choice between years of study (sign <). The courses ‘Mathematic Didactics’ and ‘Preparing for the educator’s role’ could be learnt in the third or the fourth years of study; the courses ‘Language’, English and ‘Israel – legacy and revival’ could be learnt in the first or the second years of study.

i. Swap of courses (sign =). The ‘Physical education’ course, determined at the ‘Academisation’ stage, was replaced by the ‘Movement’ course probably because local manpower.

One specific change did not appear in the T.E.C in this phase, change of courses’ scope (sign ()).

3. The analysed T.E.C in this phase did not intensively refer to the College’s unique pedagogical characteristics, regarding the four preferred directions that represent the College’s multifaceted commitment to the association to Israel as a homeland (sign (a.), (b.), (c.) and (d.)). The T.E.C in 1991-2 and 1992-93 offered similar courses. 1. A semester course ‘Israeli Studies – The history of the Israeli Settling’ that represented the (c.) type (the first year of study), and 2. The six-hour compulsory cluster, “Israel – legacy and revival” (a renewed name), that focused mainly on aspects of (b.) and (c.) types, which remained almost a relic of ‘A’ college’s unique pedagogical characteristic, fundamental to its traditional credo. There was no further detailing of the courses in the given list. The courses offered in this cluster (their details appeared in the timetables) for the different years of study, were: Yearly courses - ‘The holidays and their origins’, in the first year, and ‘The Sages
Literature’, in the second year, represented the (b.) type, which enforced the Jewish aspects of the College’s belief; and other semester courses – ‘The history of the Zionist Idea, represented the (c.) type, which enforced the ‘Socialistic studies and labor values’. The (d.) type, which enforces and elaborates the College’s ideology, concerning the ‘Kibbutz studies’ and the ‘Joint education’ disappeared.

These examples demonstrate the impact of four influencing factors on the T.E.C: Society’s (Jewish aspects), Society’s and Academic (decrease of courses that represented the unique belief, for general academic concerns), College’s (adopting or adapting a policy that enabled the reduction of courses that represented the unique belief), and Department’s (adaptation of courses to the Department’s needs).

4. The T.E.C were still characterised as compulsory in nature, but the choice possibilities increased. They appeared in the: ‘Specialisation Studies’ part, ‘Foundation Studies’ part, ‘Teaching and Didactic Theory’ part, and in the ‘Educational Topics’ part. This direction demonstrates an increase of the Department’s, Academic and the Learners’ impact on the T.E.C.

3.2.5 The fifth phase - The ‘Uncertainty’ phase

In this phase, ‘A’ college, like other C.F.T.E, has been under threatening pressures. Thus, this phase has been characterised by tremendous changes, caused by a combination of intensive external and internal influencing factors that endangered the T.E existence in general, and the existence of the Primary School Department, in particular. The conflicting reality demanded developing alternative T.E.C, in order to secure the College’s and the Department’s future.

In this phase, ten years after the College got the ‘Academisation’ recognition, the old ‘Seminary Section’, changed its title twice. The title given in 1990-91, ‘Section for
Training Educators for the Infant and Primary School Age', which located the graduates’ role to the specific pupil ages, turned to a general title - the ‘Primary Section’ (Document 13, Bulletin 2000-2001). This title was less specific, but still conveyed the same message. A year later, the Section’s title turned into the ‘Education and Teaching Section’ (Document 14, Bulletin 2001-02; Document 15, Bulletin 2003-04). This title transmitted a general message that associated Teaching and Education. It sounded ‘Academic’, and it neither hinted upon the actual teaching role, nor upon actual age of schooling. Actually, A3 introduced herself as the “Head of Teaching and Education Section” (Interview 23.1 2004). This chain of titles’ changes demonstrates the ‘Seminary Section’s’ restless on the one hand, and its dynamism, flexibility and adaptive characteristic on the other hand.

The Following Table indicates the areas of influence in this phase, according to the interviews with A1, the current H.O.D, and the functionaries - the ‘Academic Organiser’, A5; the Head of the ‘Education and the Teaching Section’, A3; and the ‘Pedagogical Organiser’, A4 (Appendix 4b). The table is ordered by the number of units of meaning, in a descending order.

Table 13 - Units of meaning - The fifth phase

<table>
<thead>
<tr>
<th>External influencing factors</th>
<th>Units of meaning</th>
<th>Internal influencing factors</th>
<th>Units of meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas of influence</td>
<td></td>
<td>Areas of influence</td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>29</td>
<td>College</td>
<td>154</td>
</tr>
<tr>
<td>Academic</td>
<td>25</td>
<td>Departmental</td>
<td>55</td>
</tr>
<tr>
<td>M.O.E</td>
<td>16</td>
<td>Learners</td>
<td>23</td>
</tr>
<tr>
<td>Society</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology innovation</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2.5.1 Internal influencing factors

3.2.5.1.1 The College’s policy

3.2.5.1.1.1 The College’s structural organisation

When referring to the College’s structural organisation two issues were raised: role division and the Primary School Department’s existence

a. Role division

The role division in ‘A’ college between (A5) and (A3) signified the College’s structural organisation change since the ‘Academisation’. This change occurred already in the fourth phase. But, as the conflicts and the complexity stemmed from the specific role division still existed in the fifth phase, and as the research could not trace functionaries from the fourth phase, except the A2 the ‘Head of the Primary School Department’, this notion will be elaborated in the fifth phase. A5 defined her role as a technical substance, and demonstrated awareness to her personal professional limitations, and thus a cautious professional behaviour (Appendix 4b, unit 323).

A3 confirmed what A5 stated, concerning the technical role of arranging the College’s timetable, and her cautious professional behaviour. She was aware of the historical perspective, arguing that the role division between her and A5 has been artificial her “a relic of the old Seminary’s structure, and the ‘Academic Organiser’ role represents the new College’s structure” (unit 330). She was aware of the current setting and the role A5 represented, thus emphasised their mutual work (Appendix 4b, units 330a, 326, 330, 332, and 358).

According to A3 mutual work was inevitable, and it allowed extracting the benefit of the complex situation, in favor of the education matters.
A1 added a new perspective to the role division. A1 regarded the ‘Academic Organiser’ role as overpowering, and the ‘Head of the Education and the Teaching Section’ as her personal defender, and her Department’s supporter (ibid. units 85, 105).

A1 did not consider A5 role was technical. For her this role was professional, as it determined the academic interests’ supremacy on the account of the pure educational interests (ibid. units 122, 124).

The way A1 referred to A5 work differs from the way A3 referred to it. A1 described A5 work as based on principles – promoting academic concerns, whereas A3 and A5 referred to it as mostly technical. This gap can be explained by A3 higher position, her deeper involvement in the College’s decision-making processes and the T.E.C development, and her wider understanding of the College’s structural and pedagogical policy.

b. The Primary School Department’s existence

The College’s structural organisation in the early 2000s did not change much, but the centrality of the ‘Education and Teaching Section’ (the traditional ‘Seminary Section’), seemed to show crack signs. The ‘Education and Teaching Section’ seemed to be in danger, because the College has been given to ‘Academic’ influences, and staff’s educational qualifications did not play any more a significant role (ibid. A3, units 355, 355a).

The Primary School Department’s future was even less certain, because it was practically exposed to an immediate danger. Its prestige decreased, it did not attract students, and thus students’ enrolment drastically shrank (Appendix 4b, A3, units 254, 354, and 355). A1 was aware of the coming crisis, and she explained that crisis stemmed from the limited horizons the primary school teaching can offer to teachers (ibid. units 130, 222).
So, the College's structural organisation was unstable, and was massively given to Academic influences. Concurrently, the Department and the College's help, made efforts in order to overcome the foreseen Department's crisis, secure its existence, and foster the continuation of its educational work.

3.2.5.1.1.2 The College's Pedagogical organisation

The College's pedagogical organisation did not change much during this phase. The direction that the 'Academisation' determined was generally kept, except in the Primary-School Department, where T.E.C often changed, as to overcome the Department's in danger situation.

In 2000-01 (Document 13, Bulletin 2000-01) the College did not publish a credo, just general comments. The College's traditional unique credo completely disappeared, and was replaced by the departments' and faculties' credos. In 2003-04 (Document 15, Bulletin 2003-04, p. 9) the College stated a limited credo, entitled as a mission (see p. 222). This credo differed from the College's traditional credos in its foci. It kept two basic ideas:

a. The basic belief in the equation teachers = educators

b. The emphasis on Jewish aspects, the (b.) type. The other three directions that represented aspects of (a.), (c.) and (d.) types disappeared from the credo. They appeared as sporadic courses, in the 'Foundation Studies' part, in the different T.E.C.

Four functionaries described in details the conflictive situation the College faced since the 2000s. The points they referred to demonstrated that the College's and the Department's central role in the T.E.C' development. Academic influences came next. Then, the Schools' influences, and afterwards the Society's, the Learners' and the T.I
influences. The functionaries’ presentation of their perspectives, allowed a better understanding of the College’s general puzzle, and in particular the Department’s parts.

3.2.5.1.1.2.1 Functionaries’ personal educational credos

A5, A4, and A3 stated their personal credo. A1 presented components of the Departments’ credo. The personal credo A5 exposed emphasised the centrality of four components for the T.E (unit 291):

**General education matters** - “training teachers for properly functioning in the primary school, for taking educational responsibility”; **theoretical disciplinary knowledge** - “teachers have to teach specific areas of knowledge”; **theoretical educational knowledge** - “which includes: development of children thinking, age characteristics, educational philosophy, educational assessment, school organisation”; and, **practical teaching knowledge** - “teaching strategies and methods, needed skills and competencies, planning units for teaching, including their specific assessment procedures, and performing actual teaching.”

The credos A3 and A4 stated focused on two main things: 1. Teaching is more then instruction, it is a mission, not just a role; and, 2. Teachers are educators, and consider children as human beings and not just as pupils (Appendix 4b, A4, unit 301; A3, unit 293). These credos were pure education oriented, and focused on valued matters. They completely differed from the credo A5 stated, which was academic oriented on the one hand, and practical role oriented on the other hand.

3.2.5.1.1.2.2 The College’s pedagogical Mechanisms and Procedures

The College operated Mechanisms and procedures in order to properly operate the decision-making processes for the T.E.C’s development. A5 referred to two Mechanisms and procedures operated in the College, for approving the T.E.C: the ‘College’s Teaching Committee’ and the ‘Academic Council’, demonstrated Academic
organisational influences (Appendix 4b, A5, unit 323; A3 unit 329). Yet, another procedure appeared at the College’s level of the T.E.C’s development, for deciding upon sequences of courses (ibid. A5, unit 359). Besides, there was a regular Mechanism for discussing departmental issues, including T.E.C’s concerns - intra-Departmental ‘Staff-Meetings’ (ibid. A3, unit 319).

These Mechanisms and procedures not only demonstrated consistent patterns of work, but also allowed A5 to by-pass her professional limits. They revealed a pedagogical organisation based on a deep and a systematic rationale of collaborative work at the College’s and at the Department’s level. This organisation encouraged democratic norms, and dialogic processes, as part of the decision-making processes, associated with the T.E.C’s development. These processes increased the Departments’ responsibility for the T.E.C’s development, and the staff’s semi-autonomous spaces. Thus, they enabled the Departments to educate their graduates in accordance to their credos.


Hence, the College operated four Mechanisms that were directly or indirectly connected to the T.E.C’s development, the: ‘Teaching Committee Forum’, and ‘Forum of F.O.H.O.D.F’, which A5 was in charge of; ‘Forum of the Pedagogical Counsellors’, which A4 was in charge of; and, ‘Section Secretariat Forum’, which A3 was in charge of. Each Forum had a distinctive area of responsibility. A5 and A3 shared the responsibility
for transferring information to the relevant functionaries or other staff members. The procedures referred to regularities of meetings and the discussed topic.

A3 described two procedures – a procedure of regular meetings, in the different Forums, and a procedure of consistent communication, which exemplified the College's collaborative culture. These procedures complemented the procedure A5 indicated. The Mechanisms and the procedures described by A3 were based on the same deep and systematic collaborative work rationale, which A5 already noticed, and complemented its characteristics: the democratic norms and the Academic orientation. A3 also deeply contemplated the conflicting aspects A5 noticed.

A1 critically referred to the Mechanisms and procedures, already mentioned by the other functionaries, the College operated. She especially elaborated on the F.O.H.O.D.F Forum. When describing its procedures of work A1 mentioned the 'Sub-Forum' that was appointed in order to increase the Forum’s effective work, and represented the fifth Mechanism operated in the College. This Mechanism actually conducted the College, and was indirectly involved in the College’s pedagogical organisation (ibid. units 104, 105, and 107).

In addition, A1 described inconsistent procedures of meetings with the F.O.H.O.D.F, which demonstrated unilateral direction, in favour of the Department’s initiatives (ibid. units 108, 109).

The procedures A1 described complemented the procedures already described by A5 and A3. They demonstrated the same principles of regular meetings, (except the meetings A1 initiated with the F.O.H.O.D.F) consistent communication, and represented the built-in collaborative culture that encouraged reasonable autonomous decision-making. The
procedures exposed conflicting interests that influenced the pedagogical organisation, as already noticed by the other functionaries.

In summary, the Mechanisms and the procedures demonstrated the College’s systemic structure, and its collaborative culture. The combination between the structure and the culture enabled the College’s efficient answers when developing the T.E.C.

3.2.5.1.1.2.3 Dilemma between the academic and the education orientations

All functionaries’ referred to the dilemma of what kind of knowledge was the most central to the T.E.C. For A5 knowledge was "First of all disciplinary knowledge", then Theoretic educational and psychological knowledge . . . Theoretic and practical teaching knowledge . . . and lastly Performing actual teaching” (unit 291).

A5 represented the extreme pole that emphasised the disciplinary orientation in the dilemma. As an ‘Academic Organiser’ she pushed towards strengthening and deepening the academic orientation on the account of pure educational orientation. A5 was aware to the F.O.H.O.D.F’S increased press for intensification the academic-disciplinary direction and even encouraged it (Appendix 4b, unit 320). The F.O.H.O.D.F’S pressures complemented her own credo, and contributed to the overpowering of the academic-disciplinary focus on the educational culture that traditionally characterised the College.

All other functionaries represented the pole that emphasised an educational focus concerning this basic dilemma. They mentioned the race towards ‘Academisation’. “We straggle for linking between theoretical studies and the field experience . . . and stop the dominance of the disciplinary direction” (A3, unit 336).
A1 intensively argued: “We have basic assumption on how should our T.E.C be organised and what should be included. But we are bounded to the College’s pressures and compulsions, which foster ‘Academic’ interests” (unit 38); and, re-emphasised: “Now the ‘Academic Organiser’ is disciplinary oriented, and emphasises disciplinary academic concerns, it is like a survival war” (unit 38).

A4 and A1 specifically referred to the tension between the academic and the educational orientations. A4 said described it as a “Battle with those who believe in the centrality of the academic–disciplinary studies . . .” (unit 316). A1 similarly argued: “The debate caused constant struggles, which eventually had an impact on the ratio between the disciplinary and the pedagogic parts of the T.E.C” (unit 119).

A4, A3 and A1 related to their commitment to the educational orientation, and strongly reacted against the “academic spirit that blows in our college” (A3, unit 292). A4 claimed for “the teachers’ educative vital role” (unit 315). A1 doubted whether “the future new H.O.D will still be experienced in Primary School teaching, and will be education oriented” (unit 25).

Both A3 and A1 demonstrated persistent efforts to bridge between the orientations, especially when considering the practicum:

“The ‘Academisation’ process when considering the College’s unification with the University’s Section caused a world war. Literature means Literature, even if students are teaching oriented and not research oriented, and we try to limit the gap between the two poles” (A3, unit 310).

“We decided to formally link the counselling to the didactic courses . . . The pedagogical counsellors would be responsible for the whole students’ experiencing at school” (A1, unit 144a).
A3 and A1 actually criticised the College’s race, showing the inferiority of academic oriented College-teachers, who did not have any school-teaching experience, when comparing them to College-teachers who experienced school teaching (Appendix 4b, A3, units 309a, 311a, 312, 313a, and 314; A1, unit 25).

This dilemma influenced the actual pedagogical organisation, as the increased academic influence has changed the balance of the T.E.C’s components – the academic-disciplinary courses, educational studies and the practicum, in favour of the academic-disciplinary courses. The ‘Academisation’ supremacy seemed central to A5, and secondary to the other functionaries. A4, A3 and A1 demonstrated a real grief and discontent when realising the educational orientation defeat and the College’s enhanced academic orientation.

In general, the College comprehensively influenced the T.E.C’s development. It determined a clear preference - an academic oriented policy. This preference was demonstrated in the ‘Academic Organiser’’s credos, the Mechanisms and the procedures operated in the College, and the exposed dilemma between the academic and the educational orientations. The College’s new direction influenced its general atmosphere in a way that had a significant impact on the T.E.C’s development.

3.2.5.1.1.3 The College’s general atmosphere

Intensive pressures significantly influenced the College’s general atmosphere in the fifth phase. These pressures represented ideological and / or practical desires and / or demands, presented and / or determined by five influencing factors, the: Academic, College’s, Department’s, Society’s and the M.O.E’s. These pressures caused a two-level
tension between beliefs, norms, and preferred directions: tension between collaborative and particular interest, which represents wide or narrow interests; and constant struggles.

a. **Tension between collaborative and particular interest**

The College’s progressing demonstrated three levels of relations:

I. **The level of free collaborative relations that demonstrated specific, not necessarily symmetric interests.**

The interviews revealed efforts to establish collaborative associations. For example, A3 referred to the efforts A1 her staff made in order to create regular collaborative association, by yearly meetings between "all disciplinary functionaries, as to enforce connections and mobilise disciplinary teachers to be more aware of educational concerns" (unit 309a).

These sporadic relations, based on personal associations, were not built-in in the College’s structural organisation; rather they were “only on a personal basis” (A3, unit 311). A1 has strengthened this argumentation: “There are some cooperative initiatives, especially in the level of H.O.D and F.O.H.O.D.F . . . If I have good relationships we shall sit together, and I will get the service . . . But it is not simple as there is an open competition between the departments (units 145, 146).

II. **The level of collaboration built-in in the College’s structural organisation.**

This level referred to communicative procedures that characterised the College’s Mechanisms, and guaranteed systematic and consistent relations, information flow, increased staff’s involvement, and widened staff’s interests. A3 noticed: “There is in our College a collaborative culture and mutual support . . . Things are mostly determined through direct collaboration” (unit 363).
III. The level of particular and competitive relations.

This level characterised the general relations between the Department, other departments and the faculties. The competitive relations reflected the change in the College’s traditional cooperative culture, weakened the possibility to shape coherent T.E.C, and perpetuated particular interests, power-combats and a tense atmosphere. A1 indicated the role of the ‘Academic Organiser’ who "introduced particular norms of work, which are far from the collaborative norms of work we were used to" (unit 91). She also emphasised competition between the different departments and Sections (Appendix 4b, units 126, 127).

A1, from her relatively narrow perspective, emphasised the competitive relations in the College as representing its new atmosphere. A3, though, from her wider perspective, referred rather to the collaborative relations.

b. Constant struggles

The term ‘struggle’ and / or ‘world war’ reappeared along the interviews, demonstrating the Department’s tense relations in the College. Tension between: other departments and faculties, functionaries, sections, and between staff members who held different orientation reappeared in especially in the interview of A1, but will not be discussed in this research (Appendix 4b, units 85a, 90, 112, 120, 153, and 288). Whereas A3 explained the competition as a result of budget’s restrictions that demanded courses’ curtailment (ibid. units 327, 347), A1 explained the competition as a result of beliefs, and ideological preferences (ibid. units 75, 119, and 140).

Struggles, resulted from conflicts between ‘Academic’ matters and the College’s educational beliefs, influenced the College’s structural organisation. Struggles, resulted
from conflicts between Academic matters and the M.O.E’s restrictions, influenced the College’s pedagogical organisation, and its atmosphere.

The College was given to external influences, but not less worthy, to a persistent internal struggle with the faculties’ and the Department’s (probably also other departments) pressures, which fought for their unique needs and beliefs, and differently perceived the College’s preferences and restrictions. Thus, the different functionaries offered different interpretations to the influences, and caused intensive internal pressures and tensions. The internal and the external factors directly / indirectly influenced the College, and had a vast impact on the T.E.C’s development.

3.2.5.1.2 The Department’s influence

Two factors limited the Department’s influence on the T.E.C’ development:

a. The increased Academic influence on the College, which was already mentioned, and will be separately elaborated later.

b. The decreased number of students in the Department in the last years, which will be separately elaborated later.

Consequently, the Department’s unique credos could not be fulfilled, and the Department could not autonomously supply the needed T.E.C. The Department had to go through a period of changes that would hopefully insure its existence (A5, ibid. units 296, 297; A3, units 337, 349; A1, unit 131).

A5 described the impact of the decreased students’ enrolment on the Department’s ability to defend its unique needs. A3 elaborated on the reasons for this decrease. A1 demonstrated skeptic thoughts concerning the Department’s future ability to defend its credos and characteristics, and influence the T.E.C’s development.
3.2.5.1.2.1 The Department’s credos

The Department’s credos as appeared in the 2000-01 and 2001-02 Bulletins, in A1 times, extremely differed from the credo stated in the early 1990s, in A2 times. It also completely differed from the credo stated in 2003-04, still in A1 times. The Department developed its educational policy autonomously, without direct associations to other influencing factors. It still kept the ‘Old Seminary’ norms of work and the basic educational beliefs concerning the teachers’ educative role, and the centrality of the education and practicum parts in the T.E.C. This kind of work demonstrated eagerness to shape a dynamic and flexible T.E.C that would give the best answers to the staff’s actual beliefs and needs. This kind of work meant endless pursuit after a satisfying T.E.

The Department’s credo in 2000-01 and 2001-02 declared:

“The Department strives to nurture in its students a humanistic and educative stance and relation to the ‘Human Culture’ achievements. From a perspective that regards teaching as a practical and reflective profession (*), it strives to prepare a teacher who has a dynamic approach to the teaching-learning process, who owns skills and competencies for developing his pupils’ learning processes. In order to develop personal learning, responsibility, initiative and environmental involvement, there is an emphasis on societal processes that occur in class, and also on contribution to the society and the partner school” (Documents 13, 14, Bulletins 2000-01, 2001-02).

(*) This sentence appeared only in Bulletin 2000-01.

The declared Department’s credo changed completely its shape in 2003-04 (Document 15, Bulletin 2003-04). It turned to a formal informatory statement:

“The Department prepares for education and teaching roles in the primary school, and bestows a teaching certificate for the primary school, a teaching license, and B.Ed degree, and those who choose ‘Humanistic’ Disciplinary specialisations – a B.A degree in Literature, Language or Bible. Beyond the specialisations, the Department enables building a personal program, which imparts a special certificate, on behalf
of the College, in two routes: Creative teaching and digital teaching. The Department offers challenging studies in the chosen disciplinary areas, and gives tools for integrating in the education system for the age of the primary school".

The credos in 2000-01 and 2001-02 substituted the College’s credo, which disappeared from the Bulletins. They neither referred to the teacher’s responsibility for the child’s whole personal development, nor to academic matters, teaching tools and contents, like the credos in the early 1990s, in A2 times. They focused on the directions the T.E strived to achieve. The credos stated four main beliefs. The first two directions were similar to the traditional Old Seminary’s beliefs and referred to the centrality of ‘Education’ and ‘Humanism’. The other two beliefs demonstrated current new educational beliefs that have influenced the Department’s credos –

a. Teacher’s ‘Dynamism’, besides his competencies, contributes to the development of the pupils’ learning processes.

b. Learning from praxis, by reflective thinking, is vital to the T.E, because it facilitates the teacher’s improvement and professional growth.

The Department’s credo in 2003-04 (Document 15) did not state an educational belief. It shortly introduced the options of study, and the immediate formal benefits – the different certificates and licenses it bestowed. It specifically mentioned two unique thematic, not disciplinary, specialisations. Besides, it emphasised the challenging nature of the study, the option of individual adaptive learning programs, and the attractive integrations of culture, creation and social education (http://www.oranim.ac.il/Site/heb/General). It also emphasised that the study gives tools for integrating in the Israeli teaching and educating system. The Department understood that there was no place to state a too sophisticated credo that might drive away potential students, and that it should tempt the potential students by promising immediate ‘rewards’, according to the Society’s play-rules’.
3.2.5.1.2.2 Characteristics that increased the Department’s influence

The Department’s organisational and pedagogical culture was based on five declared characteristics, which enabled its influence on the T.E.C, despite the College’s internal pressures and other external pressures. The Department operated procedures of work, which deeply involved the staff in the decision-making, and developed clear educational credos, which inspired the T.E.C’s development. These characteristics can be divided into two groups: the Department’s organisational culture of work and its pedagogical culture of work.

a. Organisational culture of work:

a1. Cooperative work

Cooperative work, mainly weekly staff meetings that “discussed things is the curriculum . . . including pedagogical courses, practicum contents and sequence” (A3, unit 318), increased the Department’s influence on its T.E.C’s development, and the staff central role in developing the T.E.C’s educational part. “Much time was devoted discussing pedagogical and experiential characteristics of our curriculum . . . its attractiveness” (A1, unit 251).

A1 indicated that the cooperative work strengthened the Department’s resistance to compelled changes that did not correspond with its beliefs, needs and interests (A1, Appendix 4b units 251, 254). But she worried about the loss of the traditional cooperative work, and the possible influences of this loss (ibid. units 252, 253). A3 was aware to these worries, apologising for the annulment of the traditional payment for the official meetings, reaffirming that the College “does demand curtailing the practicum” and promising help . . . I am there in order to help them” (unit 324).
b. Pedagogical culture of work:

b1. Relevance to the primary school’s needs

This topic represented the Department’s most central frontage, and its direct influence on the T.E.C. A1 persistently fought for the Department’s interests, and for developing its T.E.C, so it would answer its unique expectations and requirements. A1 seriously considered the graduates’ general and specific needs, but strongly believed that they ought to get enlightenment studies “Teachers in primary school should have general knowledge, and not only specific disciplinary” (unit 203).

A1 struggled for the cancellation of specialisation clusters or sporadic courses that seemed to be irrelevant for the primary school teaching in “Science studies as a secondary specialisation . . . The same happened with English studies, with Computers as basic studies and with Academic writing” (units 135, 136).

Concurrently, A1 fought for preserving courses that represented the Department’s deep valued beliefs based on the ‘Old Seminary’s tradition that regarded teachers as educators. A1 succeeded maintaining courses of ‘Jewish Studies’, (b.) type direction, such as the ‘holydays and special days’ course (unit 47) and the “introduction to Genesis and introduction to Bible teaching” courses (unit 220). A1 succeeded maintaining the ‘Nature Studies’ course - “seasonal nature aspects in their teaching” (unit 204), and ‘Actuality’ by “regularly introducing ‘Actuality’ matters and current environmental matters into the courses”, the (a.) type direction (unit 231a).

A1 insisted on including an art course, believing it was essential for primary school teachers as “These courses are essential, and represent the department’s belief” (unit 231b). A1 prevented the turning of a Departmental course ‘Evaluation and Assessment’ to a cross-departmental course, believing that it should be directly linked to the
Department’s unique needs “We built the ‘Evaluation and Assessment’ course, as to meet, what we believe are, the Department’s curriculum needs” (unit 206).


The new ‘specialisation’ showed the Department’s direct influence on the curriculum, by introducing this option. It showed the School’s / Society’s / M.O.E’s indirect influences, by raising or determining expectations from the T.E, which corresponded with the Department’s beliefs, and thus was accepted.

Besides, A1 enhanced a focus on the primary school age, believing that it was essential to the graduates’ preparation. She insisted that the ‘Psychology of Learning’ course would remain a departmental course that concentrates on the primary school age, and will not turn to a cross-departmental course - “...I insisted that the ‘Psychology of Learning’ course’ will be adapted specifically to the primary school age” (unit 242).

b2. Sequence

The sequence question was one of the central questions that A1 and the staff worried about. The clear professional sequence vision contributed to the Departmental internal dialogue, and to the dialogue between the Department and the College. This question reappeared several times, in different contexts along the interview.

A dialogue held in the Department revealed an internal tension regarding the ‘Research Method’ courses sequence: "The third year pedagogical counsellors ... resisted long-term processes of preparing students for research from the first year of study year” (unit
interests and beliefs, and insisted that insisted that the ‘Research Methods’ course would remain a departmental course” (unit 55).

b. Partial students' integration in the ‘High-School Section- individual combinations

The College offered another answer for the primary school students, which had a massive reference in the interviews and only limited reference Bulletin 2003-04. This option offered optimistic horizons to the Primary School Department. It offered: individual combinations, as to allow students to join disciplinary courses in other departments (mainly the ‘High-School Section) . . . personal pedagogic and didactic counselling, so students would get an appropriate guidance to the primary school needs (A3, unit 338); and / or “a B.A degree in cooperation with the ‘High School Section’” (A3, unit 351). “Students may choose to study in the High-School Section, and decide later if they prefer teaching in primary school or in high school” (A1, unit 51), “This is attractive, and we think that we can adopt it” (A1, unit 42).

This solution increased the Department’s assimilation in the ‘High-Section Section’, and caused a dilemma: “Should we allow students to graduate in the High School Section, and still belong to our department” (A1, unit 43); or “Why should we be University, we should keep our uniqueness, and offer what the University cannot offer” (A1, unit 80). Thus, apprehension and hesitation increased “Students from our Department will specialise in the high-school section, and we will have to make plenty compromises” (A1, unit 49). Consequently, persistent steps to insure the students’ loyalty to the primary school professional interests increased. Eventually, this step did not secure the Department’s existence, as enrolment did not increase.
c. Change of disciplinary specialisation clusters and courses

This option appeared in the interviews and in the Bulletins. It gave a new envelope to the traditional ‘Specialisation Studies’ (Documents 13, 14, 15).

In 2000-01 a new option for choice was offered, as part of the ‘Education Studies’ (Document 13, p. 23). Students could choose sub-specialisations in three central aspects:

1. “Integrated Teaching – The ‘Inclusion’ of children with special need in class”,
2. “Developing thinking and creativity”,
3. “Social-Valued education”.

This change lasted two years, but in Bulletin 2002-2003, this option disappeared. The interviewees did not refer to this change. In 2001-02 (Document 14, p. 27), as part of the dynamic search for an answer that would attract students to the Department and would rescue its future, the College, joint with the Department, offered an essential change in the specialisations’ form and contents, and a procedural change. The procedural change was - students were required to choose specialisation already when they enrolled to the Department. The essential change was rearrangement of the specialisations into three multi-disciplinary routes. The offered ‘Specialisation Routes’ were:

2. “The 'Integration Route' – for teaching the Humanistic Studies, and working with children with special needs, in regular classes”.
3. “The 'Creation-Society-Environment Route' - for teaching 'Israeli Studies', and by creative work and social activities. Moreover, the department trained for educational tasks in a-formal activities, beyond school, with a specific diploma of schools’ 'Trips organiser'” (Bulletin 2001-02, p. 27).

A1 elaborated on two routes “‘Humanistic Studies’ included: ‘Inclusion’ courses . . . and ‘Environmental Studies’, mainly Geography. It offered ‘Social and Guidance courses’, and also included ‘Art and Creativeness Studies’” (unit 218).
A5, A3 and A1 believed that this change would attract more students to the Department. But, students' enrolment did not increase. They enrolled only to the first two routes. So, in the next year, 2001-02 only two routes were offered to the students.

Thus, the Department, with the College’s support, offered:

1. A new mini specialisation (6 hours), so believed, attractive and essential for ‘Inclusion Studies’ (A3, unit 339).
3. Additionally, a new secondary multi-disciplinary cluster was introduced. It included ‘Inclusion’ studies, as an optional disciplinary cluster (Document 15, Bulletin 2003-2004, p. 30). (The interviewees did not refer to this change).

In summary, the Department’s influence on the T.E.C’s development was obstructed by:

1. The College’s preferences, including the Academic influences that were already mentioned, and will be elaborated in the Academic influence paragraph. Still, the College made efforts to cooperate with the Department and vice versa.
2. Financial restrictions, as was mentioned earlier in the College’s influences paragraph, and other directives that will be elaborated in the M.O.E’s paragraph.
3. Society’s influences that indirectly influenced the Department’s situation, as will be elaborated later.
4. The Students’ needs that directly influenced Department’s situation, as will be discussed later.

The Schools and the T.I indirectly influenced the T.E.C, mainly through the Department’s influence. These influences will be discussed in the relevant paragraph.
A dialogue Al held with the ‘Academic organiser’ demonstrated her insisting that the ‘Research Method’ course “would remain a unique departmental course, so the qualitative research method course would be part of the pedagogical counseling sequence, and the students would experience research in third year of study” (unit 248), “and not in the fourth year, at the ‘Induction’ stage” (unit 250).

A1 demonstrated part of the educational courses’ sequence:

“In the first grade we start from the ‘self’, then work on changing the perspective ‘from a pupil to a teacher’, and continue with ‘the entrance to school system’” (unit 264); then, they “study basic courses: ‘Introduction to Psychology’, ‘Education Thought’ and ‘Sociology of Education” (unit 262); “In the third year of study the experience a qualitative research, not an action research” (unit 249).

A1 only hinted upon the sequence considerations in the disciplinary part of the T.E.C:

“The first year offered tasting courses, Literature and Language courses in the ‘Humanistic’ route, Science Biology and Mathematic courses in the ‘Mathematic’ rout. The third route did not open, as there was not enrolment. In the second year they learnt courses as part of their main disciplinary specialisation” (unit 247).

b3. Integration

A1 referred to the integration question, emphasising the contribution of association between courses, and thus the attempts to link between courses when developing the T.E.C. A1 especially insisted on connecting between educational courses, pedagogical courses and the practicum, where she could more easily influence the curriculum. For example: “integration between the experience and the methodological qualitative research course” (unit 243); “It is important to link between theory and experiencing in the Research Method’ course, so the students will study in harmony with other tasks coordinated with the general pedagogic course” (unit 244); “the ‘Psychology of
Learning' course, in the second year of study, will remain a departmental course, and will coordinate with the pedagogical counsellor" (unit 245).

A1 neither referred to integration between courses in the disciplinary part of the curriculum, nor to integration between disciplinary, educational and pedagogical courses. She focused on integration from the students’ perspective. "They teach sequence of lessons, not necessarily integrative topics", because "they are not exposed to integrative teaching in the classes they teach", besides "they are not prepared for such teaching" (unit 267). Thus, students’ ability to experience integrative teaching is limited because they are not yet ripe for it, and because there is no much interest in such teaching in schools. This argument exemplifies the Learners’ and the Schools’ influence on the practical T.E.C.

b4-5. Choice + Differentiation

The following two characteristics seemed to be marginal. A1 recognised the importance of choice (Appendix 4b, units 232, 268) and differentiation (ibid. units 52, 235). A1 encouraged their inclusion in the educational-pedagogical and the practicum parts of the curriculum. But, specific ad-hoc factors - students’ numbers and the staff’s limited time, impeded the increase of their influence.

3.2.5.1.2.3 The T.E.C in the early 2000s

The T.E.C in the fifth phase were given to an intensive search for attractive answers that would increase students’ enrollment, and secure the Department’s future. Thus, both interviews and the documentary analysis demonstrated the Department’s hectic and daring efforts to give promising answers, and overcome the crisis.
3.2.5.1.2.3.1 Hectic changes

Forceful changes occurred in this phase, and both A3 and A1 referred to it. "We did so many interesting things for improving the training and the image, but nothing helped. We are not the only players in the arena" (A3, unit 353); "We change every year the disciplinary specialisations in the last three years" (A1, unit 213).

The stipulated alternative answers required the College's and the Department's a dynamic and flexible approach, and a tight dialogue to sort out conflictive interests. In this period three kinds of alternative answers were simultaneously offered: rearrangement of courses; partial students' integration in the High-School Section - individual combinations; and, change of specialisations.

a. Rearrangement of courses

The College offered cross-departmental courses as an alternative answer. Rearrangement of the departmental courses into cross-departmental courses was not at all noticed in the Yearly Bulletins. But, the information gathered by the interviews allowed: revealing processes that were not mentioned in the Bulletins; creating a more careful picture of the T.E.C's development; and deepening insights concerning the T.E.C. This information showed that A1 understood the College's constraints, and was willing to adapt the Department's T.E.C to the College's demands. For example: "The 'Academic organiser' asked me to check what can be learnt in cross-departmental courses, and what has to be kept as unique courses" (unit 33); "Foundation courses: English, Computers, and 'Academic Writing' are already cross-departmental courses" (unit 46); and "Psychology of Education' and 'Sociology of Education' will turn next year to cross-departmental courses" (unit 53). But, she persistently defended the Department's unique needs,
Special Note

Page 278-280 missing from the original
3.2.5.1.3 The Learners’ influence

Two kinds of Learners’ influences appeared in the functionaries’ references:

3.2.5.1.3.1 Proactive influence, which enhanced T.E.C’s adaptation to students’ needs and expectations

This type of the influence fostered:

1. Introduction of new courses in order to improve students’ competencies and/or knowledge. “We added inclusion studies, as students needed to be exposed to these aspects, for their class experience”, and “as students’ knowledge is limited they got extra disciplinary professional tutoring in the students’ specialisations” (A1, units 176, 185).

2. Development of courses adjusted to students’ level of study. “The students’ abilities influence the counsellors’ interpersonal work” (A1, unit 178), and “Students could learn according to their personal level only two basic courses – English and Computers. Now we prepare differential teaching Language courses” (A1, unit 182).

3. Choice options as an educative principle. “We leave some space open for the students’ own choice, either choice in lessons’ time, or choice between specific courses” (A3 unit 350).

4. Students’ involvement in the T.E.C’s development. The students indirectly influenced the T.E.C. “Complaints regarding deficiencies or extras in the T.E.C” (A5, unit 374) are considered, despite the Department’s discontent “Once the staff decided . . . Now the College encourages students’ participation in designing their T.E.C” (A1, unit 190).
3.2.5.1.3.2 Reactive influence, which demanded the T.E.C’s adaptation to students’ needs and expectations

Learners’ reactive influence referred to two interrelated matters – the limited students’ enrolment and the race after attractiveness that would tempt students to join the Department. These matters had an impact on the Department’s:

1. **Decreased ability to maintain autonomous T.E.C.** The Department could not maintain itself, thus “Students had to fit into exciting courses with students from other departments” (A3, unit 295).

2. **Increased race after attractiveness.** Attractiveness intended to attract new students as there was “a drastic reduction in students’ enrolment”, and “to attract actual students who “required choice studies (and the Department) wanted to enable them” (A1, units 24, 176).

3. **A Need to satisfy students.** An eager to satisfy the students appeared mainly in one area – specialisation. A1 stated: “We will enable students to specialise in specialisations they want” (unit 180); “If a student choose History I will find a creative solution for her” (181), and “I listen to the students’ needs and expectations” (189a).

4. **Addition of choice courses in order to advance enrolment.** Choice seemed to be a means for solving students’ requirements. “Now we allow students to choose courses offered in other departments in our section, and in the ‘High-School Section’” (A3, unit 259a). But, the choice options were limited so “Students are obliged to choose between given options” (A1, unit 39).

5. **Response to Students’ complains / demands when developing T.E.C.** Responding the students has become a common phenomenon. "Most students work for their living, and cannot attend schools during the semester brake time, thus next year we
shall change it”, and “Students know their right . . . they do refuse experiencing in September, before the academic year starts” (A1, units 179, 186).

In summary, the Learners’ influences were reactive rather than proactive. Students influenced the T.E.C mainly by not being there, or by complaining on what is there. The proactive influence showed attempts to improve the Department’s T.E.C according to its deep educational beliefs. The reactive influence showed attempts to attract students to the Department and ensure its existence.

3.2.5.2 External influencing factors

3.2.5.2.1 The Schools’ influence

The Schools’ influence increased in this phase. It seemed to be a by-product of the partnership establishment. Partnership allowed developing a straight dialogue between the schools and the Department. “We created a forum of the pedagogical counsellors and the schools’ headmasters that meets several times a year. The headmasters bring the field’s voice . . . expectations from our graduate students” (A1, unit 272).

It let the Department exposing ‘weak’ theoretical and practical aspects in the T.E.C, from the schools’ perspective, and accordingly readjusting them. “Messages from the field revealed frustration from students’ readiness to schooling” (A5, unit 374), and a complementary response “We decided to ‘adopt’ some new most common changes in the field, and accordingly adjust our T.E.C” (A5, unit 303b).

This influence enabled the Department to get exposed the schools’ reality, and consequently to make the T.E.C more flexible, so to allow:

a. Adopting matters, so believed, central to the schools reality and relevant to the T.E,

b. Adapting these matters to the theoretical and the T.E.C’ practical parts. pointed out:
The different functionaries reaffirmed: "We could not ignore the fields' needs"; "Headmasters looked for teachers acquainted with strategies that enable them to . . . manage a class . . ." (A1, units 272, 273); "Partnership vastly influenced the T.E.C. We adapted the T.E.C to the schools' beliefs and needs — excluded or included courses, changed foci or re-emphasised ideas" (A4, unit 307).

These relations facilitated the Department's ability to actually adopt the schools’ specific interests and expectations. The Department ‘updated pedagogical approaches, as to meet “Directions the M.O.E has assimilated in the schools” (A1, unit 304). It ‘Adjusted Teaching’ and ‘competencies for managing heterorganic classes’, “We integrated ‘Adjusted Teaching’ elements ‘Inclusion’ principles, which were central to the schools' agenda into our pedagogy courses and the practicum” (A4, unit 305).

The interrelations between the schools and the Department encouraged mutual influences. The schools “Influenced the formation of the practicum, and we made more flexible plans, adaptable to the schools' needs (A4, unit 302). Yet, “As part of the practicum reorganisation . . . pedagogical courses' contents changed . . . I can see that the field influences these changes” (A3, unit 333).

Still, the dilemma of the extent that the College and the Department should respond to the schools' requirements and expectations has been left open. For example: “We constantly ask ourselves whether we should react the schools' demands, or should we have an active role . . . we are hysteric about Mathematic achievements, and the exams' results, but the schools put us into a stressing pillory” (A3, unit, 298), furthermore “Should we positively respond to the inspectors' recommendation to elaborate specialisation in Mathematic, or should we stick to our beliefs and attitudes? . . . We are caught between the hammer and the anvil” (A3, unit, 299)
The influence of this area increased in this phase as a consequence of a real change in the interrelations between the Department and the partner-schools. Still the influence affected specific matters of the T.E.C and not their general disposition.

3.2.5.2.2 The Academic influence

Academic influences had a significant impact on the T.E.C’s development.

'Three aspects were demonstrated in the functionaries' references to this factor:

a. General Academic influences on the T.E.C

- The T.E.C became fragmental, and uncared for their holistic layout. “The curricula became fragmental. This caused a contradiction between our desire to develop a holistic picture of reality, and the academic demand to zoom into distinctive matters” (A3, unit 294)

- New academic research caused changes in the T.E.C. “Current researches in the area of primary school indicate a need to rethink certain things included in the T.E.C, and demand their changing” (A3, unit 374)

- The balance between the academic and the educational focus changed, in favor of the academic dominance. “We have a qualitative research course, which we are pleased with. But, there is a demand to add a quantitative research course, in order to guarantee M.Ed” (A3 unit 334). “A ‘Quantitative Research’ course was compelled on us . . . We questioned for what students need to study it. She won” (A1 unit, 153).

b. Academic influences on traditional-educational aspects

Academic concerns turned disciplinary knowledge more important than educational processes. Thus, the traditional students’ evaluation process was abolished. “Previously we had students’ evaluation meetings. Now the students are scattered among different courses . . . there is no point in it”. Besides, “The university-oriented staff de-legitimates
the existence of such meetings, claiming for un-ethical aspects, they regard only absolute grades as important” (A1, units 154, 154a).

c. Consequences of the Academic influences

The Academic influence showed vast implications on the College’s culture in three aspects.

c1. Acceptance high academic staff members

The College accepted only high academic staff members, who didn't experience teaching. A1 reaffirmed: “The College accepts now academically qualified teachers that have never met a real child” (unit 71). Thus, the staff was divided into two unfriendly and even hostile groups. “The Academic atmosphere created two groups of teachers - education oriented teachers, even if they did not teach education studies, and disciplinary orientated teachers, who ignored education interests” (72). Besides, staff members did not actually show a real interest in education concerns; they only worked in the College. “More teachers belong to the university and also work in the college . . . they regard pedagogy and didactic studies as a waste of time” (83).

c2. Establishment of a Research Section

The College established a ‘Research Section’, which encouraged and operated research. This section had its own agenda, and did not always give answers to relevant Department’s needs. “We evaluated the Department's T.E.C, as the 'Research and Evaluation Section' dictated long time processes” (A1, unit 150)

c3. Changes in the approach to the students

The approach to students has changed. The cohort system has been limited. “Students get only rarely united to mother-classes” (A1, unit 154c). Besides, the new staff criticised the holistic approach that regarded students as learners, who develop during their studies.
“Members of staff . . . think that our students are treated like pupils and not like academic students” (A1, unit 156).

In summary, Academic influences directly and intensively influenced the College’s preferences and its structural and pedagogical culture. They less directly and less intensively influenced the Department’s agenda. Thus, the ‘Academic’ influences caused a turning point in the College’s and the Department’s proceeding. They caused contentious relations between the College that easily adopted them, and the Department, which hardly adopted them.

3.2.5.2.3 M.O.E’s influence

The functionaries differently accepted the M.O.E’s influences. A5 accepted them, A3 was ambivalent, and A1 mostly rejected them.

Four main issues were revealed in the functionaries’ reference to this factor:

a. ‘Costs’ and consequences of the M.O.E’s budget restrictions

A1 specifically elaborated on the M.O.E’s budget restrictions. The M.O.E’s restrictions caused immediate and gradual implications, which limited the Department’s ability to establish deep curricular changes that required financial recourses. It could only cosmetically and superficially change the T.E.C. “Many things are cancelled because we roll stones, but we cannot add stones . . . “We tried to construct a new structure, but it offered mainly cosmetic changes . . .” (units 28, 159). Besides, ‘tasting’ courses was abolished as a result of the budget restrictions. “As a consequence of the reductions . . . we could not afford ‘tasting’ courses, these became ‘luxury’” (160).

A1 claimed that gradually, the continuous restrictions decreased Department’s ability to give sufficient answers to students’ needs, and damaged the College’s level. “We want to
give the students more, but the financial restrictions limit it” (unit 27) . . . “The M.O.E’s financial restrictions damage the level of College” (32).

b. ‘Costs’ and consequences of the M.O.E’s intervention policy

A4 showed a turning point in the College’s and the Department’s role as an ‘Intervention Body’ in schools. A4 noticed that the M.O.E’s new policy allowed and even encouraged involvement of semi-commercial ‘Intervention Bodies’ in schools, thus indirectly limited the College’s role in initiating changes in schools. “. . . Since the M.O.E supports ‘Intervention Bodies’ to profoundly influence the schools, the College became a reacting ‘Intervention body’ rather then a leading body” (unit 303). “The intervention bodies limited the College’s educational influence, but they never had a direct influence on the College” (303a)

c. The M.O.E’s pedagogical directives

The M.O.E’s pedagogical directives / initiatives demanded change of emphasises. “The M.O.E demands rearrangements of certain disciplines or forces change in the College’s financial policy” (A5, unit 375). The M.O.E limited the Department’s freedom and flexibility in arranging the T.E.C according to its beliefs, and actually prevented the implementation of a Departmental new educational policy. “We created a mini special education specialisation, but the M.O.E . . . resisted, claiming that we are not expert in special education” (A1, unit 162).

From a different perspective, the M.O.E’s preferences influenced the students’ enrolment to specific specialisations. “The M.O.E granted students who specialise in Mathematic, thus many joined this specialisation” (A1 unit 161).
d. The Department’s reaction to the M.O.E’s pedagogical and budget policy

The Department rationally responded to the M.O.E’s policy. It ambivalently referred to some of the M.O.E’s demands, partially agreed with them, but tend to regret the ‘costs’ required from the educational matters. “We feel ambivalent towards the M.O.E’s recommendations . . . we want that teachers will be first of all educators . . . we also want that they will be have rich disciplinary knowledge” (A3, unit 299a)

The Department kept the general directives set in the ‘Guidelines’. “We are fully obligated to the M.O.E’s regulations and the C.F.H.E ‘Guidelines’ (A1, unit 158). Yet, it did not immediately respond to the M.O.E’s renovations, and remained faithful to its beliefs. “The M.O.E demands 36 hours for specialising in Mathematic . . . The inspectors expect that we shall follow this demand, and even threaten us” (A3, unit 365) . . . “We don’t hysterically respond to the M.O.E’s recommendations . . . We have never been too extreme in the Literacy orientation . . . We rethought our programs in Mathematic and Reading, and adapted them if needed. We try to keep loyal to our professional backbone” (A3, unit 366).

The Department integrated in its staff some counsellors who worked for the M.O.E. This step encouraged the staff’s professional development. “There are in the Department some teachers who belong to the M.O.E’s pedagogical centres . . . (it) contributes to the Section and the Department” (A3, unit 168).

In summary, the M.O.E’s influences caused resistance, and even rejection in the Department’s level, and a reserved acceptance in the College’s level. The M.O.E’s exposed restrictions had a direct impact on the College’s budget, and inevitably limited the Department’s ability to freely develop its curriculum. The M.O.E’s preferences actually limited the College’s responsibly for intervening in schools’ reality, and the Department’s ability to open new specialisations. The M.O.E’s preferences also had a
direct impact on specific disciplines included in the Department's T.E.C, either by their prevention (Literacy) or by their encouragement (Mathematic). Still, at a local level, the Department benefited from association with counsellors who worked for the M.O.E.

3.2.5.2.4 The Society’s influence

The Society’s influence increased in this phase. Society’s pressures transferred a continuous discontent from the schooling, and illegitimated the T.E system. “Recently we changed three times the T.E.C, but nothing really happened . . . students do not want to be primary school teachers, who work so hard, do not get positive appreciation, rather public low image” (A3, unit 352). Besides, “Non-professional public influences associate easier with the Academic voices and accept the M.O.E’s voices that push for norm tests and Excellency” (357).

The Society’s influence had a negative impact on the enrolment to the Primary School Department, as it damaged the teachers’ image, and discouraged potential candidates to enroll to the Department. Besides the Israeli societal complex situation demanded care when developing the T.E.C, and determining potential sensitive courses. “We do not have a course that focuses on Jewish identity, rather a course on identity in general, because such a course opens a dialogue and enables including the Arab students who study in our college” (A1, unit 289).

On the surface, when referring to the functionaries’ intensity or elaboration on this area of influence this area seemed to be marginal. But, this influence had an indirect acute influence on the T.E.C. The teachers’ low image affected the enrolment to the Department, and thus its ability to develop and even keep autonomous T.E.C, as already mentioned.
3.2.5.2.5 The Technological Innovation influence

Only A1 referred to this area of influence, demonstrating a new project. “We introduced a new project, a distance learning class, which communicated mainly and e-mail” (unit 285). This influence, thus, seemed to be the least significant.

3.2.5.3 The fifth phase – Analysis of the T.E.C

The T.E.C in fifth phase have been significantly different from the T.E.C developed in previous phases. The analysis of Tables 55A-57A (Appendix 7) demonstrated general conceptual and specific conceptual changes in this phase.

3.2.5.3.1 Analysis of the T.E.C presented in Tables 55A-57A (ibid.)

3.2.5.3.2 General conceptual changes

These changes demonstrated breaking off from the traditional T.E.C, and a loosening loyalty to the curriculum approved at the ‘Academisation’ stage, or to the College’s historical beliefs. They revealed two kinds of deep changes in the Department’s and the College’s beliefs on what should be learnt, and how the T.E.C should be developed.

3.2.5.3.1.1 Changes that demonstrated loosening loyalty to the T.E.C defined at the ‘Academisation’ stage (1986)

✓ Change in the traditional ‘Education Studies’ part.

In 2000-01 three sub-specialisations in the ‘Education Studies’ were introduced. These sub-specialisations fostered deepening the education studies (Appendix 7, Table 55A). This option demonstrated the Department’s influence.

✓ Change in the traditional ‘Compulsory studies’ part.

The ‘Compulsory Studies’ part changed into the ‘Foundation studies’ part, already in the early 1990.
In 2000-2001 the 'Foundation Studies' re-organised. The 'Arts' studies, which since 1986, were part of the 'Compulsory Studies' and regarded as 'Qualifications', split from this part, and created a new sub-group of 6 hours. This change demonstrated a conceptual change (sign (=)) that strengthened the Arts’ place in the curriculum. The detailed specific course’s names (sign ^) supported it (ibid.).

In 2001-2002 the ‘Foundation Studies’ were re-organised, and studies split to: ‘Foundation Studies’ that included: Computers, Academic writing, Physical education and English; and ‘Compulsory Studies’ that included: Arts, Judaism and Language (ibid.).

In 2000-2001 and 2001-02 courses that in previous phases were included in the ‘Compulsory part’, and were regarded as general basic courses, turned to be counted as ‘Specialisation studies’ courses, and were presented in a distinctive table (Document 13, p. 26, Document 14 p. 32).

In 2003-2004 the ‘Foundation Studies’ reunited. All four courses included in this part in 2001-2002 remained. ‘Arts’ and ‘Language’ became part of a new sub-group of courses named ‘Basics for the primary school teacher’ (Appendix 7, Table 53A).

Change of the common Disciplinary clusters.
In this phase a multidisciplinary orientation was introduced (Document 14, the 2001-02 Bulletin, p. 27; Document 15, the 2003-04 Bulletin, p. 30). This orientation shattered the classic Academic influence that enhanced the study of pure academic disciplines, and forwarded a more educative approach. This change was a combination of the Department’s the College’s influence.

Change of the ‘Specialisation Studies’ scope.
In 2003-2004 the scope of the major specialisation was elaborated from 22-24 to 28-30 hours and one optional mini-specialisation was elaborated to a secondary
specialisation of 8-10 hours. These elaborations were on the account of the four or five elective mini-specialisations of 6 hours each, which were determined at the ‘Academisation’ stage. The rest two mini-specialisations turned to compulsory mini-specialisations (Document 13, the 2000-01 Bulletin p. 25; Document 15, the 2001-02 Bulletin p. 30). This change was a combination of the Department’s and the College’s influences.

✓ Change in the traditional ‘Disciplinary Specialisations’ part.

- In 2000-01 the major and the secondary ‘Specialisation Studies’ were not presented as a distinctive part. They were not presented in details; only their scope was indicated. A detailed list of courses for the two compulsory mini-specialisations was presented. In addition, a list of compulsory courses that were counted as ‘Specialisation Studies’ courses was presented (ibid.).

- In 2001-02 a significant conceptual change occurred (sign (=)). The disciplinary ‘Specialisation Studies’ turned into multi-disciplinary ‘Specialisation routes’. Each route presented in details distinctive lists of the courses needed for accomplishing the first year of study. A general Table for the ‘Specialisation Studies’, like the one presented in 2000-01 presented courses for the second-fourth years, for those who already started learning, and will continue learning the ‘old’ curriculum. Besides the inconstancy in the ‘Specialisation Studies’ layout, the placing of this part changed. It appeared now first in the yearly Bulletin, as to symbolise its centrality, and attract students to the Department (ibid.).

- In 2003-2004 another significant conceptual change occurred in the organisation of the ‘Specialisation Studies’ (sign (=)). Four new things emerged: 1. A list of six possible major ‘Specialisations’ was presented without courses’ detailing. 2. An option was opened to combine primary school studies with specialisation in
‘Humanistic’ studies in the ‘High-School section’. 3. In addition, a new multidisciplinary specialisation was introduced in details. 4. A new option for ‘License studies’ was opened, which offered specialising as a ‘creative teacher’ or as a ‘computerised teacher’, in addition to the disciplinary specialisation studies (ibid. Document 15, pp. 28, 30). The Department influence in these cases was salient.

3.2.5.3.1.2 Change of the T.E.C’s presentation concept

In the 2000s the T.E.C were presented, for the first time, as whole pictures. They were presented as tables that included lists of courses for the four years of study, per hours, organised in distinctive parts. In previous phases the T.E.C were presented as specific timetables for yearly groups of study, which made it difficult to get a whole picture of the T.E.C. Thus, the Tables presented in this research, for T.E.C in previous phases, were created from these timetables.

Specific changes

These changes demonstrated differences in the Department’s and the College’s beliefs on what should be learnt, in the courses’ level, and how should specific curricular matters be shaped. These changes pointed out that the phenomenon of restless, which appeared in previous T.E.C reappeared in this phase. The restless came out in four main kinds of specific changes, which were principally similar to the differences occurred previously, but in a different dispersal and frequency. Most changes stemmed from specific conceptual matters that caused:

a. Change of courses names (sign *)

Change of nine courses’ names was salient in this phase. It revealed three main reasons:

I. Academic influences:
a. The name of the course ‘Sociological basics in education’ offered in 1986, was changed since the early 2000s to ‘Sociology of education’.

b. The name of the course ‘Psychological and Social processes in class’ defined in 1986, changed into ‘Psychological and Social factors in class’ in 1991-92, and in the early 2000s to ‘Social Psychology’.

II. Educational-Departmental influences:

c. The ‘General Didactic’ course, offered in 1986, was changed to ‘General Teaching and Didactic theory’ in 1991-92, a name with an academic flavor. In the early 2000s it was changed again to ‘Pedagogical counselling’. This name emphasised now educational matters.

d. The name of the course ‘The irregular child’ was changed into a less negative name ‘Children with special needs’ in the early 2000s.

III. The College’s influence: The name of the course ‘The nature of our country’ defined in 1986, was changed in 1991-92 to ‘Biological Studies - The seasonal fauna and flora’, and again in the 2000s to ‘Nature and Environment’ symbolising a less indoctrinated reference to nature. This change cautiously indicates that the College was less committed to its traditional credo (similar to the fourth phase).

b. Addition of courses (sign ^^)

Addition of nineteen courses was the most salient phenomenon in this phase. It stemmed from four main reasons:

I. ‘Academic’ influences penetrated to the Education studies’ part, in 2000-01, with one-hour course - ‘Educational research’. In 2003-04 this course was elaborated to two distinctive one-hour courses - ‘Educational-qualitative research’ matters attached to the course ‘Teacher as an educator’, and the ‘Educational-quantitative research’ course. This elaboration demonstrates the T.E’s interest in interweaving
theoretical academic matters into the T.E.C (Appendix 7, Tables 53A, 55A). Another course was the ‘Seminar’ offered in the fourth year in the 2000s. Academic influences also penetrated to the Foundation studies’ part, with the one-hour courses - ‘Academic Writing’ in 2000-01 and 2003-04, and the ‘Directed Reading’ course attached to other courses, such as to the ‘Educational thought’ course in 2000-01 (Appendix 7, Tables 55A, 57A). The introduction of theses courses demonstrates the T.E interest in enhancing practical academic competencies into the T.E.C.

II. Educational-Departmental influences reflected educational matters that were directly influenced by the Departmental staff’s beliefs, and indirectly influenced by: Learners’, Schools’ and Society’s expectations and/or needs for example: ‘Critical T.V watching’, ‘Cognition development and thinking processes’, ‘Class Navigation’, ‘From a learner to a teacher’, ‘Inquiry learning’, ‘Curriculum planning’, ‘Teaching in an heterogeneous class’, ‘Educational-qualitative research - attached to the course ‘Teacher as an educator’, ‘Norm and Reading defects’, ‘Norm and Mathematic defects’. These courses fostered students’ personal and professional development, and provided the students with advanced teaching strategies and ‘tools’. Additionally, these courses demonstrated change of expectations from the T.E and new educational beliefs.

III. The M.O.E’s influences. These influences either directly or indirectly influenced the T.E.C. The ‘First aid’ and the ‘In-service workshop’ courses were introduced to the curriculum as a direct response to the M.O.E’s directives. The course ‘New pedagogic concepts’ was added as the Department’s indirect response to the M.O.E’s initiative for schools’ ‘Core curriculum’. At this point the Department’s role was central.
IV. **The College's influence.** This was an indirect influence, as the College supported the introduction of courses into the T.E.C.

c. **Change of courses' scope (sign ↓)**

The scope of ten courses was changed in this phase, as a result of two reasons:

I. **Educational-Departmental superiority, which caused widening of courses’ range, on the account of other courses' scope.** For example: the scope of the course ‘Introduction to developmental Psychology’ was reduced from two hours to one hour. The scope of the course ‘Language’ was reduced from six hours in 1986, to four hours in 2001-01, and to two hours in 2001-02 (Appendix 7, Tables 55A). Still, the scope of the course ‘Measurement and Assessment’ increased in 2001-02 from one hour to two hours, as to emphasise accountability concerns, central to the Department’s educational belief.

II. **Increased competition between Departmental-educational matters, College’s and Academic matters, which caused diminishing of hours.** For example:

- The scope of course ‘Educational thought + Directed Reading’ was reduced in 2000-01 from two hours to one hour, in spite of its renewed academic emphasis.

- The courses ‘Class navigation’, and ‘The cognition development and thinking processes’ were added in 2000-01. A year later in 2001-02 their scope was reduced from one hour to half an hour.

- The scope of the ‘Mathematic’ and ‘Science’ courses was reduced from three hours to two hours, and the scope of the ‘Computer’ course was increased from two to three hours in 2000-01, and in 2001-02 reduced to one hour.

d. **Change of organisation (sign +).** The organisation of two groups of courses was changed in this phase – the didactic studies and the cluster the ‘**Build up of the Israeli state**’.

297
I. The ‘Didactic studies’ - In the fifth phase, the ‘General Didactic’ studies that included in 1986 fourteen hours turned to be ‘Pedagogical counselling’ studies that included twelve-hours. The one-hour ‘Language Didactic’ and ‘Methods for imparting reading and writing teaching’ courses remained, though the ‘Methods’ course moved vertically, from the first to the third year of study, and the two-hour ‘Mathematic Didactic’ course was cancelled. In the 2000-01 there were four Didactic hours two in the second year and two in the third year, on top of the ‘Pedagogical counselling’ studies. In 2003-04, the ‘Didactic studies’ included eight hours, four in the second and four in the third year of study. The reorganisation of the didactic studies demonstrated a decrease in their centrality, since the ‘Academisation’, and increase of the ‘Academic’ influence.

II. The cluster ‘The build up of the Israeli state’ – In the fifth phase the six-hour compulsory cluster that represented the College’s traditional credo, has fallen apart, as part of the decrease in the uniqueness of ‘A’ college. Only some sporadic courses remained: the two-hour course ‘Israeli studies’, and the one-hour courses ‘Jewish and Israeli Identity’, which moved to third year of study, and ‘Holocaust studies’ remained.

In summary, the four specific changes demonstrated more than a feeling of the T.E.C’s intensive restless. They demonstrated the T.E.C's dynamism and flexibility.

All other changes were less salient in this phase. The ‘Move of courses between years of study’ (sign @) occurred only twice, and both examples were already mentioned in the previous paragraph, when describing the reorganisation of the ‘Didactic studies’ and the compulsory cluster ‘The build up of the Israeli state’. Courses organised according to individual level (sign (")) appeared only once in 2003-04, in ‘English’ studies. Few courses in 2001-01 and 2001-02 split: the ‘Children’s Literature’ course

298
split, one hour was studied in the first year of study and the other in the second year, and the Music and Visual art courses split between years of study. Few courses in 2003-04 offered choice between years of study (sign <), such as: 'Class navigation and behaviour analysis', 'Measurement and Assessment'. There were neither choice courses (sign ~) nor 'swap of courses' (sign =) in this phase. These changes could be conceptual as well as administrative, thus, they demonstrated influences of both the Department and the College.

The analysed T.E.C in this phase showed a sharp decrease in the College’s unique pedagogical characteristics, regarding the four preferred directions that represented the College’s multifaceted commitment to the association to Israel as a homeland (sign (a.), (b.), (c.) and (d.)). The T.E.C in the 2000s offered only few courses that represented commitment to the traditional agenda. The (d.) type of direction ‘Kibbutz studies and the Joint education’ completely disappeared from the T.E.C in the 2000s. The (c.) type of direction ‘Socialistic studies and labor values almost’ was left with one representative course ‘Israeli studies’. The (a.) type of direction ‘Nature studies and studies of the Geography of Israel’ was left with two representative courses ‘Nature and Environment’ and ‘Seasonal Nature’. The (b.) type direction was relatively dominant with eight offered courses.

The M.O.E’s directives for compulsory Jewish studies (at least four hours), and the College’s lasted deep belief in their centrality to the T.E can explain the variety of courses the (b.) type in current T.E.C. The three other types were not relevant in the 2000s, as a consequence of ‘Society’s’ and ‘Academic’ influences that competed with the educational beliefs and won.
3.3 Summary

The T.E.C analysis complemented the interviews’ analysis, but allowed portraying a complex, multifaceted picture of the T.E in the primary school department in ‘A’ college. The analysis re-emphasised the centrality of the College’s and the Department’s influences on the T.E.C, but it exposed a difference, between the fourth and the fifth phases’ results, regarding the dominance of these influencing factors.

When referring to the external factors in all analyses – the Questionnaire’s close and open parts, and the Case study’s interviews’ results demonstrated the dominance of the Schools’ influence on the T.E.C’s development. The Questionnaire’s open part, which A1 and A2 took part, showed 31 units, almost equal to the 32 units given to the Academic influence; the results of the Case Study’s fourth phase showed 8 units of meaning for the Schools’ influence, almost equal to the 7 units given to the Academic and the M.O.E’s influences; the results of the Case Study’s fifth phase demonstrated a clear dominance of the Schools’ influence, with 37 units, whereas the Academic influence, which came next, got only 32 units, and the M.O.E only 23 units (Tables: 13, p. 199; 14, p. 247; 15, p. 267). The Society’s and the T.I influences received insignificant reference by the respondents and the interviewees, and seemed to be marginal.

When referring to the internal factors in all analyses – the Questionnaire’s close and open parts, and the case study’s interviews’ results demonstrated the dominance of the influences showed a disagreement. The Questionnaire’s close part demonstrated that the Colleges’ influence was the most dominant, and followed the Departmental influence. The Questionnaire’s rating part revealed rather the dominance of the Departmental influence. The Questionnaire’s comments’ part demonstrated the same results. The Questionnaire’s open part revealed the dominance of the Departmental influence with
125 units of meaning, whereas the College’s influence showed about a third – 35 units (Table 13, p. 200). This gap can be explained by the respondents’ personal involvement in the Department.

The case study’s results demonstrated that the College’s and the Departmental influences in the fourth phase were equal, with 27 of units of meaning given by A2. In the fifth phase, in contrast with, the College’s influence seemed to be more significant. It got from A1 and all other Functionaries more then double units of meaning then the Department’s influence got (181 versus 82).

The ‘Learners’ influence in all analyses was the least dominant among the internal influences, but the number of units of meaning almost reached the number of units of meaning the most dominant external influencing factors achieved. The Learners’ influence was high above the M.O.E’s, the T.I and the Society’s influences.

In general the specific Case Study’s results corresponded with the survey’s results (the Questionnaire’s results). They reaffirmed the survey’s results, but additionally allowed revealing deeper insights. The Documentary analysis and the interviews’ analysis enabled further elaboration of the picture received from the influencing factors’ impact on the T.E T.E.C’s development. The Documentary analysis and the interviews’ analysis exposed hidden aspects, which might change the ratio of different influencing factors’ impact on the T.E.C. The analysis of the ‘Yearly Bulletins’ and the interviews revealed that Academic, M.O.E’s, and Society’s influences have directly and consciously influenced the College’s preferred directions when developing the T.E.C. The analysis of the ‘Yearly Bulletins’ and the interviews exposed Academic, M.O.E’s, and Society’s influences that have slightly, not necessarily directly or consciously, influenced the Department’s impact on the T.E.C’s development. The disharmony caused by the direct,
massive and conscious influences versus the indirect, 'slight' and unconscious influences, partially explains the continuous tension between the College and Department, as already noticed. Besides, the revealed hidden aspects may cause a further analysis of the centrality, not the dominance, of the Academic, the M.O.E's and the Society's influencing factors to the development of the T.E.C.
Chapter Five  Discussion

This chapter begins with preceding comments on the study's purposes and methodology. Then it discusses the meanings and the implications of the main findings, with regard to the study's purposes. It associates the meanings and the implications with the knowledge on T.E. and T.E.C, presented in the literature review (L.R), in the view of: 1. The refined 'Conceptual framework for the T.E.C's influencing factors, adapted from Stark et al. (1986), and Stark and Lattuca (1997), 2. The aspects or areas of commonality and difference revealed from the study, 3. The preferred directions that have influenced the T.E.C with regard to the contemporary worldwide main approaches indicated in the L.R, and the correlated ideal graduate teacher types, 4. Dilemmas revealed in the T.E.C, 5. Finally, conclusions resulting from the study, recommendations and contribution to the T.E and the T.E.C.

1. Preceding Comments

✓ This study examined the factors that have influenced T.E.C in Israeli C.F.T.E, in the last twenty years, in the primary school departments. This examination considered external and internal influencing factors. It examined areas of commonality and difference in the Departments’ T.E.C. It indicated the preferred directions influencing the T.E.C, which can be regarded as indicators of tomorrow’s teachers’ education.

Furthermore, the examination allowed deeper understanding of the T.E.C’s main characteristics. It enabled identifying the extent of different factors’ influence on the T.E.C’s development, and their interrelations, and interpreting the revealed phenomena. It enabled pinpointing on the actual conflicts and dilemmas caused by these influences, and the different curricular answers given by the Departments.

Additionally, this study facilitated the understanding of the T.E.C’s development complexity, which resulted from the constant search for a balance between the various external and internal factors, as to increase the T.E.C’s coherency and
consistency. It illuminated the tensions originating in differences between the local, contextual–environmental circumstances and interests, presented by the various internal influencing factors, and the general interests, demands and expectations, presented by the various external influencing factors.

This study has been undertaken near the end of the ‘Academisation process’. This period was supposed to be a period of a relative relaxation, in which the policy makers, at the M.O.E’s level, should have devoted their efforts to deepening the understanding of the results, achieved in the process, and their implications on the T.E system. Instead, this period ended with the M.O.E’s objecting voices, demonstrating disappointment from the education system and the T.E system. The M.O.E appointed two official committees in order to examine the T.E system - Ben-Peretz’s committee (2001b), and Dovrat’s committee (2004), which have undermined the achievements gained by the ‘Academisation process’, and recommended reorganisation of the T.E system. Thus, the T.E system, and the primary school departments in particular, have reached another crucial turning point, which deserves further research.

The study has been based on a questionnaire, which functioned as a survey that was conveyed to all current and former primary school H.O.D in secular Jewish C.F.T.E, and a Case study. It used three kinds of resources for the data gathering: H.O.D’s responses to the Questionnaire’s close and open parts; semi-structured interviews with current and former H.O.D, with other Functionaries from the chosen College for the Case study, and with Functionaries from the M.O.E to achieve a more rounded picture regarding the M.O.E’s expectations of the primary school Departments’ T.E.C. Additionally, Documents were gathered, so as to enrich and elaborate the data,
and get an historical perspective on changes occurred in the researched Department / College in the last twenty years. The Case study chosen has been the biggest C.F.T.E, one of the first Colleges in the state of Israel, and a College that has changed its unique societal credo, in the course of time, as a result of a change of combination of general and local circumstances.

Macro interest studies tend to be tendentious and to question predisposed T.E.C's linkages to social, political and economical influences, in order to criticise them (Beyer and Zeichner, 1987). This study followed the interpretive methodological tradition, in order to build a comprehensive interpretation, as indicated by Guba and Lincoln (1994) and Schwandt (1994). Thus, it used participants’ viewpoints regarding the factors that have influenced the T.E.C, instead of predisposing linkages between specific influencing factors. It analysed these viewpoints, and accordingly explained the researched phenomenon.
2. Meanings and the implications of the main findings, in context of the study’s purposes

2.1 The external and the internal factors that influence the T.E.C’s development

The Questionnaire and the case study analysis showed a clear picture of the external and the internal factors that have influence the T.E.C’s development. They also revealed the extent of impact, regarding the different influencing factors, on the T.E.C’s operations.

The influencing factors introduced in the L.R, and presented in Figure 1, p. 53, created the basis for the Questionnaire’s development. Consequently, the Questionnaire and the Case study results exposed different expected aspects, such as the: actual factors that influence the T.E.C’s development; existence of areas of commonality and difference; and the actual directions and trends that drive the T.E.C. But, the results also revealed some clear and significant unexpected aspects, such as: the extent of the influencing factors’ impact on the T.E.C; the interrelations between the different internal factors; the interrelations between the different external factors; and the interrelation between the internal and the external factors. Eventually, the unexpected results deepened the understanding of the different influencing factors’ role in developing the T.E.C.

The results proved the dominance of the internal factors’ impact on the T.E.C’s development. This was especially demonstrated in the Questionnaire’s close part through the rating of the most important statements (Table 10, p. 179). It was also significantly demonstrated in the Questionnaire’s open part results (Table 11, p. 194), and in the Case study results (Tables: 12, p. 243; 13, p. 258). The Questionnaire’s open part results and
the Case study results revealed a ratio of nearly 1:3 responses in favor of the internal influences against the external factors.

The Questionnaire’s open results also reveal the salient, though complex, interrelations between the internal influencing factors, especially between the Colleges and the Departments, but also between the Departments and the Students. In addition, the results reveal less salient interrelations between some of the external influencing factors, especially between the M.O.E and the Schools, but also between the Society and the M.O.E, and between the Academic research and the M.O.E. The results also reveal the most significant interrelations between the internal influences, mainly the Colleges’ and the Departments’, with the external factors. These interrelations had a vital impact on the T.E.C’s development, as they determined the extent of the different factors’ influence, and their translation to actual T.E.C’s dimensions. The Case study’s results reaffirmed the existence of these interrelations, and their impact on the T.E.C.

Not only the amount of participants’ references proved the internal factors’ significant role in the T.E.C’s development. The endless curricular changes appeared in ‘A’ College’s Yearly Bulletins since the early 1990s (the fourth and the five periods), and even earlier, confirmed and reaffirmed the changes resulted from the College’s, the Department’s and even the Students’ influences on developing the T.E.C. These changes represented unique, micro level changes (Short 1987), which suggested local contextual answers to the problems the College and the Department have faced.

However, most problematic-matters emerged from the Case study in ‘A’ College represented issues that all primary school departments in Israeli C.F.T.E have faced, and generally, have complemented the Questionnaire’s close and open part results. The
Departments, with the Colleges, have dealt with similar problems, stemming from the external and the internal factors. However; these influences had a different impact on curricula developed in the other Departments and Colleges.

Hence, the Colleges’ and the Departments’ role in developing the T.E.C has been crucial. They mediated the external and the internal factors, though not always in harmony. Accordingly they determined the preferred directions, and through negotiation agreed upon the structure, the organisation and the T.E.C’s courses. The Colleges, as revealed from the study, have been regarded only as an internal influencing factor. This study’s result did no show evidences of reciprocal influence between Israeli C.F.T.E.

2.1.1 The refined conceptual framework for the T.E.C’s influencing factors

The study’s results demanded refining the conceptual framework, presented in the L.R, in order to adapt it to the Israeli T.E system. The refined conceptual framework can be reexamined in other departments in Israeli C.F.T.E, except the primary school departments. They can be reexamined also in different departments in C.F.T.E in other countries. The refined conceptual framework offers:

1. Excluding the Colleges from the external influencing factors
2. Adapting names of some influencing factors
3. Reorganising the influencing factors according to their dominance
4. Presenting the: interrelations between the internal factors; interrelations between external factors interrelations between the internal and the external factors
5. Defining types of different kinds of influences, as presented in the index
Figure 3: The refined Conceptual framework for the T.E.C's influencing factors

A. Cohen, 2004,
Refined from the adapted Conceptual framework, Stark et al. (1986) Stark and Lattuca (1997)

Index:
Direct influence ➔ Direct mutual influence ↔ Optional influence ➔
Indirect influence ➔ Mediating influence ➔ Optional mutual influence ➔
2.2 Areas of commonality and difference in the primary schools departments’ T.E.C

Areas of commonality and difference were revealed from the: Questionnaire’s close part – the grading, rating and comments results; from the Questionnaire’s open part results, and from the Case study’s results. The H.O.D’s responses (agreements or disagreements) demonstrated in the Questionnaire’s grading part results revealed areas of commonality, and the gaps resulted from H.O.D’s extreme opposed references, made conspicuous areas of difference. The H.O.D’s preferences, demonstrated in the Questionnaire’s rating part reaffirmed the Questionnaire’s grading part results. So did the H.O.D’s references in the comment part and in the Questionnaire’s open part. These references elaborated on weaknesses and problematic aspects as well as on advantage and contented aspects, and supported the areas of commonality or difference. The Case study’s results complemented the other results, and endorsed aspects of commonality or difference.

2.2.1 Areas of commonality

The results revealed wide agreements concerning actual aspects of commonality within three areas of influence, the: Colleges, Departments and the Schools.

2.2.1.1 The Colleges and the Departments

The Colleges and the Departments appeared to be the most influential factors. They, also, resulting from the Questionnaire’s grading and rating parts and the open part, revealed the most impressive cross-Departmental areas of commonality. The Case study’s results endorsed the Questionnaire’s results. These influencing factors demonstrated close and tight interdependent relations, thus they jointly appear as areas of commonality. The comments on the College’s area of influence re-emphasised these interdependent relations.
Two aspects, within these two most salient areas of commonality, appeared as most prominent, the:

1. Independency the Colleges' have given to Departments in determining their preferred directions for staff development

2. Departments' central role in developing T.E.C's practical, field-based part

These two aspects reveal complementary relations between the Colleges and the Departments. The first aspect demonstrates the Colleges' administrative culture, which encouraged the Departments' to develop their educational visions, and lead the developing of T.E.C's practical part. Without the Colleges' recognition in the Departments' unique needs, such as enhancing staff's professional development, the Departments' would not have been able to professionally shape the T.E.C's practical part.

Another two aspects, within these areas of influence, refer to the Colleges' responsibility for the general T.E.C's setting, by approving courses' addition/changing, on the one hand, and the Departments' responsibility for the developing of T.E.C.'s educational-pedagogical part on the other hand. Again, the Colleges' readiness to loosen their control on the T.E.C's educational-pedagogical part enabled the Departments to develop their unique interests in the freed areas. Other issues presented in the Colleges' and the Departments' influence sections did not show significant cross-Departmental areas of commonality.

The study's results only partially correspond with characteristics presented in the L.R, when referring to the colleges' influence, mainly because the L.R did not distinguish between the colleges' and the departments’ influence. The L.R referred to the institutional vision and the institutional structural and organisational considerations as central characteristics of the colleges’ influence, so did this study. The L.R also referred
to the staff's beliefs as an important characteristic of the colleges' influence. But, as this study distinguished between the Colleges' and the Departments' influences, it divided between the Colleges' and the Departments' visions, and what has been more important, it referred to the staff's beliefs as part of the Departments' characteristics, and not as part on the Colleges' characteristics. Besides, the L.R referred to the educational research held in colleges, as a significant characteristic of the colleges' influence, but this study's results did not show that educational research held in Israeli C.F.T.E has significantly influenced the T.E.C.

The Case study's results show that the Colleges' and the Departments' influences have not been isolated from the external influences, and that they were also given to competing or opposed internal pressures and interests, and to criticism, as stated in the L.R (Hargreaves, 1993; Stark and Lattuca, 1997). In addition, the L.R argued that internal factors tend to combat, thus, they usually limit or dissolve their own initiatives (Zais, 1976). But, this study found that the two main internal influencing factors – the Colleges and the Departments, at least in Israel, tend to work in a reasonable harmony, or at least in a satisfactory coordination, thus their influence has been vastly regarded, as stemmed from all the results, as the areas of the greatest commonality.

2.2.1.2 The Schools

Schools appeared to be the most influential external factor, still less impressive then the Colleges' and the Departments' internal influencing factors. The study's results notably referred to the increased influence of the Schools on the T.E and the T.E.C's development. The Questionnaire's grading, rating and open parts, independently, indicated upon two aspects of commonality within the Schools' influence, the: contribution of partnership to the integration of the T.E.C's theoretical and practical
parts, and schools' reality impact the field-based T.E.C. Other aspects did not show vast agreements or disagreements across the Questionnaire's different parts, thus they do not justify referring to them as aspects of commonality. Comments referring to the Schools' influence demonstrate intensification of partnership characteristics in the Departments, and widening of its influence on the practical parts of the T.E.C's development. The Case study's results, although elaborated on one Department, enforced the Questionnaire's results, and reaffirmed the Schools' increased involvement in the T.E.C's development.

All results demonstrate a clear association between Schools' increased influence on the Departments' T.E.C's development and the increased interest different Departments revealed since the adoption of the partnership principles, and their adaptations to the Israeli context. The partnership in the Israeli context represented micro level local initiatives, given to the Departments' sovereign preferences. These results correspond with the L.R's indication that partnership contributes to intensified schools' influence on the T.E.C development (Graves, 1990), and with the L.R's indication that it increases the T.E.C's correlation with the schools' reality (Combleth, 1986, in: Freiberg and Waxman, 1992; Bush, 1987).

In Israel the adoption of partnership has been a voluntary decision. The Departments did not regard it as a limiting, threatening initiative, forced by an external influencing factor. The Departments internalised the Partnership, thus Partnership did not increase dispute and resistance, and it rather increased the potential to promote curricular changes, originally stemmed from external indirect influences. This correlates with ideas presented in the L.R, and referred to the limited impact of external influences on promoting changes (Stark and Lattuca, 1997), and to the positive role internalisation of ideas has in lessening

2.2.2 Areas of difference

This study's results revealed three areas of difference, the: T.I, Society, and the M.O.E. All three areas of influence appeared to be marginal influencing factors, and did not show comprehensive influence on developing of the T.E.C in the Departments' level.

2.2.2.1 The T.I

The T.I appeared to be the least influential factor. The Questionnaire's grading part, demonstrated that this area has been the most controversial area of influence, with extreme opposed references, thus the most salient cross-Departmental area of difference. The Questionnaire's rating part revealed similar results, which showed only one limited agreement that referred to a change occurred in communication ways. Other results showed that changes in the traditional ways of using information, and the traditional ways of teaching-learning processes, neither widely spread, nor reached the limit of the lowest agreement. Only few Departments regarded these changes as mostly significant. This re-emphasised the deep differences between the Departments, when referring to the T.I's impact on the developing of their T.E.C.

The Questionnaire's comment part results reaffirmed the other results. Four H.O.D, who represented three Departments, elaborated on possible reasons that partially explained the deep differences between the Departments when considering T.I. The comments referred to three kinds of contrasts: contrasts in the institutions' and the people involved ripeness, contrast in the kinds of the influences - advanced versus marginal influences on the T.E.C, and contrast beliefs associated with the T.I's contribution to the T.E.
The open part results reaffirmed that the other results. The four H.O.D, which referred to the T.I in this part, represented three Departments, and showed relatively successive attempts of interweaving the T.I into their T.E.C. The fact that other H.O.D did not refer to changes associated with the T.I. area of influence proofs the relative low rating this area of influence had from their perspective. Thus, again the T.I influence appeared as an area of differences.

The Case study’s results reaffirmed that the T.I’s influence, in the Departmental level of the T.E.C’s development, encouraged sporadic disconnected changes, which indirectly indicated upon a tendency of disconnectedness between initiatives, thus absence of cross-Departmental aspects of commonality, and an emergence of differences. Still, the Case study’s results demonstrated that Departments’ determined or irresolute drive to introduce T.I depended, to a large extent, on the Colleges’ push. Thus, differences in the T.I influence reflected different Colleges’ preferences.

The Departments recognised the T.I’s potential to change the traditional ways of using information and thus the traditional ways of teaching-learning processes and traditional communal and personal communication ways. But, the T.I area of influence did not show a significant impact on the T.E and the T.E.C in these Departments. The L.R suggested that T.I could play a vital role in T.E and T.E.C (Kirk, 1988; Imig and Switzer, 1996; Pitzsimmons, 2001). But, in the Israeli context, the T.I influence on the T.E.C’s development showed rather controversial impacts, and none presented a real vital role.

2.2.2.2 Society

Society’s influence appeared to be a marginal influencing factor, when referring to the Departmental level of the T.E.C’s development. The Questionnaire’s grading part results
revealed mainly controversial and moderate consent responses, thus limited cross-
Departmental aspects of commonality, and increased aspects of difference. The
Questionnaire’s rating part results reaffirmed the grading part results, and showed wide
cross-Departmental disagreements towards nine aspects. These referred to general
societal concerns, such as the impact of the socialisation’s commitment on the T.E.C’s
development, and to specific problematic societal Israeli concerns, such as courses for
mixed Jews and Arab students. The nine concerns can be regarded as aspects of
difference within this area of influence. Concurrently, the Questionnaire’s rating part
results demonstrated cross-Departmental agreements towards two general societal
concerns. These concerns referred to the strengthening of humanistic values, and
teachers’ critical thinking, and represented two aspects of commonality with this area of
influence. As vast agreement referred only to two concerns, and the other nine concerns
showed controversial or moderate consent responses, this area of influence can be
regarded as an area of differences.

The comments on this area of influence complemented the other results, in the sense that
they pointed out sporadic responses associated with Society’s concerns, and did not show
vast agreements. The Questionnaire’s open part results also showed diffused and
unrelated references, which could not be gathered into specific aspects of commonality.

The Case study results reaffirmed that Society had a marginal influence on the
Departmental T.E.C’s development. These results revealed that the T.E.C’s development
in the Departmental level differed from the T.E.C’s development in the College’s level in
the extent of awareness to the Society’s formal and informal cultural, political-economic
interests, presented in the L.R (see p. 53). They indicated that the College shaped up a
unique response with regard to these interests. This response represented intentional
ideological beliefs that have determined what would be learnt and how much. The emphases have been readapted in the course of the years, and demanded the Department's commitment.

The specific response to Society’s influences, revealed from the Case study’s results, hinted that other Colleges could shape up distinctive responses to the Society’s interests, thus cause coexistence of aspects of difference within this area of influence. This explains the absence of commonality within this area, revealed in the Questionnaire’s results. As the T.E.C at the Colleges’ level demonstrated intentional ideological beliefs, they did not represent, according to the L.R, a pure technical production approach. They represented, instead, a more critical approach that facilitates personal responsibility and social awareness (Posner, 1998).

2.2.2.3 The M.O.E

The M.O.E’s influence, which represented the formal State’s interests, appeared to be a relative marginal influencing factor, when referring to the Departmental level of developing the T.E.C. The Questionnaire’s grading part results revealed H.O.D’s diverse responses - moderate consents and even mixed responses - that represented controversial attitudes to the M.O.E’s influence, and showed a limited consensus between current and former H.O.D. Consequently, the results revealed limited cross-Departmental aspects of commonality, and increased aspects of difference within this area of influence.

The Questionnaire’s rating part results confirmed the grading part results. They exposed just one agreed aspect, which referred to the M.O.E’s impact on interweaving the ‘Special education courses’ into the Departmental T.E.C. So, the M.O.E’s direct influence on Departmental T.E.C’s development has been limited.
The comments on this area of influence reinforced the ambivalence revealed in other results. Few H.O.D demonstrated dissatisfaction with the M.O.E’s influence on the T.E.C. The references in the open part complemented the comments’ results, by demonstrating satisfaction and even support of the M.O.E’s influences. Some references supported the: ‘disciplinary proficient teachers’ model for primary school teachers, the M.O.E recommended and the M.O.E’s ‘Inclusion’ policy. Others positively referred to the M.O.E’s policy towards Mathematic and Science studies, or to its preferred reading-writing policy. Other references neutrally elaborated on specific aspects the M.O.E had had an impact on. The dissatisfaction revealed in the H.O.D’s comments, and the support or neutral attitudes revealed in the open part have strengthened the argument that this area of influence demonstrated aspects of difference.

The M.O.E’s movements demonstrated ‘from–to’ and ‘either-or’ modes of change that represented, as argued in the L.R, two metaphors, the “Movement down a long road” metaphor, and the “swing of the pendulum” metaphor (Meil, 1964, pp. 358-362). The drastic abolishment of the ‘Reading and Writing Literacy’ tradition for the ‘Phonological approach to reading processes’, so called new tradition, exemplified the M.O.E’s ‘from–to’ proceeding. This kind of proceeding increased the Departments’ resistance to the M.O.E’s directives. Some H.O.D, as revealed from Questionnaire’s close part results rejected that they have been influenced by the M.O.E when determining the reading-writing courses. Others have adopted of the M.O.E’s new policy, regarding reading-writing processes, and accordingly adapted the relevant courses. The same proceeding appeared in the New-Mathematic reform. The M.O.E’s ‘Inclusion’ policy represented a third metaphor, the “upward and outward spiral” (Miel, 1964, pp. 361-362), which has emphasised an on going process of renewal, based on previous experiences and theories.
The Case study results revealed that the Department and the College differently reacted to the M.O.E's influence. The College seemed to be consciously committed to the M.O.E's direct directives and restrictions, when deciding upon the T.E.C's development. The Department, in contrast, resisted the direct M.O.E's directives and restrictions, and has been intentionally committed to the M.O.E's indirect influences, transmitted by the schools, when developing the T.E.C. This disharmony partially explains the continuous tension between the College and Department, and the growth of the College's influence on the Departmental T.E.C's development.

Although the M.O.E’s policy played a secondary role in developing the Departments' T.E.C, the Case study's results hinted that its influence had a significant impact on developing the T.E.C at the College's level. The L.R only referred to the governments' influence on the T.E.C's development at the Colleges' level, as references that focus on the Departments' level were not found. Consequently, this study's results did not correspond with the arguments presented in the L.R, which stated that governments' policies played a vital role on the T.E.C’s development at the Colleges level. Governments, argued the L.R, set administrative and educational directives, such as allocating financial resources and setting accreditation standards (Barrow, 1984; Witty et al. 1987; Giroux and McLaren, 1987; Cowen, 1990; Cuban, 1992; Reid, 1994; Edwards, 1994; Adams and Tulasiewicz, 1995; Tisher, 1995; Lofthouse et al. 1995; Hudson and Lambert, 1997; Totterdell and Lambert, 1997; Bell, 1999a).

This study's results correlated with the L.R's argument that governments only rarely generously funded T.E (Fullan, 1991; Howey, 1995; Imig and Switzer, 1996; Young, 1998a). They also correlated with a complementary argument that governments did not

This study’s results revealed that the Departments have minimised the M.O.E’s influence. On the one hand, they have transferred dissatisfaction from the M.O.E’s influence to the Colleges’ influence, mainly when referring to administrative and budget restrictions. On the other hand, they have ‘adopted’ some initiatives and presented them as if they naturally emerged in the Departments. The minimisation of the M.O.E’s influence can be explained in two ways. One explanation emphasises the Departments’ inherent resistance to imposed influences, and as the M.O.E represented an agent for distributing imposed directives, the Departments disliked its interference. The other explanation refers to a historical perspective. This study has been operated in between periods of macro changes caused by the M.O.E, far enough from the ‘Academisation’ macro change, in the early 1980s, and before the formal introduction of a new macro change, which its first steps are just about to be started, as a result of the ‘Dovrat’ Report (2004). So, H.O.D could easy ignore that the M.O.E has been the catalyst for some major changes in the T.E system and the T.E.C. Still, it may be that a combination of these two explanations has influenced the H.O.D’s reference to the M.O.E’s influence.

2.2.2.4 The Academic Research

The Academic influence demonstrated a second-rate impact on the T.E.C’s development, when referring to the Departmental level. Still, similar to the M.O.E’s influence, the Questionnaire’s grading part results revealed that H.O.D diversely responded. H.O.D demonstrated moderate consents and even mixed responses, which represented controversial attitudes to the Academic influence, and showed a limited consent between current and former H.O.D. The former H.O.D’s responses have consistently lowered the
Academic influence. This can be explained by a combination of personal and ideological factors. The former H.O.D’s personal-professional histories were deeply embedded in the traditional Seminaries’ culture, thus they resisted the Colleges’ academic culture. Besides, the former H.O.D believed in the centrality of the practical studies, thus they worried that academic studies’ superiority would relegate this centrality.

The Questionnaire’s rating part results supported the H.O.D’s controversial attitudes towards the Academic influence. They exposed three aspects of commonality, out of eight possible aspects, which achieved vast agreements/disagreements. H.O.D disagreed that the T.E.C did not aim at accumulating academic knowledge, and this reinforced a previous belief in the centrality of the practical studies. H.O.D agreed that theory complemented practice, and this agreement matched the previous disagreement. H.O.D also agreed that the T.E required developing the students’ high academic abilities. All agreements and disagreement high lightened the H.O.D’s ambivalence towards the Academic influence and explained the limited aspects of commonality.

The comments on this area of influence confirmed the divisiveness revealed in the other results. They referred to two aspects - the worry of increased Academic influence on the disciplinary studies and the educational-pedagogical studies, and the existed versus the expected associations between theory and practice. These aspects have widened the previous mentioned above matters, and further clarified the profound reasons for the H.O.D’s conflictive references, associated with the Academic influence.

The Questionnaire’s open part results complemented the picture of the Academic influence, by defining expectations from the students, the Departments’/Colleges’ staff, and the T.E.C. Thus, they reaffirmed the expectation that students would acquire
academic competencies, which appeared as one of the agreements in the Questionnaire's open part. Besides, these results emphasised the centrality of research and of the belonging to an academic community, in the current T.E academic culture. They enforced the disappointment stemmed from the apparent supremacy of the academic influence on the T.E.C's development, on the account of educational-pedagogic orientation, which was already mentioned in the comments.

The Case study's results complemented the other results, and deepened the understanding of the dualism towards the Academic influence - the worry and the prospect, thus the limited aspects of agreement. Additionally, the Case study's results revealed that the Academic influence has differently influenced the T.E.C's development in the Department's and the College's levels. The College has been much more committed to the Academic influence than the Department, as a result of the 'Academisation process'. The 'Academisation process' has set 'Guidelines' for academic-disciplinary requirements, and for the staff's highly academic qualifications, as a stipulation for B.Ed bestowing. Consequently, new members of staff went through a pure academic route. They have never taught in primary school, thus disregarded the educational-practical matters. Eventually the College's culture turned to be more academic, and this has affected the T.E.C's development in the College's and in the Departmental level. This explains the drastic growth of the College's influence on the Departmental T.E.C in the fifth phase, and the tense interrelations between the College and the Department.

This study's results revealed that the Academic research had an impact on both educational and disciplinary matters, relevant to the T.E. The L.R referred only to Academic research contribution to educational matters relevant to the T.E - better understanding of what is good practice (Corrigan and Haberman, 1990; Stark and
Lattuca, 1997; Hagger and McIntyre, 2000), and transitory theories and principles concerning: teaching expertise, professional language, central concepts, etc. that get changed or updated as part of the knowledge change or environmental conditions (Felix, et al. 1995; Berliner, 2000). The L.R did not refer to the Academic influence on disciplinary matters, because most teaching-students in the western world already graduated. Israeli students in C.F.T.E have been still un-graduated, thus, the disciplinary academic research has a crucial influence on their disciplinary studies.

The study revealed that the Departments’ T.E.C did not intentionally consider Academic influences on curricular matters, although, actually, the Case study results demonstrated vast changes in the: T.E.C’s general layout, components included, and the terminology used. The T.E.C’s rationale, as demonstrated in the Case study’s Documents, have reinforced a basic argument stated in the L.R, that the T.E.C are composed of different fragmented disconnected components that demonstrate a mixture of eclectic, occasional courses (Naish, 1990); thus tend create non-coherent T.E.C (Liston and Zeichner, 1990; Burstein et al. 1999; Fullan, 2001). Yet, the Case study’s results corresponded with the argument stated in the L.R, that T.E.C’s courses neither create developmental sequences, nor are linked to cross disciplinary organiser principles (Holmes Group, 1986; Feiman-Nemser, 1990; Doyle, 1990; Lamm, 1993; Stark and Lattuca, 1997).

But, since the late 1990s, as demonstrated in the Case study’s results, a conceptual change has occurred, and thread of coherency could be traced in the T.E.C researched in the Case study. These results corresponded with Faigin’s and Ariav’s report (1996), which coherency and the sequencing of the T.E.C in Israeli C.F.T.E have lately improved. The T.E.C increased their awareness to the meaning of learning, and their focus on the learners’ experiences under the guidance of the Departments and the
Schools. This direction, though unintentionally, correlated with Goodlad's and Su's definition of curriculum (1992, see p. 28), and somehow penetrated into T.E.C presented in the Case study. These T.E.C, as revealed from the courses' names have focused on 'Experiences', 'Learning processes', or as offered by Connelly and Lantz's (1991), in the L.R, 'Existential – personal' matters.

2.2.2.5 The Students

The Students' influence demonstrated a second-rate impact on the T.E.C's development, when referring to the Departmental level. Still, similar to the M.O.E's and the Academic influences, the Questionnaire's grading part results revealed that H.O.D diversely responded. H.O.D demonstrated moderate consents and mixed responses. These results represented controversial attitudes to the Students' influence, and showed consistent inconsent between current and former H.O.D. The former H.O.D's responses have constantly lowered the Student's influence. This can be explained by a combination of three reasons: 1. Change of educational beliefs stemmed from educational research on constructive learning processes and on the learners' involvement in the learning processes, 2. Change of societal circumstances, which legitimated multi-cultural aspirations, and high-lightened multiplicity as positive societal trait, 3. Transfer of developments in the field of curriculum planning, which enabled and creation of more dynamic, flexible and learners' focused curricula, to the T.E.C's development.

The Questionnaire's rating part results supported the H.O.D's controversial attitudes towards the Students' influence. They exposed two aspects of commonality, out of seven possible aspects, which complemented each other in the sense that they reflected openness to considerations associated with learners needs and / interests. One aspect
referred to the T.E.C’s adaptation to students’ progress, and the other aspect referred to inquiry processes offered to the students in order to meet their personal interests.

The comments on the Learners’ area of influence referred to sporadic aspects, and they did not really significantly support the other results. The Questionnaire’s open part results corresponded with the other results in an indirect way, and so did the Case study results. These results exposed the Students’ influence dependency on the Departments’ proactive initiatives and their reactive responses to the students’ needs and interests, and on the Colleges’ cooperation with the Departments’ preferences. The Questionnaire’s open part demonstrated that about half of the Departments directly communicated with the students, in different settings, thus even this matter revealed an aspect of difference rather than an aspect of commonality. The Case study re-enforced these results, as they revealed that the Department has initiated several kinds of communication routes with the students, and responded to the emerged needs. The Questionnaire’s open part results reported on addition or remove of courses, and so did the Case study’s results. Still, this matter did not reflect a general phenomenon, thus it revealed another aspect of difference. Some other matters that the Questionnaire’s open part results showed, such as a change of days of practicum, and other matters revealed in the Case study results, such as introduction of choice options for encouraging students’ growth, or increasing of care to the students’ needs as to encourage their personal and professional development, exposed aspects of difference. Both results also revealed the Department’s reaction to the decrease of students. Even this matter demonstrated an aspect of difference. As the Departments’ educational beliefs and preferences varied, Students’ influence revealed significant disparity and incongruity, and it can be regarded as an area of difference, with limited aspects of commonality.

325
This study's results vaguely corresponded with the L.R arguments. The study's results did not demonstrate the students previous knowledge has been regarded as an aspect commonality, although the L.R indicated that students causal or normative knowledge, their practical and theoretical knowledge, perspectives and interests need to be considered when developing the T.E.C (Zeichner and Teiltelbaum, 1982; Kirk, 1988; Pearson, 1989; Clandinin and Connelly, 1991; Doyle, 1992; Bennett et al, 1993; Reiman, 1999). Besides, this study's results did not reveal attempt to use students' personal knowledge for enhancing their survival, and developing their individualistic thinking (Beyer and Zeichner, 1987). In addition, the results did not demonstrate a comprehensive agreement that the students' mental schemata, which are affected by students' cultural background, social and personal context, have been a basis for their further development.

The results neither showed that there has been an agreed belief concerning the developmental nature of the T.E.'s processes, nor did they show that the students' understanding develops through constructive learning processes that bring together previous knowledge and experiences and new knowledge and experiences, as to enable conflicting interaction between them and enhance reconstruction of knowledge (Walker, 1987; Ayers, 1988; McIntyre, 1988; Calderhead, 1988, 1991; Fish, 1989; Carter and Doyle, 1990; Bennett et al, 1993; Britzman, 1991, in: Johnston, 1994; Sultana, 1995; Korthagen and Kessels, 1999; Britzman, 2000; Flores, 2001).

2.2.3 Summary,

This study's results revealed that the Departments and the Colleges have been the most influential factors. These internal factors determined the programmatic, structural and organisational characteristics of the T.E.C, in collaborative deliberative processes. Besides, the Colleges' policies determined the extent of other influencing factors' impact
on the T.E.C, especially the extent of two external influencing factors - the Academic and the M.O.E. The Colleges’ and the Departments’ priorities determined the extent of another two external influencing factors - the T.I, and the Society’s influences. The Departments’ priorities, however, determined the extent the Schools’ external influencing factor, and the extent of the internal Students’ influence impact on the T.E.C.

Two factors appeared to have the least significant influence on the T.E.C: the T.I and Society. The minimal T.I influence resulted, as exposed from the study’s results, from the environment un-ripeness, and from the doubts relating to its actual contribution to the T.E. The minimal Society’s influence resulted, as revealed from the study’s results, from the conflictive pressures, and consequently the absence of vast agreements.

The other influences had only a limited influence on the T.E.C. The Schools’ external influencing factor had an impact on specific aspects, concerned with the fieldwork needs. The external Academic influence was caught between the Colleges’ support and the Departments’ worries from its potential of expanding on the account of educational concerns. Thus, the Departments’ made attempts to narrow the extent of the Academic influence, and to widen pure educational concerns. The last external factor – the M.O.E, had a limited influence on the T.E.C, from the Departments’ perspective, despite the Colleges’ commitment to the Guidelines and to other current directives, because the Departments’ resisted the M.O.E’s direct and indirect compelled interventions.
3. The preferred directions that have influenced the T.E.C, and the correlated ideal graduate teacher types

The areas or aspects of commonality and difference corresponded, to a large extent, with the contemporary worldwide five main approaches to T.E, noticed in the L.R: school-based, constructive, competency-based, whole personal development, and the long-life learning. These areas or aspects illuminated conceptual matters, and have been either processes oriented or product oriented. The correlation between the local preferred approaches and the worldwide approaches can be explained by similar worldwide problems the T.E faces. It can also be explained by the intense transfer of ideas and educational beliefs, concerning preferred processes, through contemporary professional periodicals and the internet. Still, this study revealed that another direction, which was not mentioned in the L.R, has been prominent in the Israeli studied Departments - the academic approach.

3.1 The worldwide approaches

3.1.1 The school-based approach

This study’s results revealed that the school-based worldwide approach has been an accepted and an advanced direction among the Israeli primary schools departments in the Israeli C.F.T.E. This approach has been process oriented. It can be directly associated with two interconnected areas of influences - the Departments’ and the Schools’ influence. The Schools’ influence, in the Israeli context, thus represented the Departments’ preferences. It emphasised the schools’ real life experiencing, and the improvement of the experiencing quality, two aspects that have been noticed in the L.R
(Beyer, 1988; Dunne, 1993). The school-based approach (see pp. 86-88), strived at a balanced interaction between practice and theory, as to:

1. Proportionally incorporate different forms of knowledge (see Beyer, 1988; Fish, 1989; Dunne, 1993; Goodson, 1993; Reiman, 1999; Berliner, 2000), such as: academic disciplinary or 'know that', and teachers' professional knowledge / reflective knowledge or 'know how' that includes pedagogical content knowledge, curricular knowledge (Eggleston, 1977, in: Heywood, 1984; Schon, 1983; Shulman, 1986; Wilson et al., 1987; Pearson, 1989). This study's results revealed a dilemma associated with the weight given to the academic disciplinary knowledge versus the weight given to the educational-practical knowledge. This dilemma demonstrated the Departments' worry that the balance interaction between practice and theory would be interrupted by the increased emphasis on the academic studies.


3. Guarantee a softened and intermediate, but real and a thoughtful, meeting with the complexity of teacher's role (Hall and Millard, 1994; Reiman, 1999; Korthagen and Kessels, 1999). This study's results revealed that much effort has been put in arranging the students' practicum, as to allow them a supportive and a meaningful experiencing environment.

The Schools' influence, as appeared in this study, increased under the umbrella of a local variation of the widespread partnership trend, as part of the increased worldwide school-based approach. But, partnership in the Israeli context has emerged as a bottom-up enterprise. Some primary school departments have been influenced by publications presented in professional periodicals, which depicted the experience, accumulated
knowledge and understandings of the partnership’s contribution to the T.E. These departments, autonomously, decided to adopt this option as a result of three reasons, the:

1. Continuous dissatisfaction from the Departments – Schools relations;
2. Belief that the schools have much more to offer to the T.E, than a field for students’ experiencing in class.
3. Expectation that a new model of work with the school would improve the T.E.

The Israeli version of partnership represents a micro level change (see Cohen, 2000), thus different patterns and levels of partnership appeared. Still, H.O.D’s responses in the Questionnaire and the interviewees’ references in the Case study revealed that partnership despite the different settings, encouraged a common vision, and shared interests. It enhanced mutual responsibility for the T.E, creation of relevant T.E.C, staff’s professional development and research activities. Partnership also encouraged reflective processes at two levels, the students’ practical experiencing, and the partnership leading level. These characteristics correspond with the partnership’s characteristics presented in the L.R. The school-based approach in the Israeli version has demonstrated, as already mentioned, clear association to the constructivist worldwide approach.

3.1.2 The constructivist approach

This study’s results revealed that the constructivist approach, per-se, received low attention, whereas most of its sub-approaches received much more attention, and could be regarded as saliently representing the worldwide current approaches’ influence on actual T.E.C’s directions. This approach and the derived sub-approaches have been process oriented, and presented the T.E orientation. It was expected that constructivism would be a complementing major direction for the school-based approach, as the school-based approach looked for a balanced interaction between practice and theory, and demanded
constructivist-learning processes. But, as the study's results revealed, constructivism has been mainly hinted and indirectly detected in the H.O.D responses and references. Even in the Case study, constructivism was directly mentioned just in one case.

Latent spots of constructivism have been traced in three areas of influence: the Academic, the Schools' and the Students' influences. These represented two routes of constructivism, revealed in the L.R: a route that focuses on restructuring students' previous knowledge by active learning, while building bridges that help attaining desired academic understandings, concerned with contents; and, a route that focuses on constructive processes that enhance cognitive knowledge construction, and subjective, contextual and relativistic understandings, and support reflective and meta-cognitive procedures, collaboration and caring (see Watts and Bentley, 1991).

This study's results demonstrated a minor interest in the first route. The Questionnaire's grading part results showed that students' previous knowledge was not really considered when developing the T.E.C by both current and former H.O.D. Similarly; the results revealed that students' needs were not central to the T.E.C's development; as H.O.D's responses demonstrated M.R. But, when referring to the T.E.C's dynamism, current H.O.D were more decisive than former H.O.D that the T.E.C were adapted to students' progress. These results were neither elaborated in the Questionnaire's comments, nor in the Questionnaire's open part. Thus, it is not entirely clear whether the students' previous knowledge has been associated with constructivist processes, directed to the improvement of the students' academic achievements, which facilitated the restructuring of the students' content knowledge or not.
This study’s results demonstrated an increased interest in the second route of constructivism that enhance cognitive knowledge construction, and personal-professional development. The Questionnaire’s grading part revealed that although constructivism has been scarcely observed in the Academic and the Schools’ influences, a change occurred in current H.O.D’s responses. Current H.O.D were more decisive than former H.O.D regarding the complementary associations between the theoretic courses and practice, and regarding the positive role partnership has in facilitating integration between theory and practice, which require constructive learning processes. The Questionnaire’s rating part results reinforced the centrality of these aspects, thus indirectly reaffirmed the increased interest in this route. The comments and the Questionnaire’s open part only slightly and indirectly elaborated on this route, when referring to above mentioned above aspects. The Case study referred directly to the existence of constructive process in the Department just once, but this has been an exception that proved the rule.

3.1.2.1 Constructivist sub-approaches

Constructivism also appeared as sub-approaches associated with the main constructive approach.

3.1.2.1.1 The collaborative sub-approach

This sub-approach has been a noticeable direction among the constructivist sub-approaches, as stemmed from the Questionnaires’ close parts results. Collaboration appeared in the Schools’ and the Departments’ areas of influence as learning-communities that enhance the potential of learning (Adams and Tulasiewicz, 1995; Tatto, 1999). The learning-communities differed in their populations and their objectives. But, they did not differ in their central aims- increasing responsiveness, involvement, problem solving and authentic research, deepening meaningful learning and improvement of
professional practice (Thomas, 1993), and in their processes that focus on face-to-face dialogues and mutual learning. The community associated with the Schools’ influence referred to Schools-Departments partner relations, whereas the Departments’ influence referred to pure Departmental learning-communities, which at times also included disciplinary counsellors.

The Questionnaire’s open section results revealed that the collaborative sub-approach also characterised the Colleges’ cultures, creating learning-communities at the Colleges’ level. The Case study results even strengthened the collaborative sub-approach direction, demonstrating all three kinds of collaborations – the Colleges’, the Department’s and the Department-Schools partnership, which carried dialogues communication and mutual learning. The Learning communities appeared in this study, enhanced critical thought on practice and on the self, through cognitive dialogues (Butt, 1989; Whitehead et al. 1994; Samaras and Gismondi, 1998). They demonstrated two levels out three appeared in the L.R: an intra-institutional level of collaboration – within and between Departments / Faculties (Diez, 1999); and, an inter-institutional level of collaboration - partnership and professional collegiality between Schools and Departments (Beyer, 1988; Cornish et al. 1994; Samaras and Gismondi, 1998). Learning-communities in this study did not demonstrate peer-work in a cohort level (see Howey and Zimpher, 1989; Samaras and Gismondi, 1998).

3.1.2.1.2 The reflective sub-approach

Reflection has been another conspicuous direction among the constructivist sub-approaches, as derived from the Questionnaires’ open part and the Case study’s results. These results correlate with the argument stated in the L.R, which since the late 1980s
reflection has become most influential and central to the T.E discourse (Shulman, 1986; Borman, 1990; Freiberg and Waxman, 1992; Young, 1998a).

The Questionnaire’s open part results revealed that the Departments’ influence, similarly to Kelly (1998, p. 44), regarded reflection as a central “process of knowledge making”, as, it exposes students’ subjective professional knowledge in and on action; encourages their ethical concerns, intellectual development and thoughtful learning and teaching. The Case study’s results elaborated on reflection, and referred to the general students’ personal and professional development. Reflection, thus, has been a means for enhancing interpretations and deepening professional understandings of the ‘Self’ and the ‘Other’. These two aspects corresponded with the L.R. But, this study did not refer to another aspect stated in the L.R – better interpreting and understanding the society (Schubert, 1989; Bullough and Gitlin, 1994; Pinnar, 1998; Claus, 1999; Brisard and Hall, 2001). Reflection, as presented in the results, has: facilitated the integration of different kinds of knowledge; increased awareness to practical knowledge; allowed reconsidering the practical experiencing, and even researching personal practice experience and thinking.

3.1.2.1.3 The research sub-approach

The Research sub-approach has been deeply embedded in the Departments’ T.E.C in two ways. One way, stemmed from the Questionnaire’s open part and the Case study’s results, referred to the Colleges’ influence, regarding the academic atmosphere. The results revealed that Colleges had academic aspirations, thus they set up essential basic and formal research methodology courses in the T.E.C.

The other way, as stemmed from the Questionnaire’s grading and rating parts and the Case study’s results, represented the Departments’ influence. The Departments’ belief in
constructivist teaching-learning processes encouraged learning through investigation and challenging critical-reflective processes, either action research or self-study research. Action research has been a vehicle for increasing students' involvement in their studies. It has been the means for: researching class work, critically interpreting it and improve practice; critically bridging between theory and practice and between life and work; enhancing personal and professional development through experiencing, as to improve pre-service teachers' quality of teaching (Pearson, 1989; Borman, 1990; Goodson, 1993; Moon, 1995); and, eventually creating personal theories resulted and developed through practice (Elbaz, 1981; Beyer, 1988; Fish, 1989). This study's results, though, did not expose specific attention to the creation of personal theories.

3.1.2.1.4 The critical sub-approach

The critical sub-approach has been partially implanted in the Departments' T.E.C. The Questionnaire's rating; comments and open parts, and the Case study's results elucidated that in the Israeli context this sub-approach referred to two aspects out of the three aspects mentioned in the L.R - personal and schools' aspects. The Departments did not refer to general societal concerns, although the L.R mainly referred to the T.E.C's potential of encouraging students' to critically reflect on socio-political aspects, and react to social injustice (Aronoviwitz, 1981; Beyer and Zeichner, 1987; Beyer, 1987, 1988; Schubert, 1989; Whitehead, et al. 1994; Claus, 1999). The Departments encouraged critically reflecting on inner circles of schools' reality, and not on wider socio-political circles in which schools have been embedded, and on critically thinking of alternative hermeneutic answers regarding personal - professional matters.
3.1.2.1.5 The narrative sub-approach

The narrative sub-approach has not been well established in the Departments' T.E.C. The Questionnaire's and the Case study's results elucidated that in the Israeli context, this sub-approach has been underdeveloped. The Departments’ T.E.C did not refer to the role of the personal narrative in becoming a teacher (Carter and Doyle, 1990). The T.E.C, as the results revealed, supported processes of adaptation of personal understandings, development of professional knowledge and empowerment. But, they did not maximise reconstructing of pre-service teachers' personal theories, by using cases and life histories as pedagogical instruments that strengthen personal voices linked to general societal contexts (Butt, 1989; Shulman, 1992; Thomas, 1993).

3.1.3 The competencies-based approach

The competencies-based approach has been regarded as a secondary direction in the T.E. This approach has been product oriented, and represented the T.T orientation. The Questionnaire’s close part results revealed that H.O.D did not specifically refer to competencies or required skills. The Questionnaire’s open part and the Case study’s results demonstrated three shared aspects that referred to the strengthening of: academic competencies; class managing competencies; and, teaching competencies.

These results disclosed that the Departments’ T.E.C did not intensively regard skills and competencies acquisition as central to the development of professional knowledge. The Case study’s results reaffirmed it. The T.E.C, in the studied Department in ‘A’ college, offered some competencies’ oriented courses, which have changed in the course of years. But, the more intensive focus on competencies, as to guarantee sufficient acquisition of class managing competencies and teaching resulted from the both the students’ and the schools’ demands. The Case study’s results showed actual increased awareness to
competencies since the beginning of the 2000th. The Department's credos directly referred to skills and competencies possession as an essential condition for properly teaching. This corresponded with the worldwide increased attention given to competencies in the T.E, as noticed in the L.R.

Besides, the Questionnaire's close sections results indicate that the Departments disregarded the influence of M.O.E's intention to determine standards for teachers' competencies on the T.E.C. The 'Standards' policy', a branch of the competencies sub-approach has become the official M.O.E's policy. The M.O.E has decided to adopt the 'Standards' stance, believing that this allows, as to enhance accountability, and guide measuring of academic and fieldwork achievements, in accordance to set in advance centralised standards (Imig and Switzer, 1996; Reynolds, 1999; Burstein et al. 1999; Apple, 2001; Delandshere and Arens, 2001; Wang and Odell, 2002). The 'Standards' policy' did not yet affect the Israeli T.E and the T.E.C.

3.1.4 The whole personal development approach
The Questionnaire's open part and the Case study's results revealed that this approach has been a significant direction. It has been process oriented, and represented the T.E. orientation. The results exposed that the Departments explicitly encouraged this direction. The Departments believed, exactly like noticed in the L.R, that teachers' personal resources create the basic for the 'Self' development and for the development of teaching tools, through constructivist processes (Sultana, 1995). The results corresponded with the picture revealed in the L.R, concerning the impact of personal contextual experiences, beliefs, preferences and values, on becoming professional teachers. They neither showed encouragement of personal theories and images development as offered by Elbaz (1981),
nor did they reveal support in Gestalt processes, which foster the development of teachers’ professional knowledge, as offered by Korthagen and Kessels (1999).

3.1.5 The long-life learning approach

The long-life learning sub-approach has not been well rooted in the Departments’ T.E.C. It has been a process-oriented approach, and represented the T.E. orientation. All results, except the Case study’s results, illuminated that the Departments did not seriously considered this approach. The Case study revealed a sided reference that was not embedded in the Department’s T.E.C. The Israeli T.E system did not yet build a multistage formal program for teachers’ long-life development throughout teachers' career, like in other countries, as mentioned in the L.R. The pre-service learning stage and the internship learning stage have been formally established. The in-service learning stage has not yet been formally established, although it is potentially the most advanced period of improving teaching (Lawton, 1990; Barber, 1995). A period of operating advanced critical-reflective processes and professional learning for linking practice and theory (Gallegos, 1981; Butt, 1989).

3.2 Local approaches

This study results revealed another relevant approach – the academic approach, which was not mentioned in the L.R as a current worldwide approach, but has influenced the Departments’ T.E.C.

3.2.1 The academic approach

The academic approach, differently from the other approaches, although appeared as a noticeable direction, has been a source of dispute. This approach has been product oriented. Its significant influence on the T.E.C derived from the local T.E’s system
structure. The Israeli T.E.’s system has been traditionally based on undergraduate students. Students have been concurrently expected to complete their disciplinary specialisations and their pedagogical education, as to get a B.Ed degree that recognises the two distinctive domains of knowledge. The need to prepare teachers for both kinds of proficiency has lifted up the academic content concern on the account of pure educational process’ concerns.

3.3 The Departments’ preferred directions and the ideal graduate teacher types

The preferred directions, revealed in this study’s results, correlate with the ideal graduate teacher types (Table 6, p. 97). The product-oriented current approaches, mentioned above – the competencies and the academic approaches correlate with two ideal graduate teacher types that represent the T.T orientation. The competencies approach correlates with the ‘Good Employee’ type (Doyle, 1990), and the academic approach correlates with the ‘Junior Professor’ type (ibid.).

The processes oriented current approaches, mentioned above – the school-based approach, in the Israeli model of partnership, the constructivist approach, mainly its collaborative, the reflective and the research sub-approaches, correlate with four ideal graduate teacher types that represent the T.E orientation. Experiencing teaching in the Israeli context of partnership corresponds, to a large extent, with the ‘Fully Functioning Person’ type of teacher (Doyle, 1990). The collaborative sub-approach, within the constructivist approach, correlates with the ‘Collaborating Teacher’ type of teacher (Zeichner, 1993). The reflective sub-approach, within the constructivist approach, correlates with the ‘Reflective Professional’ type of teacher (Doyle, 1990; Zeichner,
1993). The research sub-approach, within the constructivist approach, correlates with the 'Teacher as Researcher' type of teacher (Zeichner, 1993). The critical sub-approach, within the constructive approach, partially correlates with the 'Designing Teacher' type of teacher (Lamm, 2001). The 'whole personal development' approach correlates, to a large extent, with the 'cultivating teacher' type of teacher (ibid.). The 'long life learning teacher' approach correlates, to a large extent with, the 'Innovator' type of teacher (Doyle, 1990), who continues learning and developing throughout the career. One ideal graduate teacher type, the 'Teacher as an Artist' (Zeichner 1993) does not correlate with any approach, probably because this ideal type is too demanding, and too hard to carry out. As indicated, the approaches focused on process have been much more dominant then those focused on products. Similarly, the range of ideal graduate teacher types that correlate with the approaches focused on processes was wider.

3.4 Summary

The preferred directions that have influenced the T.E.C were the school-based and the constructivist approaches. Within the school-based approach the partnership option, in a unique form, has become dominant. Within the Constructivist approach three sub-approaches – the collaborative, the reflective and the research oriented appeared to be most significant directions, the critic sub-approach has not been dominant, and the narrative sub-approach did not really exist in the Israeli context.

The whole personal development approach has been a noticeable direction. But, it has been in conflict with the academic approach that focused on theoretic studies and misevaluated educational processes. This caused diverse emphases, inconsistent learning processes, and eventually a decrease of the T.E.C's coherency. The competencies approach has been an insignificant direction, although recently, as a consequence of
Students’ and Schools’ influences, the Departments increased their attention to competencies’ and skills’ development. This goes well with the increased product oriented academic approach. The long-life learning approach did not yet make its way into the T.E system, thus the Departments’ T.E.C did not systematically consider different stages of study, and sequel studies.

The M.O.E’s preferred directions, presented in the interview with M.O.E’s level functionaries, rarely demonstrated harmony with the Departments’ preferred directions. These Functionaries disregarded the Departments’ most conspicuous approaches – the partnership as part of the schools-based approach and two noticeable sub-approaches within the constructivist approach – the collaborative and reflective. When referring to the introduction of research in schools, the Functionaries agreed that students’ personal experience in such processes is vital for research professional implementation in the schools. The ‘long-life learning’ approach appeared to be another area of disharmony. The Functionaries revealed advanced understanding concerning this issue, whereas the Departments / C.F.T.E, as this study’s results revealed, did not significantly refer to this direction. The functionaries, however, referred to the whole sequence of teachers’ career, to the different stages of their professional development – pre-service, internship and in-service, believing that this direction has to be developed. The M.O.E’s functionaries extremely regarded the academic approach direction, whereas the Departments only somewhat regarded them.

The current new approaches, and the derived directions, have been integrated in the existing beliefs that determine the nature of the T.E.C’s development - the belief that the T.E.C should be T.T oriented, versus the belief the T.E.C should be T.E oriented. The product orientation, as seen, corresponded with the T.T belief, so did the relevant ideal
graduate teacher types; whereas the process orientation, as seen, corresponded with the T.E belief, so did the relevant ideal graduate teacher types. Still, the current approaches neither replaced the previous approaches nor former directions, which historically existed in the T.E.C. The various approaches, current and former, and the derived directions present different kinds of relations, have caused, as the results revealed, dilemmas in the T.E.C's development. These will be presented in the next paragraph.

4. Dilemmas revealed in the T.E.C

This study's results exposed dilemmas that have underpinned the T.E.C development during the last twenty years, since the 'Academisation process' began. The dilemmas resulted from two reasons: the existence of diverse and even contradicting beliefs concerning education in general, and T.E. in particular; and, in parallel, absence of agreements upon binding answers to the basic questions: what is the ideal teacher's profile? And what should a good teacher know? This fluid situation has encouraged growth of competitive approaches, which caused curricular dilemmas, presented either as extremes or as continua (Ginsburg, 1988; Reid, et al, 1989; Lowry, 1993; Hoyle and John, 1998; Tadmor, 2000; Avdor, 2000; Burton et al., 2001).

The dilemmas revealed in this study have been concerned with four categories, already mentioned in the L.R: social and educational vision; nature of preparation; nature of knowledge; and, structure and organisation. But, not all kinds of continua, appeared in the L.R, have emerged as significant to the T.E.C in the researched Departments.
4.1 Dilemmas relevant to the researched Departments’ T.E.C

The T.E.C’s dilemmas revealed in the study fit in the four categories of extremes or continua presented in the L.R (see p. 106)

4.1.1 Category 1: The social and the educational vision

The dilemma ‘Training’ versus ‘Educating’ was presented in this category in the L.R, when referring to the field of teacher preparation (Cruickshank and Metcalf, 1990; Doyle, 1990; Aldrich, 1990; Macintyre, 1991; Bullough and Gitlin 1991; Hodkinson and Harvard, 1993; Goodlad, 1994; Korthagen and Kessels, 1999; Ovens, 2000; Lamm, 2001). This dilemma appeared to be most significant in this study. All researched T.E.C appeared to be ‘Educating’ oriented, thus demonstrated the supremacy of T.E orientation over the T.T orientations. The T.E orientation, as uttered in the L.R, and reaffirmed in this study’s results, focused on the students’ development, through contextual learning and dialogues, reflective processes (Cruickshank and Metcalf, 1990; Hodkinson and Harvard, 1993). Still, the results revealed that two influencing factors have endangered the ‘Educating’ orientation: the Academic influence that has lessened the education matters ascendency; and, the M.O.E’s current ‘Standards’ program that supported a ‘Training’ orientation, and has threatened the T.E.C’s basic ‘Educating’ orientation.

Another two dilemmas, mentioned in this category in the L.R, appeared to have a marginal influence on the Departments’ T.E.C – the ‘Monolithic culture’ versus the ‘Multi-cultural’, and the Pre-service preparation versus Long-life learning. The T.E.C revealed awareness to ‘Multi-cultural’ matters, but not a consistence consideration of these matters. The T.E.C did not demonstrate any attention to ‘Long-life learning’
matters, although the M.O.E supported this direction. Yet, another two dilemmas appeared to be insignificant – ‘Accepted reality’ versus Reality given to criticism, and Craft versus Profession. Reality has been regarded as a priory accepted, and teaching has been regarded as a profession, thus the T.E.C showed lack of interest in these dilemmas.

4.1.2 Category 2: The nature of preparation

All five dilemmas presented in this category in the L.R, appeared to be significant in this study. The most problematic dilemma has been ‘Theoretic-Academic’ versus ‘Practical-Pedagogic’ focus. This dilemma exposed a deeper dilemma identified in the L.R as ‘Liberal versus ‘Applied’ focus (Beyer, 1988), or as ‘Scientific’ versus ‘Humanistic’ emphasis (Kerr, 1968; Reiman and Thies-Sprinthall, 1998; Moon, 1995). The ‘Scientific’ emphasis corresponds with the liberal tradition, and focuses on ‘Theoretic-Academic’ concerns, and the ‘Humanistic’ emphasis corresponds with the applied tradition, and focuses on practical and experiencing matters.

This study’s results revealed conflicting interests regarding this dilemma. Whereas the Departments’ and the Students’ influences have considered ‘Practical-Pedagogic’ matters as an outlet point for the ‘Theoretic-Academic’ studies, the Academic, the M.O.E’s and to some extent the Colleges’ influences, have regarded the ‘Theoretical-Academic’ matters as an outlet point. Similarly to the former dilemma ‘Training’ versus ‘Educating’, presented in the first category, the influence of the Academic, the M.O.E, and to some extent the Colleges, has endangered the supremacy of the ‘Practical-Pedagogic’ focus.

The other four dilemmas: ‘Product oriented’ versus ‘Process oriented’; ‘Competencies’ acquisition’ versus ‘Professional-personal development”; ‘College based’ versus ‘Field based”; and, ‘Content-centered’ versus ‘Learner-centered”; have been mostly relevant to
the Departments' T.E.C. The Departments' T.E.C appeared to be more: 'Process oriented', 'Professional-personal development' oriented, 'Field based' oriented, and more 'Learner-centered'. The first three dilemmas represented three preferred directions, stemmed from the current worldwide approaches, mentioned earlier.

These preferred options of continua demonstrated that the Departments' T.E.C have been 'Process oriented', and open to contextual changes and to interpretations, especially in the 'educational' and the 'practical' parts of the T.E.C. They have encouraged knowledge construction and reconstruction through dialogic processes, reflective thinking, and the development of autonomous and critical human beings, which represented the relativist or hermeneutic approach to knowledge creation. These characteristics corresponded with arguments stated in the L.R (Schwab, 1964; Freire, 1972; Doll, 1993; Young, 1998).

The 'specialisation' and the 'foundations' parts of the T.E.C, as revealed from the results, demonstrated a more positivistic approach, which fostered pre-determined linear learning objectives and processes, and enhanced knowledge impartation, and utilitarian thinking. These characteristics corresponded with the technical productive approach (Posner, 1997). The Departments' T.E.C demonstrated a combat between the positivist and the relativist traditions of thought in the different parts of the T.E.C. This combat increased the T.E.C's inconsistency and incoherency.

The fourth dilemma did not fit in the current worldwide approaches that have influenced the T.E.C, although it has been significantly embedded in the primary schools priorities, at least in the Israeli context, as stemmed from the M.O.E's Functionaries interview. This might indicate upon a disharmony between the T.E policy and the Schools' actual preferences.
4.1.3 Category 3: The nature of knowledge

Four out of the six dilemmas presented in the LR in this category, had a significant impact on the Departments’ T.E.C’s development: knowledge ‘Imparting’ versus ‘Constructing’; ‘Public’ versus ‘Personal knowledge’; ‘Fixed’ versus ‘Flexible and developmental knowledge’, and, ‘Objective’ versus ‘Subjective knowledge. These dilemmas have been interconnected, and complementary. They actually represented a more practical orientation than the fifth dilemma in this category, the ‘Given’ versus the ‘Questioned’ knowledge, which did not appear in the Departments’ T.E.C. The ‘Molecular’ (split up) versus ‘Holistic’ nature of knowledge dilemma appeared only indirectly, and did not have a major impact on the T.E.C.

These dilemmas exemplified two opposed approaches, mentioned in the L.R, regarding the nature of knowledge - the positivistic and the relativistic (see pp. 69-70). This study’s results revealed that the Departments’ T.E.C demonstrated a relativistic approach to knowledge regarding two dilemmas, and they were close to the ‘Subjective’ and the ‘Personal’ extremes. Regarding the third dilemma, the T.E.C, as resulted from the Case study, demonstrated partial ‘Flexibility’, in the sense that courses have been changed, adapted or removed, length of courses has changed, so courses’ names, courses moved between years etc. The T.E.C did not get changed or adapted to the students’ needs within a year of study. The preference of the relativistic concept of knowledge supported teaching-learning processes based on knowledge ‘Constructing’. The dominance of: the schools-based approach, in the Israeli model of partnership, the collaborative and the reflective sub-approaches, as part of the constructivist approach and, the whole personal development approach, have been evidence to the centrality of the relativistic concept of knowledge in the field the T.E. These approaches, as argued in the L.R, focus on
developing teachers' professional knowledge or personal and professional knowledge, through construction and reconstruction of students' previous knowledge, personal experiences and beliefs (Johnston, 1994; Prentice, 1997, Flores, 2001).

As in category 2, the Case study’s results revealed a gap in the way the Department and the College referred to knowledge. The Department emphasised integration between practical and theoretical knowledge as to foster construction of professional knowledge, which according to the L.R, created a third, unaccepted, concept of knowledge – practical knowledge (Tom and Valli, 1990). The College ignored the centrality of the practical knowledge for T.E, disregarded the need to integrate between the two kinds of knowledge, and instead, emphasised the centrality of the academic-theoretical knowledge acquiring. These results reappeared, however, less saliently, in the Questionnaire’s close and open parts.

The results revealed the Departments’ prominent agreement that the T.E.C associated three kinds of knowledge, in the three types of courses: disciplinary theoretical, educational-pedagogic and practical (Short, 1987; Cowen, 1990; Tulasiewicz, 1996). These types of courses correlated with the three forms of knowledge, mentioned in the L.R: know that, know how, and personal knowledge (Howey and Zimpher, 1989). The results revealed only a partial agreement concerning the kind of knowledge that should be first learnt. Still, the Departments agreed that the practical knowledge and the integration between the different kinds of knowledge should get a relative high weight, or at least not lower from the weight given to pure academic-disciplinary knowledge.

The Departments regarded the theoretic-disciplinary knowledge, as a means more than as a goal for its self. They referred to the theoretic-disciplinary knowledge mainly as a
means for preserving existing knowledge organised in agreed traditions, which represent societal concerns, and not as a means for developing personal concerns. These two options were stated in the L.R (Lamm, 1993; Young, 1998a; Hegarty, 2000).

4.1.4 Category 4: Structure and organisation

All four dilemmas presented in the LR in this category, had a significant impact on the Departments' T.E.C’s development. These dilemmas: ‘Disciplinary’ versus ‘Integrative’; ‘Eclectic’ versus ‘Integrated’; ‘Set in advance’ versus ‘Dynamic’, and ‘Compulsory’ versus ‘Electives’, derived from the former ideological dilemmas, and represent practical concerns of the T.E.C’s development.

The most prominent dilemma in the T.E.C, illustrated by this study’s results, was the ‘Disciplinary’ versus ‘Integrative’ dilemma. The ‘Disciplinary’ extreme appeared to be dominant. Consequently, the T.E.C were closer to the ‘Eclectic’ extreme than to the ‘Integrative’ extreme. The dominance of the ‘Disciplinary’ organiser principle caused a hierarchical organisation of courses. It offered gradual learning that introduced courses step-by-step, as seen in the T.E.C analysed in the Case study (Appendix 7), and showed sharp separation between theoretical and practical courses. The T.E.C since the 2000s, which demonstrated more an ‘Integrative’ orientation facilitates associations between theoretical and practical courses, believing, as stated in the L.R, that this kind of relations supports field experiencing and deepens professional development (Silberstein, 1997).

The interrelated organisation of courses offered integration of conceptual matters, skills and competencies, and / or integrated learning methods and experiencing (Tom, 1995).

The Case study results demonstrated that the T.E.C were basically organised according to a disciplinary rationale, which was the most ancient and central rationale in the course of
history, and has been associated with the positivistic concept of knowledge, (Miel, 1964; Ball and McDiarmid, 1990; Kremer-Hayon, 1991; Ben-Pertz and Connelly, 1991; Zeichner and Tabachnick, 1991; Lamm, 1993). The T.E.C presented in the Case study included a collection of distinctive disciplinary courses, in the proficiencies part, the foundation part, and the education part. The courses were rarely interconnected, thus they raised different questions regarding specific contents, aimed at different and not necessarily complementary objectives, procedures, methods, and results, as argued in the L.R (Bruner, 1965; Lawton, 1975; Hegarty, 2000). The disciplinary oriented T.E.C presented in the Case study, represented the other Departments’ T.E.C, as all T.E.C have been based on the ‘Academisation process’s ‘Guidelines’, set by the disciplinary oriented M.O.E and the academic C.F.H.E.

An attempt to introduce a more integrative orientation to the T.E.C in the early 2000s failed, as the M.O.E and the C.F.H.E did not approve the recommended changes (see p.20). Still, the Case study revealed that the T.E.C since the 2000s demonstrated more integrative initiatives, and determined an integrative organiser principle to selected central educational subjects for study and / or new proficiency routes (see Appendix 7). The integrative initiatives have strengthened the T.E.C’s overall structures. These structures increased holistic reference to knowledge, as stated in the L.R (Ginsburg, 1988), and deepened the understanding disciplinary concepts and broad problems, as mentioned in the L.R (Glatthorn and Foshay, 1991). The Questionnaire’s comments and open parts demonstrated that the T.E.C upheld and developed integrative initiatives that link between theoretical courses and practice and / or between theoretical courses. So, despite the M.O.E’s stagnancy the Departments have actively advanced their T.E.C. Still, the T.E.C did not show an interdisciplinary orientation, and did not integrate conceptual and affective understandings with complex skills and competencies.
When referring to the other dilemmas, the results revealed that the Departments’ T.E.C appeared to be closer to ‘Set in advance’ extreme than to the ‘Dynamic’ extreme, and closer to the ‘Compulsory’ extreme than to the ‘Electives’ extreme. Still, buds of the less dominant extremes could be recognised in some of the researched T.E.C.

4.2 Summary

The dilemmas, presented in this paragraph, appeared when different areas of influence demonstrated controversial beliefs with regard to preferred directions, for example, when the Departments’/ the Colleges’ beliefs met beliefs presented by the Academic and the M.O.E’s influences. They also appeared when beliefs regarding preferred directions showed duality within areas of influence, for example, when Departments/ the Colleges presented dilemmas that reflected the Students’ and / or the Schools’ influences, or when dual Society’s beliefs coexisted. The T.I influence did not cause any dilemmas.

The next Figure represents a refined list of dilemmas, adapted to the study’s results from the list presented in the L.R (see p. 106).
Figure 4: Department’s ‘A’ profile on a list of Dilemmas presented as extremes on continua

The social and educational vision:

a. Training → Educating
b. Monolithic culture → Multi-cultural
c. Accepted reality → Reality given to criticism
d. Pre-service preparation → Long-life learning

The nature of preparation:

e. Theoretic, Academic → Practical, Pedagogic
f. Product oriented → Process oriented
g. Competencies acquisition → Professional-personal development
h. College based → Field based
i. Content-centered → Learner-centered

The nature of knowledge:

j. Imparted → Constructed
k. Public → Personal
l. Fixed → Flexible and developmental
m. Molecular (split up) → Holistic
n. Objective → Subjective

Structure and organisation:

o. Disciplinary → Integrative
p. Eclectic → Integrated
q. Set in advance → Dynamic
r. Compulsory → Electives

A. Cohen, 2004

This profile represents the Case study’s results for the researched Department in College ‘A’, but to a large extent, typifies all Departments, because the impact of the Departments’ influence, as the results revealed, was dominant, and showed a most prominent area of commonality. All aspects appeared in the Questionnaire’s grading part showed consensus or salient consent, and only one gap between current and former H.O.D was revealed (Tables: 7-8, p. 169, and Table 9, p. 176).

The impact of the other influencing factors mentioned earlier in this paragraph, on the preferred directions, and consequently, on the preferred extremes of continua has been most significant, and interwoven in all extremes of continua, except one continuum (b),
which focused on a dilemma within Society's influence. Thus, the profile presented for 'A' College regarding this specific continuum did not necessarily typify the other Departments' placing. Besides, the School's area of influence, showed controversial results, and eventually, demonstrated disagreements and a vast gap between Departments and between current and former H.O.D, thus the specific profile presented in continuum (h) did not necessarily typify the other Departments' placing. Finally, the least salient influencing factor, Technological Innovation, which showed controversial responses and maximal gaps, did not generate any dilemma, thus has been ignored.

The list actually referred to the three main questions 'why', 'what', and 'how' indicated by Cuban (1992), that need to be answered when developing the T.E.C. The harmony revealed in the profile between preferred extremes from the different categories determines the T.E.C's nature, and the way weight given to the curricular basic components: purposes, contents, processes and products, their organisation and interrelations.
Chapter Six Conclusions, Recommendations and the Study's contribution

1. Conclusions

The different T.E.C researched in this study revealed that diverse prototypes of the 'good', so believed, primary school teachers have underpinned the Departments' T.E.C, either consciously or unintentionally. Thus, basic disagreements between the Departments' preferences and the other influencing factors' preferences appeared. These disagreements explain the continuous tension between the external factors and the Departments, and sometimes even between the Departments and the Colleges, and the ineffectual situation of the T.E and the T.E.C.

The external factors' potential to promote curricular changes has been limited by Departments' resistance, thus the intended external influences have been hardly internalised. At the same time, the external influences limited internal change initiatives, increased debate and dissatisfaction (see Zais, 1976, Freiberg and Waxman, 1992; Hargreaves, 1993; Fidler and McCulloch, 1994, Stark and Lattuca, 1997). The study has identified some areas that exemplify best the turbulent relations between the Departments and the other influencing factors.

1.1 Macro-level changes

The 'Academisation process' presented, for the meantime, the most significant macro-level change. But, this process, despite the 'domino effect' it had on the T.E.C's development, has failed to create a coherent setting that would satisfy the M.O.E’s and the C.F.T.E’s authorities at the state level, the C.F.T.E and the Departments at the institutional level. This process has caused ripples demanding institutional / departmental
solutions to unsolved local-contextual circumstances, which has increased detachment between the state level and the local level authorities. As a result the C.F.T.E’s general atmosphere has changed. Combats within the Colleges, between the management, the departments and the faculties, as a result of the Colleges’ relative high commitment to the state level expectations and directives, and the Departments’ résistance to these expectations and directives have increased. Besides, a combat within the Colleges, between functionaries, on gaining more power, instead of uniting efforts for integrating different kinds of knowledge and the different parts of the T.E.C, still exists (see Ben-Peretz, 1989). This blew a hole in the ‘Academisation process’. Consequently, just after its completion, the M.O.E has come up with yet another macro-level change, a new alternative, not yet operatively detailed, which represents disagreement with the existing tradition and offers a different agenda for preparing tomorrow’s teachers.

This alternative would again turn over the T.E nature and structure, while re-emphasising the centrality of the academic orientation, and ignoring the gained achievements from the ‘Academisation’ period. This move might cause a crisis in the whole T.E system, but mainly in primary school departments, which have already been driven to the verge of collapse.

1.2 Micro-level changes

The Departments and the Colleges took the liberty to rely on their own answers to local-contextual needs or expectations, as a result of the T.E failure to conscript the external influencing factors’ support. The M.O.E showed unhappiness with the graduate teachers; the Academy disapproved the student teachers’ academic capabilities; the Society de-legitimated the teachers’ personal-professional quality; the Schools criticised novice teachers’ readiness to teach and to manage a class. The C.F.T.E did not manage to create
a community that holds a solid and an agreed rationale for the T.E, and to share research and / or unique experiences. Thus, the Colleges and the Departments secluded, and have become ‘mini self-sufficient and enriched systems’, in-charge for their intrinsic interests, needs, and the required internal micro-level changes, and only rarely, and usually unwillingly, influenced by the external factors’ divergent and not necessarily correlated expectations. This isolation, encouraged creation of local T.E traditions, but not necessarily supported the T.E system, as it caused disharmony between the external influencing factors’ expectations and the T.E system.

1.3 Disharmony between the macro-level and the micro-level changes

A disharmony has been revealed between different expectations from the T.E system, and its ability and readiness to fulfill them. The T.E system has been under evaluated, given to intense diverse pressures and to a constant debate (Darling-Hammond, 1990, 1999). Different external influencing factors, such as the: M.O.E, Society, Academy, and the Schools either de-legitimated the T.E’s directions and achievements, or resisted the efforts and the resources put in this system. The Israeli T.E system has been given to endless criticism, and the latest reports (Ben-Peretz, 2001b and Dovrat, 2004) demonstrated it best. The on going dissatisfaction, thus, seems it to be an immanent and unsolved phenomenon, as if the efforts put in the course of the ‘Academisation process’, in the last twenty years, did not generate any change in the T.E system’s status and the teachers’ image.
1.4 Limitations of the T.E and the T.E.C

The one-mode T.E.C for undergraduate students, revealed in this study, presented a solid, in-flexible and un-breakable four-year study program, neither given to units division, nor to accumulation of complementary units. This common mode ignored distinctive needs of different populations - undergraduates and postgraduates, experienced and non-experienced, singles and married, thus did not give appropriate answers to diverse social needs. The Departments' efforts to improve the T.E.C have been challenging, but also constraining. They have been challenging, because developing balanced T.E.C is demanding. They have been constraining, because mingling diverse perspectives and conflictive beliefs that would guarantee coherent T.E.C, a reasonable sequence of the T.E.C, and an adequate and acceptable future teachers' preparation, is difficult and demands relinquishment of beliefs and compromise.

These recursive efforts to improve and upgrade the T.E.C, demonstrated that the Departments have not reached a second-degree change, which brings together re-conceptualisation and reconstructing of existing frameworks (Feiman-Nemeser, 1990; Wideen, 1995; Grimmett, 1995; Rhodes and Bellamy, 1999). Most micro-level changes reoccurred within the existing traditions, and showed reconstructing without re-conceptualisation. Some micro-level attempts, have offered re-conceptualisation of the T.E and the T.E.C, but did not manage to generate a reconstruction of the whole T.E.C, and have remained isolated, thus, marginal attempts.

All macro-level changes have failed realising the Departments' and the Colleges' perspectives, regarding the T.E's nature and the complexity developing balanced T.E.C that link different kinds of knowledge and different theoretical and practical concerns.
The new ‘revolution’ (Dovrat’s report, 2004), demands that the C.F.T.E, and especially
the primary school departments, would completely change their preferred foci, and move
from a focus on:

1. ‘Education’ to a focus on ‘Training’
2. ‘Practical, Pedagogic’ studies to a focus on ‘Academic’ studies
3. ‘Processes’ to a focus on ‘Products’
4. ‘Professional-personal development’ to a focus on ‘Competencies’

These four recommended directions ignore the common preferred foci the Departments
have developed and maintained in the course of the ‘Academisation process’, as seen in
Figure 4 (p.351). They demand an extreme change of the T.E system and the T.E.C in the
primary school departments, as if nothing has been worth, and as if nothing is worth
being kept in the new setting. The future of the coming ‘revolution’ does not promise a
real lasting change in the T.E system and the T.E.C, as a result of two reasons: a
misconception of the good teachers’ characteristics, and a failure in recruiting the
Colleges and the Departments to the desired change. It seems that the policy makers have
denied the fact that only a ‘move upward and outward as a spiral’ would guarantee a
satisfactory success (Miel, 1964), whereas ‘a move down a long road’ and ‘swinging on a
pendulum’ (ibid.), while ignoring the previous experience would not guarantee success.
2. **Recommendations**

However, it is recommended that the C.F.T.E should:

1. Create a community that defines its distinctive needs, researches its unique characteristics, crystallises educational beliefs, and actively transfers the accumulated practical and theoretical knowledge between C.F.T.E and elsewhere.

2. More willingly get attached to the 'multidimensional ecosystem' within which it exists (Beyer and Zeichner, 1987; Lawton, 1990; Kliebard, 1992; Wideen, 1997; Totterdell and Lambert, 1997; Young, 1998; Power, 2001; Fucks, 2000; Pitzsimmons, 2001), as to stop the vicious circle of dissatisfaction, and increase the relevant external influencing factors’ positive attitude, appreciation and recognition in the efforts put in the T.E and the T.E.C, and the actual achievements.

3. Struggle for establishing an ordered forum in which the C.F.T.E’s representatives would formally present the T.E unique needs and expectations. The forum will include the M.O.E’s and the C.F.H.E’s representatives, the C.F.T.E’s representatives, and also some public representatives. Such a forum may well facilitate turning the C.F.T.E’s representatives to partners in the decision-making processes, when determining desired policies and boundaries, and areas of freedom within the boundaries. This will encourage C.F.T.E or Departments to develop legitimate variations of ‘good teacher’s profiles’, credos and T.E.C. This recommendation actually refines alternative no. 4 (Wideen, 1997, see p. 130), which refers to the creation of flexible and life based T.E.C, free of external limiting influencing forces. Instead, it offers creation of flexible and life based T.E.C, within areas of freedom the boundaries allow, believing that constant organised negotiation would lessen the M.O.E’s predetermined behaviouristic preferences (alternative no. 3, ibid.) and would increase the M.O.E’s awareness to teachers’ humanistic personal development. This
would ease a combination of alternatives no. 2 and 4 (ibid.), allow responding to the social reality and adopting the competition and the competencies’ based culture, and concurrently encourage creating a flexible and more life based T.E.C, within agreed boundaries.

4. Renewing the whole organisational-pedagogical setting by developing alternative modes of T.E, and adjusted T.E.C, instead of the major, and almost single, current mode of the T.E.C, as to give answers to diverse social needs and populations. This means developing flexible and differential T.E.C, which enable: diverse duration of T.E programs (from a year to four years), diverse duration and levels of courses, modular studies, credit accumulation and accreditation of prior studies, splitting the studying (Whitty, 1993; Whitehead et al. 1994).

5. It is also recommended that processes of macro-level changes would not deny the strength of the micro-level processes occurred in the Colleges and the Departments, and would use the accumulated knowledge they hold in order to: increase efficiency and relevance to the real needs of the T.E; ease processes of change and minimise resistance, in order to create a process that would allow a ‘move upward and outward as a spiral’ (Miel, 1964), which would guarantee an appropriate, and hopefully a lasting process of T.E.C’s development.
3. The study's contribution

From the theoretical perspective:

1. There has been a limited research on higher education curriculum in general (Stark and Lattuca, 1997), and on T.E.C in particular (Avdor, 2001). Thus, this study's attempt to examine the entirety factors that influence the T.E.C and their interrelations, contributes to deepen the understanding of the T.E.C in the specific researched Departments, in Israeli C.F.T.E, and to the understanding of the T.E.C phenomenon in general.

2. The Israeli context revealed a unique dilemma - practice versus theoretic. This dilemma is insignificant in other west countries, because T.E systems in other countries offer mainly post graduate programs, whereas the Israeli system is based on mainly on under graduate students. Still, despite the Israeli T.E system’s uniqueness, the Israeli T.E.C and T.E.C in other west countries face basically the same essential dilemma - T.T versus T.E, and eagerly look for similar directions as to solve problems originated in this dilemma. The Israeli case, thus, reemphasises the arguments stated in the L.R. It reinforces the deep gap between teacher educators’ and researchers’ pure educational beliefs, and the States’ narrow interests, their semi professional arguments, and their harmful impact on the: T.E systems and the T.E.C; the future teachers and general education future; and, the societies’ future.

3. This study examined both macro-level and micro-level changes. Macro level studies, which examine T.E.C’s general characteristics at the state’s, institutional and/or the departmental level, only rarely appeared in the T.E.C’s research (Dror, 1999). Thus this study, which examined the different factors that have influenced the primary school departments’ T.E.C in Israeli C.F.T.E, while identifying major directions, and
areas of commonality and difference, which cross-Departments, contributes to the body of knowledge regarding the field of the T.E.C’s development.

4. This has been the first study in Israel that has developed a comprehensive theoretical framework of the internal and the external factors that influence T.E.C’s development, while considering the desired graduate teachers’ profile.

5. The study created a comprehensive puzzle of the Israeli T.E.C for primary schools departments. The puzzle’s parts can be regarded as essential building bricks for reconsidering the T.E.C’s development, in other Colleges, departments and faculties.

From the methodological perspective:

1. The ‘Conceptual framework for the T.E.C’s influencing factors’, adapted from Stark et al. (1986) Stark and Lauttuca (1997) for this study, although designed for the primary school departments, can be used as a tool, thus applicable for analysing other departments in Israeli C.F.T.E, and elsewhere.

2. Similarly, the ‘Five Categories’ Tool’ developed in this study, for analysing the primary school departments’ T.E.C, which is based on the contemporary worldwide five main approaches to T.E, noticed in the L.R: school-based, constructivist, competency based, whole personal development, and the long-life learning, may well be relevant to other departments.

3. Likewise, the series of the T.E.C dilemmas, defined for this study and chosen to be presented as extremes on continua, are relevant to not only the primary school departments. They can be used to typify profiles of T.E.C in other departments or faculties, and to compare them.

4. Meil’s three metaphors (1964), presented in this study, create a tool for analysing historical curricular changes, and factors that influence curricula developing, including the T.E.C. These metaphors can be used for analysing different settings and
different levels of T.E.C’s development, and defining the different kinds of changes. From this perspective micro-level changes and macro-level changes can be analysed, and the defined kinds of process revealed, can pinpoint, to a large extent, T.E.C’s areas of strength and weakness, forecast degree of satisfaction from the changes, and the probability of their lasting.

5. The interpretive methodological tradition used in the data analysis is replicable. It can be adapted to different curricula studies, which are interested in researching the influencing factors and their implications on the T.E.C’s development, in Israel or elsewhere.

6. The methodological tools developed for this study, for extracting the T.E.C’s whole picture, the questionnaire developed for the survey and the interviews developed for the Case study, with minor adaptations, may be applicable to other departments in the Israeli’s C.F.T.E, and to institutions for T.E in other countries.
4. Final Comments

This study has opened a window into the complexity and ambiguity of the T.E’s field and to T.E.C development. Basic disagreements regarding the ‘good teacher’s profile, the most relevant and beneficial T.E processes, and the required T.E.C seem to be inherent to the nature of T.E in the Israeli context and elsewhere. Thus, the T.E has constantly caused dissatisfaction on the one hand, and debate on the other hand. Still, the enigma of the T.E needs to be solved for the sake of the future pupils, teachers and the whole society, so some more research may perhaps reveal deeper understanding on the T.E phenomenon, and allow improving the T.E processes and T.E.C.

✓ A study that compares the received T.E.C from students’ perspective, and the declared T.E.C from the policy makers perspective is recommended, as to get a deep understanding of the nature of the T.E.C and needed changes.

✓ A study of the ‘good teachers’ profile’ is needed, in order to refine the existing beliefs concerning the T.E and in order to promote the T.E.C.

✓ A more specific study, relevant to the current Israeli context, a study that compares the aims, the organisational procedure and results of the ‘Academisation process’ and Dovrat’s ‘revolution’ may contribute to a better understanding of the way macro-level processes, caused by external factors, influence the T.E.C.
Bibliography

Translated from Hebrew – (−) Translated to Hebrew (+)


364


Avdor, Sh., (2001), Universities and Teacher Education Colleges as Teacher Education Preparation Environments, Thesis Submitted for Doctor of Philosophy degree, Jerusalem: Hebrew University


Back, Sh. (2001b), “Toward a Collapse; a gloomy forecast”, She’ur Chofshee, (Free Lesson), Teachers’ monthly News Paper (=)
Back, Sh., (2002a), Teacher Education Based on Competences: Technical Rationality in Practice, Draft (=)


366


Ben-Peretz, M. (2001b), Teacher Education in Israel in the Course of Time, A Report presented to the M.O.E, Jerusalem: pp. 1-26 (=)


http://www.amalnet.k12.il/sites/hadshanut/shitotha/had00113.htm, 15.5.2002 (=)


Cochran-Smith M. (2000a), “Teacher Education at the Turn of the 21st Century: Quo Vadis?” Lecture delivered at Tel-Aviv University, January 13th


Dewey J. (1960), *The Child and the Curriculum*, Tel-Aviv: Oztar Hamore Press, pp. 3-33 (First published in 1902, (+)


Eisner, E.W., (2002), "From episteme to phronesis to artistry in the study and improvement of teaching", Teaching and Teacher Education, May, Vol. 18, No. 4, pp. 375-385


Fogarty, R., (1991), The Mindful School: How to Integrate the Curriculum, Pallantine IL: skylight Publishing


379


Habermas, J., (1971), Knowledge and Human Interests, London: Heinemann


383
Holmes Group. (1986), *Tomorrow's Schools*: Principles for the design of professional development schools, East Lansing, MI: Holmes Group


Kfir D., Ariav T., Fejgin, N., Liebman, T., (1997), The Academism of Teaching Profession and Teacher Education in Israel, Jerusalem: The Hebrew University, Magens Press (=)


Kremer-Hayon, L., (1992), "Teachers' Professional Development – Meaning of the Concept, I'unim be' Chinuch, (Considerations in Education), Faculty for Education, Haifa University, No. 57-58, pp. 145-156


391

Peled E. (1976), *The Education in Israel in the Eighties*, the Project of Planning Education for the 80th The Ministry of Education, Jerusalem (=)


393


Rocheli, A., (2001), Disciplinary Studies, Committee’s Report Recommendations, Draft (=)


Shagrir, L., (2000), Modifications in the Education Science Curricula of the Elementary Track in the Colleges of Education: Reflecting the Changes in Israeli Society, Thesis Submitted for Doctor of Philosophy degree to the Bar-Ilan University (=)

Shaked, G., (2002), "The Revolution is Already Here", She'ur Chofshee, (Free Lesson), Teachers’ monthly News Paper, November (=)


The M.O.E, (1965), *Instructions for the Reform Implementation in Teacher Training Colleges*, Jerusalem (=)

The M.O.E, (1971), *Report and Committee's Recommendations*, Jerusalem (=)


The M.O.E, (1994), *Main Plan for the Teacher Education Academic System Development in Colleges for Teacher Education*, A Suggestion for Discussion, Wing of Teacher Education (=)

The M.O.E, (1997), *The Colleges for Teacher Education at the End of the 90th*, A Proposal for Discussion, Jerusalem (=)


401


Yaffe, E., (1979), “‘Academism’ and ‘Humanism’ in Teacher Training”, in: Bma'agalei Chinuch (Educational Circles), Jerusalem: The M.O.E, pp. 90-94 (=)


405

Appendix no. 1 –The questionnaire

_______________ Head of the primary-school department
_______________ College

Dear colleague,

I appeal to you as a chair of the primary-school department in your college, who is in charge of the department’s curriculum, to participate in my research. This research is part of my Ph.D. Thesis that studies the factors, which have influenced the shaping of the curriculum developed in primary-school departments in Israeli C.F.T.E, and examines the extent of their influence.

As the number of primary school chair people is limited, your participation and personal contribution is most significant. I would like to hope that responding to this questionnaire would be useful for examining curricular issues in your department.

Please, fill in the Questionnaire, which has mainly close-ended questions, while relating to the actual T.E.C in your department, and send it back in the enclosed envelope.

The responses will be treated in confidence.
The results will be sent to the respondents.

Thanks for your participation and devoting your time.
Aviva Cohen
Former Chair of the primary-school department in “Kaye” College
A. This section includes statements that represent possible academic influences on the T.E.C in your department.

- Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The T.E.C mostly aims at theoretic knowledge accumulation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. The courses’ requirements emphasise high academic abilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Theoretical courses complement the learning from field-based practice</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Theoretical courses are basis for field-based practice</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Current academic research concerning learning processes influences the T.E.C’s rationale</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Current academic research concerning reading processes influences the relevant courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Staff’s expertise determine which courses’ are included the departments’ T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Lecturers’ involvement in research enforces the academic focus of the departments’ T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Please write the three most important statements in your actual T.E.C by the order of their importance. The most important ___ The second one ____ The third one ____

Comments ________________________________________________

B. This section includes statements that represent possible societal influences on the T.E.C in your department.

- Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Teachers’ public image influences the T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. The T.E.C reflects general humanistic values</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. The T.E.C emphasise values of socialisation in the Israeli society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. The T.E.C is influenced by current circumstances in Israel</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. The T.E.C fosters critical thinking by teachers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. The T.E.C offers a variety of courses that deal with moral dilemmas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. The department offers new areas for specialisation in order to “attract” students</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. The T.E.C offers mixed Jewish and Arab courses in order to bring closer Jews and Arabs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. Jewish tradition is interwoven in different courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. The T.E.C encourages students to be involved in societal projects</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. TEC trains students to work in different societal environments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Please write the three most important statements in your actual T.E.C by the order of their importance. The most important ___ The second one ____ The third one ____

Comments ________________________________________________
C. This section includes statements that represent possible school's influences on the T.E.C in your department.

- Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Schools’ “agenda” influences the T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. Schools’ “agenda” influences the field-based T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. The department imposes a fixed field-based curriculum on the training schoolteachers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. School-college partnership has helped to integrate between the theoretical and the field-based T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24. The field-based T.E.C is coordinated with the training schoolteachers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25. The field-based T.E.C is cooperatively set by the training schoolteachers and the teacher-educators</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26. Courses have been changed in order to meet schools’ needs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27. Schoolteachers are part of the college department’s staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28. Mentors, schoolteachers and students create a learning community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Please write the three most important statements in your actual T.E.C by the order of their importance.

  The most important ___ The second one ___ The third one ___

  Comments: ____________________________________________________________

D. This section includes statements that represent possible college's influences on the T.E.C in your department.

- Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. The college imposes a common T.E.C on all departments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30. Adding/changing courses requires official college's approval</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31. The college enables the department to shape its own T.E.C according to its educational belief</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32. The college enforces cross-department fundamental courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33. The college determines the departmental staff’s placement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34. The college imposes the departmental specialisation areas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35. The college enables departmental staff development, due to its preferences</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Please write the three most important statements in your actual T.E.C by the order of their importance.

  The most important ___ The second one ___ The third one ___

  Comments: ____________________________________________________________
E. This section includes statements that represent possible department's influences on the T.E.C in your department.  
- Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>36. The departments’ staff is involved in shaping its T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37. The departmental educational belief determines the guiding principles of the T.E.C’s specialisation areas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38. The departmental educational belief determines the guiding principles for the education and pedagogy courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. The departmental educational belief determines the guiding principles for the field-based T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. The departmental educational belief is influenced by parallel departments in other C.F.T.E</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Please write the three most important statements in your actual T.E.C by the order of their importance.

  The most important ___________  The second one ___________  The third one ___________

Comments: ____________________________________________________________________

F. This section includes statements that represent possible technological innovations influences on the T.E.C in your department.  
- Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>41. Information technology (I.T) has influenced the overall T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. I.T has made T.E.C courses more flexible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43. The T.E.C operates some distance-learning courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44. I.T has changed lecturers’ teaching-learning processes in many courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45. Mentors interweave I.T in training courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>46. I.T has influenced ways of communication between staff and students</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47. Students often use I.T in their field-based work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48. The use of information resources has changes many courses in the department</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>49. The use of technologic tools have significantly changed the teaching-learning processes in many courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- Please write the three most important statements in your actual T.E.C by the order of their importance.

  The most important ___________  The second one ___________  The third one ___________

Comments: ____________________________________________________________________
G. This section includes statements that represent possible M.O.E's influences on the T.E.C in your department.

* Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>50. The departmental T.E.C represents the M.O.E's societal-political policy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>51. The departmental T.E.C is indirectly influenced from the M.O.E's policy, through compulsory requirements from schools</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>52. The M.O.E's reduction policy influences the field-based T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>53. The M.O.E's grants' policy influences the opening of specialisation areas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>54. Reading courses have changed due to the M.O.E's policy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>55. Special education courses have been added to the T.E.C as a result of the M.O.E's &quot;Inclusion&quot; policy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>56. The M.O.E's policy concerning 'Mathematics teaching' has changed the relevant courses in the T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>57. The M.O.E's &quot;Standards&quot; policy causes changes the foci of the T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

* Please write the three most important statements in your actual T.E.C by the order of their importance.

The most important ____ The second one ____ The third one ____

Comments: _____________________________

H. This section includes statements that represent possible students' influences on the T.E.C in your department.

* Please circle the number most suitable as to how the statement fits the actual T.E.C in your department.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally disagree</th>
<th>Partially disagree</th>
<th>Mostly agree</th>
<th>Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>58. Students' abilities influence the T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>59. The students' multi-cultural background influences the T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>60. The T.E.C considers students' previous knowledge</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>61. Students' needs are conceived as a central factor for shaping the theoretical T.E.C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>62. The T.E.C is dynamic and adjusts itself students' diversity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>63. The T.E.C is differential and adapted to students' progress</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>64. The T.E.C offers inquiry processes that meet students' personal interests in many courses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

* Please write the three most important statements in your actual T.E.C by the order of their importance.

The most important ____ The second one ____ The third one ____

Comment: _____________________________

I. Please describe shortly the essence of the department's T.E.C.

____________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________________
Appendix no. 2 – H.O.D’ Interview – factors that influence the T.E.C in your department

1. What are the fundamental assumptions and beliefs that influence the T.E.C. in your department?
2. What are the T.E.C’s purposes? What does it emphasise? How the T.E.C is kept balanced?
4. How is the T.E.C organised? What influences its sequence? Which considerations are taken when shaping the sequence?
5. How does the T.E.C change? What motivates / encourages or restricts its changes? What is the rationale behind the changes? What are the changes’ directions? What do they emphasise? Why?

Appendix no. 3 – Interview of functionaries in the College level

1. What are the fundamental assumptions and beliefs that influence the T.E.C. in the college? Is there any uniqueness in the primary school’s T.E.C?
2. To what extent are the primary school’s T.E.C purposes similar / different forming other departments’ T.E.C? What does the primary school’s T.E.C emphasise comparing to other departments’ T.E.C?
4. How do you, on behalf of the college, influence the primary school’s T.E.C? How do the college’s permanent / occasional committees enable / encourage communication between functionaries in the college level and / or their influence on the primary school’s T.E.C?
5. Which considerations are taken when organising the sequence of primary school’s T.E.C
6. What encourages / constrains changes in the primary school’s T.E.C? What is the rationale behind these changes? What do they strive at? What do they emphasise?
### Appendix no. 4 ‘A’ College Case Study – Data organised in Tables, divided to the different influencing factors – an example

**The College’s influence - General and managerial policy influences**

<table>
<thead>
<tr>
<th>No.</th>
<th>H.O.D</th>
<th>Units of meaning</th>
<th>Type of reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>A lx</td>
<td>As a matter of fact when I started working in 1983 while completing my first bachelor degree.</td>
<td>B</td>
</tr>
<tr>
<td>15</td>
<td>A lx</td>
<td>I became a pedagogical counsellor 1984 since, and I was the staff’s ‘child’ for many years.</td>
<td>C</td>
</tr>
<tr>
<td>16</td>
<td>A lv</td>
<td>All teachers, even if they were not from the Kibbutzim transmitted the humanistic message that teachers are educators.</td>
<td>B</td>
</tr>
<tr>
<td>17</td>
<td>A lv</td>
<td>The re was something very homogeneous, and the orientation was very clear, thus there was no need to verbally state it.</td>
<td>C</td>
</tr>
<tr>
<td>18</td>
<td>A lv</td>
<td>I think that outsiders could not last in this atmosphere they would have been emitted.</td>
<td>C</td>
</tr>
<tr>
<td>19</td>
<td>A lv</td>
<td>Our ‘Head of College’ is a professor of mathematics but not an educator. He is from a Kibbutz, has graduated in a Kibbutz high school, but has never taught, so he does not know much on teaching-learning processes.</td>
<td>B</td>
</tr>
<tr>
<td>20</td>
<td>A lx</td>
<td>The ‘General administrator’ is also from a Kibbutz, a veteran in our college. He has an educative background as a headmaster. He always tells that we, the education departments are the real college, and not those faculties that are more academic and university oriented.</td>
<td>B</td>
</tr>
<tr>
<td>21</td>
<td>A lx</td>
<td>But his influence is limited. I am not so sure that he is right, I am not sure that we will win in the struggle with the disciplinary faculties.</td>
<td>C</td>
</tr>
<tr>
<td>22</td>
<td>A lv</td>
<td>Our College is divided to three sections - the primary section, which includes the infant department, the primary school department and the special education department, the Bedouin department, and the art department, which historically has belonged to this section; The second section is the middle and high school section, which has historically has belonged to the nearest university, and now is an integral part of the college; The third section is the continuation section and teachers completions and advanced studied.</td>
<td>C</td>
</tr>
<tr>
<td>23</td>
<td>A lv</td>
<td>Our section is the biggest, but our department is the smallest, and is conceived by others as non-academic, not professional, anachronistic etc.</td>
<td>B</td>
</tr>
<tr>
<td>24</td>
<td>A lv</td>
<td>In the last four years and especially in the last two years there has been a drastic reduction in students’ enrollment. We woke up too late, when we have already been the problem. Now we try to be more attractive.</td>
<td>B</td>
</tr>
<tr>
<td>25</td>
<td>A lv</td>
<td>It is not clear that in the future new H.O.D will still be experienced in primary school teaching, and will be education oriented.</td>
<td>B</td>
</tr>
</tbody>
</table>
## Financial and human restrictions

<table>
<thead>
<tr>
<th>No.</th>
<th>H.O.D</th>
<th>Units of meaning</th>
<th>Type of reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Alx</td>
<td>Teachers are right when they claim that our students are ignorant.</td>
<td>B</td>
</tr>
<tr>
<td>27</td>
<td>Alv</td>
<td>We want to give the students more, but the financial reduction limited it.</td>
<td>B</td>
</tr>
<tr>
<td>28</td>
<td>Alv</td>
<td>Many things are dropped down because only roll stones from one place to another, and sometimes cultivate some stones, or throw them if needed, but (as) we cannot add stones. Thus changes in the T.E.C are superficial.</td>
<td>B</td>
</tr>
<tr>
<td>29</td>
<td>Ax</td>
<td>We are tied to the college's restrictions; we cannot change teachers' status and their standard of employment.</td>
<td>B</td>
</tr>
<tr>
<td>30</td>
<td>Ax</td>
<td>This, in fact, affected the dosage of courses offered to the students, the kind of courses, and their quality.</td>
<td>B</td>
</tr>
<tr>
<td>31</td>
<td>Ax</td>
<td>This year we were supposed to cut out many hours.</td>
<td>C</td>
</tr>
<tr>
<td>32</td>
<td>Alv</td>
<td>The M.O.E's financial restrictions damage the level of College.</td>
<td>C</td>
</tr>
<tr>
<td>33</td>
<td>Alv</td>
<td>The 'Academic organiser' asked me to check what can be learnt in cross-departmental courses, and what has to be kept as unique courses.</td>
<td>B</td>
</tr>
<tr>
<td>34</td>
<td>Alv</td>
<td>This is still connected to college's restrictions, and the search for cross-departmental courses, in order to save teaching hours.</td>
<td>B</td>
</tr>
<tr>
<td>35</td>
<td>Ax</td>
<td>The 'Academic Organiser' was ready to confirm the 'instrumental enrichment' course on the account of one of the given education courses.</td>
<td>B</td>
</tr>
<tr>
<td>36</td>
<td>Alv</td>
<td>(The solution of opening the 'High-school Section' to students from the 'Primary school department') is linked to the current period of reduction cutting off financial, which influences the college. We constantly look for common areas that enable combining courses and gathering students from some departments.</td>
<td>B</td>
</tr>
<tr>
<td>37</td>
<td>Alv</td>
<td>Financial reductions caused cancellation of the co-teaching courses.</td>
<td>B</td>
</tr>
</tbody>
</table>
Appendix no. 4a – Interviews with the M.O.E's functionaries

R.S

1. The T.E should educate student to meet the learners' emotional and academic needs.

2. Teachers . . . have to look at learners as human beings rather than as pupils. . .

3. Teachers should know what to do with each pupil in all situations.

4. Teachers should develop their own personal-professional approach and adopt changes, while considering required adaptations to class regularities, children's needs and curricular plans. . .

5. Changes should match their basic intentions.

6. Teachers need to know and understand the class work, be able to transfer their focus from one area to another area, and deliberatively respond to the M.O.E's directions.

7. The M.O.E is concerned with three main issues: reducing academic gaps and increasing learners' academic achievements; keeping learners' mental health, developing their ability to interpersonal communication and societal education; enhancing the Jewish tradition, the national identity, and valued education that consider facing the rapid changing of life in schools and beyond them. All three issues are important, but their priority changes.

Z.I

1. Teachers should be able to function professionally in a compulsion, interfered and unrest system, while keeping their integrity and their professionalism.

2. Teachers should: get to know learners from a wide an integrative perspective; be expert in the relevant age characteristics; know learners' norm functioning in both edges - gifted learners and disabled and non achievers; be responsible for all class learners' progress, regardless their difficulties.

3. Teachers should be professionally empowered, as to autonomously act.

4. T.E should train for professionally teaching reading, writing and mathematic.

5. Teachers should be able to set a work plan on the curricula basis; to consider all components: the epistemology of the disciplines they teach; the time organisation; class managing; learning environment organisation; technology integration.

6. T.E curricula should consider is exposing student teachers to the whole sequence of schools' curricula. . . They should develop deep understanding in the nature of the disciplines, rather than concentrating teaching methods. . .

7. Teachers need to own a tools' box that indicates their expertise in preferred disciplines, in pedagogy, in the learners' age, concerning developmental cognitive affective and behavioural components.

8. Teachers should be able to: carefully observe learners; professionally identify learners' difficulties, and to direct to specific experts; give appropriate answers; use thoughtfully alternative kinds of evaluation; document their experience, identify phenomena and inquire it; read and interpret data from gathered information, and thoughtfully adapt and use it for future work planning.

9. Teachers should be able to work in teams, and in colleague instruction.

10. Teachers should be able to implement all these characteristics to their proficiency disciplines: language; mathematics; science and technology; humanistic – literature; bible; Jewish thought; social sciences – history; geography; citizenship; special education; may be arts.

11. Student teachers duties should include a portfolio of their plans and experiences with individual learners, with groups of learners and with the whole class; inquiry and action research on experienced interesting phenomena.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The crisis in primary teacher education is increasing. Only few, relatively, choose the option of joining the primary school education.</td>
</tr>
<tr>
<td>2</td>
<td>Many candidates have law entrance grades. There is a need to attract excellent candidates, and offer a leadership emphasis.</td>
</tr>
<tr>
<td>3</td>
<td>Circuit conditions need to change in order to attract candidates.</td>
</tr>
<tr>
<td>4</td>
<td>The inclusive teacher – primary school teachers need to specialize in a level of B.A in major and secondary disciplines. Teachers should teach a central discipline, educate a class and teach some other disciplines that are part of the cluster they have specialized in. (A remark - may be that this direction encourages alienation).</td>
</tr>
<tr>
<td>5</td>
<td>Age proficiency - primary school teachers should be age proficient on their disciplinary proficiency. Proficiency from this point of view relates to all kinds of relevant disciplines, methods and didactics to the primary school age characteristics’ including its lower (kindergarten and secondary school) edges.</td>
</tr>
<tr>
<td>6</td>
<td>Teachers’ competence to teach and to manage a class - primary school teachers should be ready for entering the class. There is a need to define ‘must’ curricula for pre-service education and to construct in-service continuous studies.</td>
</tr>
<tr>
<td>7</td>
<td>The teacher education college has to equip learners with professional tools for continuous learning, keeping up-to-date, critical reading, decision-making, critical consumption of curricula and learning materials.</td>
</tr>
<tr>
<td>8</td>
<td>The in-service education should be built as coherent and sequential studies from a developmental process.</td>
</tr>
<tr>
<td>9</td>
<td>Colleges need to define their educational credo, and primary school departments should keep their unique as part of the institute.</td>
</tr>
<tr>
<td>10</td>
<td>Primary school teachers should be trained for special education and inclusion.</td>
</tr>
<tr>
<td>11</td>
<td>Primary teachers’ status in the Israeli society should be improved.</td>
</tr>
</tbody>
</table>
Appendix no. 4b ‘A’ College Case Study – Data divided to the different influencing factors

The Fourth phase

The College’s influence

60. Those educationally concerned based their educational beliefs on their personal experience claimed that students should develop their theories out of practice, thus theoretic information is not sufficient (A1).

62. The disciplinary teachers, especially those who previously taught in primary schools, recognised that students aught to experience their theoretical studies (A2).

63. The pedagogical counsellors believed that what is central to the learning process is the students’ personal conclusions . . . (A2).

64. The ‘Pedagogical Organiser’, insisted that the reduction of learning hours should not impinge on the educational and the pedagogical T.E.C. The curriculum can be planned better and improved, but it would be a mistake to minimise it (A2).

103. The ‘pure knowledge’ is only a basis. It should not take the total learning time, as it is impossible to passively listen to so many hours, internalise understandings and transfer them into practice (A2).

The Department's influence

223. Every Sunday the pedagogical counsellors met. The first two hours were devoted to general aspects of the T.E, and the other two hours were devoted to the specific planning of courses for each cohort (A1).

225. What mostly encouraged changes in our T.E.C and in the courses contents was mostly our interior constant evaluation, (reflection) that considers where we want to go to, and what do we want to do (A1).

257. We devoted 4-5 meetings for learning and understanding the main characteristics of this approach, its advantages and disadvantages (A2).

233. The students could choose, in the course of the three year study in the college, one co-teaching course every year (A2).

269. The pedagogical program was built as a spiral. There were unique topics for each grade, and other topics which students went through more than one time. For example: ‘observation’ as a topic. The students dealt with ‘observation’ in their first year of study, observed pupils’ behaviour during lessons and in brake time, and prepared a mini-research on the differences / similarities between the behaviours (A2).

270. In the second grade they dealt with children’s diversity, observed pupils, and got acquainted to different aspects of their behaviours (A2).

271. In the third year of study they dealt with the former aspects, and with answers to children’s special needs (A2).

236. The pedagogical counsellors consider the differentiation among the students in their pedagogical work (A2).

237. There is flexibility in evaluating students’ experiencing progress. We cannot declare it because we have two kinds of populations, Jewish and Arab students, who experience in Jewish schools. There are significant differences between them, and we cannot demand from them the same (A2).

239. I cannot say that the exams in the different disciplines differ. But, if needed students get extra time (A2).
234. The T.E.C does not enable much choice, and students' possibilities to choose interesting courses is limited (A2).

246. When I look back to the eight years I was Head of Department I can see that the T.E.C became more integrated. Disciplinary teachers' readiness to experience and develop integrative courses increased (A2).

241. There was a progress in disciplinary teachers' readiness to associate disciplinary needs to schools' reality (A2).

258. A key sentence in our department was that teachers never stop learning. One who wants to be a teacher turns to be an eternal pupil (A1).

259. We were aware to the students' personal development. All we did was directed to increase the consciousness to the self. We believe that self-conscious is important to teachers as human beings, who work with others, and are aware to their abilities and others' abilities (A2).

261. These (reflective) processes develop students' ramified thinking (A2).

The Learners' influences

68. The 'Academic Organiser' allowed the addition of course on 'Special Education' for our students (A2).

194. That is why I said that we looked for a program that will answer the students' existential needs, which will enable them to gain the maximum. Not maximum hours, but maximum opportunities to develop in a valued and humanistic attitude (A2).

195. Students have influenced the T.E.C in two directions. We adapted our courses to the students' level. Their initial cognitive level was low, and we had changed our programs in order to meet their levels, and enable the growth of their potential (A2).

198. The pedagogical counsellors recognised the students' needs, and were eager to help them in confronting problems in the class and solving them (A2).

201. The students' needs in the practicum influence the pedagogical counsellors' considerations in planning their progress plans (A2).

202. The students want to survive, and not to really learn and develop them; this affects their level of learning (A2).

210. As part of the curriculum, pedagogical counsellors met students for personal discussions. These discussions aimed at encouraging the students to learn from their own experience in class. The pedagogical counsellors discussed with the students their needs and problems, while evaluating, rechecking and improving teaching materials, if needed (A2).

The Schools' influences

277. The pedagogical counsellors were acquainted to the schools' needs, and aware to what happened there. Thus, they knew what has to be adapted, changed or added to our program (A2).

278. For example, couple of years ago schools introduced computers. We realised that we are far behind, therefore I we decided to introduce computer studies to the students, on the account of other courses (A2).

280. We had mutual relations with the schools. We invited a school Headmistress, an expert in constructivism, for teaching us this approach. A group of pedagogical counselors, from the third cohort decided to train the students in her school, and prepare their projects there. They even
decided to relocate the pedagogic course in the school, in order to deeply discuss and experience constructivist processes (A2).

283. I was pleased with the association we had with the schools. When I started my role students were scattered in more than 30 schools. When I finished students were less scattered, and those schools we worked became training schools (A2).

284. The pedagogical counsellors guided the teachers in schools how to operate the active learning strategy. The training teachers and the students experienced together the methods that facilitated active learning (A2).

The Academic influence

93Aa. Thus, teaching in the college should differ from teaching in high school and the university. For example: it should aim at increasing students’ appreciation to Bible studies, and at methodological, pedagogical and practical aspects of teaching (A2).

94. There must be a balance between what I call ‘pure knowledge’ that concentrates on content details, and pedagogical knowledge that concerns what should be taught, why and how. The focus on ‘pure knowledge’ should be changed (A2).

95. The ‘Head of Teaching and Education Section’ and myself, with the encouragement of all pedagogical counsellors opened courses for disciplinary teachers that never experienced school teaching. Those teachers who participated in the course understood that teaching in the College differs from teaching in university (A2).

97. These courses facilitated the integrating of ‘pure knowledge’ with ‘pedagogical knowledge’ (A2).

209. T.E does not mean only acquiring basic or profound knowledge, but also becoming a leader, a desirable humane model, worth to be imitated (A2).

The M.O.E’s influences

164. The M.O.E presents, ever so often, new educational approaches, which force schoolteachers and college teachers to adopt new strategies and techniques, and significantly change their teaching ways. Teachers that have acquired internalised and efficiently experienced so called ‘old approaches’ are expected to put aside their existing knowledge. The expected changes that the M.O.E offered were not convincing, so we decided to limit the changes, and avoiding from extreme changes in the T.E.C. We did not fully adopt the M.O.E’s initiative that facilitated ‘literacy’. But we did not ignore it (A2).

165. The M.O.E’s ‘core curriculum’ initiative encouraged a renewed examination of our T.E.C. We recognised and mapped parts that were central to our educational belief. We did so many times before, but we used different wording for the same process (A2).

166. The M.O.E’s ‘Inclusion’ initiative influence was minor, as any way, we included special education aspects in the existing pedagogical counselling programs. We did not add a specific course for special education to the T.E.C (A2).

171. We invited a functionary from the M.O.E to discuss with us the new ‘core curriculum’ initiative that the wing she was in charge of facilitated in the schools (A2).

Technological Innovation influences

282. In my time the use of computers was a real upheaval. Students learnt 4 hours use of computers. Those who chose enrichment courses had a fifth co-teaching course, where a disciplinary teacher and pedagogical counsellors cooperated (A2).
286. For example, couple of years ago schools introduced computers. We realised that we are far behind, therefore I we decided to introduce computer studies to the students, on the account of other courses (A2).

The Fifth phase

The College’s influence

323. The H.O.D forwards me the desired T.E.C, which are scrutinised . . . according to the College’s academic and financial principles. Then they are returned to the departments for further considerations, and if needed improvements”. Afterward, the proposed T.E.C are forwarded to the ‘College’s Teaching Committee’, and for a final approval they are forwarded to the ‘Academic Council’. The ‘College’s Teaching Committee’ includes chosen representatives from the ‘Forum of Heads of Departments’ and the ‘Forum of Heads of Disciplinary Faculties’ (F.O.H.O.D.F) (A3).

323a. As a representative of the College I am in charge of the college’s timetable. I am not professional in teaching and education; I do not pretend to be (A5).

326. A5 does not decide by her self. She says to us that we are the professionals in education, so we should design our T.E.C. On the other hand she emphasises that our decision are sovereign as far as the disciplines remain untouched (A3).

330. A5 and I divide the work between us. There is a mixture of tasks that we share, and even overlap, as a consequence of our mutual work. My role is a relic of the old Seminary’s structure, and the ‘Academic Organiser’ role represents the new College’s structure (A3).

332. Sometimes we arbitrarily share the work, sometimes as she is more university oriented and I am education oriented, she focuses on the disciplines’ organisation and I focus on the education studies organisation (A3).

358. A5 does the technical work, but actually the Department’s Head, with my help, does the whole work (A3).

85. In the last three years the ‘Academic Organiser’ position has become dominant. She fosters academic professionalism rather then educational professionalism, and in spite for her Kibbutz origin, she is not aware of the specific educational needs we aught to have a C.F.T.E (A1).

105. The Academic Organiser’, the ‘Head of the Education and the Teaching Section’, (A3) and my self have strongly been involved in developing the three routes option. We invited the ‘Heads of disciplinary faculties’ to a meeting, presented the principles of the program, asked for their genuine responses ... (A1).

122. The Disciplinary Teachers and the ‘Academic Organiser’ actually transmit the message that we as educators should not be involved in disciplinary matters (A1).

124. The ‘instrumental enrichment’ course was introduced for the students’ needs, but has been regarded as a ‘cream’, and not as a fundamental course ... the ‘Head of the mathematic faculty’ and the ‘Academic Organiser’ decided to cut it off for another pure mathematic course, unless we decide to cut off another educational course (A1).

355a. “There has even been a talk that doubts the very existence of the ‘Primary Section’ departments. Some members of staff claim that the structure of the whole College should turn into a university’s structure and that will affect many things (A3).

254. Staff’s cooperative work used to be part of our professional life and educational belief, and people could not work isolated (A1).

354. If we properly read the map, we realise that the primary school department will eventually will fade away. It will not have something unique that will keep it alive (A3).
I don't know what will happen when disciplinary H.O.D will replace those H.O.D who are education originated. I do not know what will happen when we shall retire. Who will defend the primary school department? It will not be simple (A3).

This students' enrollment to the primary department is affected by the limited options the department can offer them for further development (A1).

We do not know how the fact that students join courses in the 'High-School Section' will influence our department. This move might affect the existence of our department (A1).

The general conception is that teachers are first of all educators . . . thus; they are massively trained by the class educators, and less by disciplinary (A4).

We strongly believe that primary school teachers are first of all educators, even if they are not officially the class' educators. Teachers should relate to children as whole entities, they should refer to the class as a class of children, and to each situation as a comprehensive educational matter. Teaching to our mind is a mission rather than a role (A3).

We tentatively shape the education part of the T.E.C, and present it to the 'Teaching Committee', and it is discussed and approved or not (A3).

The F.O.H.O.D.F decides which courses and what contents will be represented in the disciplinary part of the T.E.C, while consulting with the 'Academic Organiser' and the H.O.D. Their decisions are to a large extent sovereign, and the dialogues they have, especially with the H.O.D, depend on their personal openness and readiness to consider other's interests and beliefs".

The H.O.D and their staffs are responsible for the T.E.C. The departmental staffs, the H.O.D and the pedagogical counsellors, meet every week . . . In these meetings they discuss their . . . requirements for adapting / changing the T.E.C (A3).

We have a Forum of the F.O.H.O.D.F, but it is a huge and ineffective Forum, so negotiation is mainly interpersonal (A3).

"We have a meeting of the entire Section Secretariat", which includes the H.O.D, longitudinal functionaries, such as: the 'Practicum Organiser', the 'Induction Organiser', the 'Education Studies Organiser', the 'Students' Dean' and the 'Fourth Year Organiser', who is in charge of the external students who accomplish their B.Ed. In these meeting we clarify current administration matters, and raise aspects of training for further discussion and deep thought . . . (A3).

We meet every two weeks. Four meetings are devoted to basic and principal issues. The 'Academic Organiser' and other relevant functionaries are invited to these meetings. . . Sometimes an ad hoc sub-committee is chosen for developing a practical proposal to be implemented in the Section's different departments (A3).

We have a 'Pedagogical Counsellors' Forum', which the 'Pedagogic Organiser' is in charge of, and this Forum meets five times a year, for theoretic learning. In this Forum departments share their unique projects and ideas, and professional external guests are invited in order to share with the staff their ideas, experience or research results (A3).

Our college has grown and became huge, so the even the Senior Staff, such as Heads of the Disciplinary Faculties' cannot be involved any more in decision-making, as it used to be in former times. They are only selectively involved. But when the decision about the three routes was taken, they did not understand what was going on (A1).

Thus, the 'College's Board' decided to appoint delegates for a 'Sub-Forum' that will meet once in two weeks, for deal with instantaneous issues. The information is transferred to the Forum's members (A1).

I have personal meetings with 'Heads of disciplinary faculties'; usually due to my initiative, and only rarely due to their (A1).

I insisted on having a dialogue with the disciplines' 'Heads of faculties'. And what usually happens is that the dialogues are based on my personal relations with the functionaries and other members of their staffs (A1).
Another influencing factor is the existential pressures, such as the F.O.H.O.D.F’s initiatives to extend the academic-disciplinary foothold in the T.E.C (A5).

We believe that those who teach in a C.F.T.E aught to be teachers’ trainers and not pure disciplinary teachers (A3).

People who were educated in universities acted completely different from those who experienced school-teaching. In the past we encouraged the acceptance of people who experienced school teaching (A3).

This was regarded as a clear advantage, now days, when PhD is a prerequisite condition for teachers’ acceptance, the College accepts teachers who never met a child in a class (A3).

The College has turned to be an additional place for people who did not manage to be accepted as university’s staff members (A3).

Most of those teachers who teach both in university and in our college admit that education does really interest them (A3).

When we decided to introduce a course on ‘Special education’ educational part of the T.E.C, members of the ‘Special education department’ blamed us for endangering their jobs (A1).

The special education department and the infant education department seem to be much more attractive to students, as teachers who study in these departments get certificates that allow them either earning more money per a hour, and / or the possibility to leave the state teaching institutions for private work. The competition with the high-school section is even stronger, as high school teaching is regarded as prestigious (A1).

We were not aware to the crawl move towards a more academic orientation that demands a disciplinary focus and concrete theoretic education courses that will increase, so they believe, the professional teaching (A1).

The debate with the Disciplinary Faculties about the disciplines’ programs, and the needed curriculum, is about two questions - what kind of knowledge is needed, and how much of it is needed (A1).

Students get a didactic course in each specialisation, but there is a debate about who will teach this course - disciplinary teachers or pedagogical counsellors (A1).

The debate on the dosage between didactics and pure disciplinary knowledge is only one of the debates we have in the college (A1).

A course of quantitative research has been compelled on us (A1).

Only one course that focuses on ‘aspects of identity’ remained, and there are many debates on its contents (A1).

The curtailment of the ‘Education Studies’ courses caused severe struggles, and we try that the ‘Head of Department’ will be the last arbiter (A3).

“This helps in our struggles in implementing our beliefs ... and representing them elsewhere in the College (A3).

This means that in the last year I toughly struggled and had a kind of a ‘world war’ with functionaries in charge of the policy making in the college (A1).

It seems that this is a small thing, but this debate caused constant struggles, which eventually have an impact on the ratio between the disciplinary and the pedagogic parts of the T.E.C, except the part of the fundamental courses, which is not influenced by these things (A1).

We had another struggle between the computer faculty and other disciplinary faculties. Computer teachers had to slowly give up applied courses for disciplinary teachers who integrated relevant applications into their courses. (A1).

The primary school T.E.C suffers because it cannot fulfil its uniqueness. Its uniqueness is not in disciplinary oriented, rather it is age oriented (A5).
297. The age characteristics necessitate a curriculum based on an educational belief in the wholeness of schooling framework, neither segregated disciplinary courses, nor deep disciplinary studies (A5).

337. The primary school T.E.C are ... the worst among the departments I am in charged of, because of the students’ decrease ... The primary school department depends on other departments, it cannot offer unique courses ... to two or three students (A3).

349. Primary school graduates have limited options for personal development beyond the class’ doors. Teachers are imprisoned in class ... If this basic situation will not get changed then the primary school’s situation will get even worse (A3).

131. I have a limited influence on the disciplinary part of the T.E.C. I have much more freedom in T.E.C's education part, and my influence is salient (A1).

251. We devote much time discussing the pedagogical and the experiential characteristics of our curriculum. We are now busy thinking about how to increase its attractiveness. We always look for new ideas, but we are not intending to leave our deep educational beliefs (A1).

254. Staff’s cooperative work used to be part of our professional life and educational belief, and people could not work isolated (A1).

252. We have a tradition of professional meetings, where we deeply discuss the new offered ideas, whereas the Disciplinary Faculties do not work similarly (A1).

253. I maintain norms of mutual work; in spite the academic norms that suppress such norms, in order to guarantee cooperative decision-making (A1).

232. If we had more students my influence on the disciplinary faculties would have increased. Our department is small, and the number of students decreased in the last couple of years, we cannot offer choice studies, but we believe we should offer (A1).

268. The project that the third grade students chose, when planning an integrative topic has turned to be a research work on educational dilemmas that interest the students (A1).

52. The whole T.E.C does not enable differential courses, except some fundamental courses, although we believe that we should have offered such courses to the students (A1).

235. In the practicum there is differentiation between students’ teaching competencies, and it demands hours and days of work (A1).

The Society’s influence

288. Only one course that focuses on ‘aspects of identity’ remained, and there are many debates on its contents (A1).
### Appendix no. 5 - The Questionnaire’s data organised in Tables - an unfilled

College’s influences - given scores (C = current H.O.D; F = former H.O.D)

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. The college imposes a common T.E.C on all departments</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>30. Adding/changing courses requires official college’s approval</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>31. The college enables the department to shape its own T.E.C according to its educational belief</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>32. The college enforces cross-department fundamental courses</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>33. The college determines the departmental staff’s placement</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>34. The college imposes the departmental specialization areas</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>35. The college enables departmental staff development, due to its preferences</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td><strong>Total score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix no. 5b – Questionnaire’s Grading summarising Tables 10A – 20A

### D. Table 10A. Distribution of high scores (3-4), for all areas of influence, regarding Current (C) and Former (F) H.O.D. (In brackets appearances of score 4)

<table>
<thead>
<tr>
<th>Influences</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total score 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Academic 8 questions</td>
<td>3</td>
<td>4(1)</td>
<td>4(2)</td>
<td>2</td>
<td>4</td>
<td>4(1)</td>
<td>4(2)</td>
<td>3</td>
<td>5(1)</td>
<td>4(1)</td>
</tr>
<tr>
<td>Societal 11 questions</td>
<td>3</td>
<td>6(2)</td>
<td>9(7)</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>9(6)</td>
<td>7(4)</td>
</tr>
<tr>
<td>Schools 9 questions</td>
<td>4(4)</td>
<td>5(1)</td>
<td>8(3)</td>
<td>4(1)</td>
<td>6</td>
<td>5(3)</td>
<td>2</td>
<td>2</td>
<td>6(2)</td>
<td>5(1)</td>
</tr>
<tr>
<td>Colleges 7 questions</td>
<td>6(2)</td>
<td>4(3)</td>
<td>3(2)</td>
<td>3(1)</td>
<td>6(3)</td>
<td>3(5)</td>
<td>4(2)</td>
<td>5(2)</td>
<td>5(3)</td>
<td>6(3)</td>
</tr>
<tr>
<td>Departments 5 questions</td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
<td>2</td>
<td>2</td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
<td>4</td>
<td>1(1)</td>
</tr>
<tr>
<td>Technological Innovations 9 questions</td>
<td>5(2)</td>
<td>-</td>
<td>9(7)</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>9(5)</td>
<td>9(4)</td>
</tr>
<tr>
<td>M.O.E 8 questions</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>6(3)</td>
<td>1</td>
<td>3(2)</td>
<td>3(1)</td>
<td>2</td>
</tr>
<tr>
<td>Students 7 questions</td>
<td>3(2)</td>
<td>6(2)</td>
<td>3(2)</td>
<td>6(2)</td>
<td>3</td>
<td>3(1)</td>
<td>-</td>
<td>3(2)</td>
<td>4(2)</td>
<td>2(1)</td>
</tr>
</tbody>
</table>

### Table 11A - Distribution of low scores (1-2), for all areas of influence, regarding Current (C) and Former (F) H.O.D. (In brackets appearances of score 1)

<table>
<thead>
<tr>
<th>Influences</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total score 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Academic 8 questions</td>
<td>5(1)</td>
<td>3(2)</td>
<td>4(2)</td>
<td>6</td>
<td>4(1)</td>
<td>4(1)</td>
<td>4(1)</td>
<td>5(1)</td>
<td>3(1)</td>
<td>3(1)</td>
</tr>
<tr>
<td>Societal 11 questions</td>
<td>8</td>
<td>4(1)</td>
<td>2(1)</td>
<td>5</td>
<td>9(4)</td>
<td>7(3)</td>
<td>9(2)</td>
<td>3</td>
<td>2(1)</td>
<td>4(1)</td>
</tr>
<tr>
<td>Schools 9 questions</td>
<td>5</td>
<td>2(1)</td>
<td>1(1)</td>
<td>5(1)</td>
<td>3(2)</td>
<td>4(2)</td>
<td>7(1)</td>
<td>7(3)</td>
<td>3(2)</td>
<td>4(1)</td>
</tr>
<tr>
<td>Colleges 7 questions</td>
<td>1</td>
<td>3(1)</td>
<td>4(3)</td>
<td>4</td>
<td>4(1)</td>
<td>3(1)</td>
<td>2</td>
<td>3(1)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Departments 5 questions</td>
<td>2(1)</td>
<td>2</td>
<td>2(1)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4(2)</td>
<td>4(1)</td>
<td>2</td>
</tr>
<tr>
<td>Technological Innovations 9 questions</td>
<td>3(1)</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>9(4)</td>
<td>9(3)</td>
<td>9(2)</td>
<td>5</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>M.O.E 8 questions</td>
<td>4(1)</td>
<td>1</td>
<td>4(1)</td>
<td>3(1)</td>
<td>2(1)</td>
<td>2</td>
<td>2(1)</td>
<td>4(2)</td>
<td>5(1)</td>
<td>6(2)</td>
</tr>
<tr>
<td>Students 7 questions</td>
<td>4(1)</td>
<td>1(1)</td>
<td>3(2)</td>
<td>5(2)</td>
<td>3</td>
<td>4</td>
<td>4(2)</td>
<td>2</td>
<td>3</td>
<td>5(1)</td>
</tr>
</tbody>
</table>
### Table 4A - Schools' influences - given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>2</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>4</td>
<td>X</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>19</td>
<td>28</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>19</td>
<td>17</td>
<td>24</td>
<td>22</td>
<td>29</td>
<td>23</td>
</tr>
</tbody>
</table>

### Table 5A - Colleges' influences - given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>31</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>32</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>33</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>34</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>21</td>
<td>16</td>
<td>18</td>
<td>17</td>
<td>21</td>
<td>22</td>
<td>19</td>
<td>21</td>
<td>22</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

### Table 6A - Departments' influences - given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>37</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>38</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>39</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>15</td>
<td>13</td>
<td>11</td>
<td>14</td>
<td>15</td>
<td>14</td>
<td>10</td>
<td>11</td>
<td>14</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>
Table 7A - T.I influences - given scores

<table>
<thead>
<tr>
<th>College</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>2</td>
<td>X</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>42</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>43</td>
<td>4</td>
<td>X</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>44</td>
<td>5</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>45</td>
<td>6</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>46</td>
<td>7</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>47</td>
<td>8</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>48</td>
<td>9</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>49</td>
<td>10</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>34</td>
<td>20</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>16</td>
<td>32</td>
<td>31</td>
<td>31</td>
<td>32</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 8A - M.O.E's influences - given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>X</td>
<td>2</td>
<td>X</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>51</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>52</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>53</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>54</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>X</td>
<td>X</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>55</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>56</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>X</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>57</td>
<td>1</td>
<td>X</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>X</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>X</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>18</td>
<td>18</td>
<td>20</td>
<td>16</td>
<td>25</td>
<td>8</td>
<td>17</td>
<td>19</td>
<td>16</td>
<td>20</td>
<td>17</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 9A - Students' influences - given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>X</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>59</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>60</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>61</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>62</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>63</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>64</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>21</td>
<td>17</td>
<td>15</td>
<td>18</td>
<td>12</td>
<td>13</td>
<td>20</td>
<td>16</td>
<td>18</td>
<td>16</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>
### Table 2A - Academic influences – given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>2</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>17</td>
<td>20</td>
<td>18</td>
<td>19</td>
<td>21</td>
<td>21</td>
<td>24</td>
<td>22</td>
<td>23</td>
<td>23</td>
<td>24</td>
</tr>
</tbody>
</table>

### Table 3A - Society’s influences – given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Cu</td>
<td>Fo</td>
<td>Cu</td>
<td>Fo</td>
<td>Cu</td>
<td>Fo</td>
<td>Cu</td>
<td>Fo</td>
<td>Cu</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>X</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>26</td>
<td>36</td>
<td>28</td>
<td>20</td>
<td>23</td>
<td>19</td>
<td>25</td>
<td>36</td>
<td>32</td>
<td>25</td>
<td>27</td>
</tr>
</tbody>
</table>

Total score: 28, 28, 37, 35
Appendix no. 5a — The questionnaire’s closed part, data presented in tables and in column diagrams:

Index: Table _A  — Table presented in the Appendices
Diagram _D  — Diagram presented in the Appendices

A. Table 1A presents the cadence’s duration of each of the H.O.D.

B. Tables 2A-9A separately show the data gathered in each area of influence. Each table offers sum-up of scoring in two ways; one - lateral scoring of each question, while crossing departments, the second one - personal longitudinal scoring of all questions, presenting a departmental scoring in a certain college, in a certain period of time, by current and former H.O.D).

C. Column Diagrams 1D-8D show the distribution of scoring, from the highest to the lowest, for each area of influence.

D. Tables 10A-11A show the high or low scoring data distribution (3-4 / 1-2), in all possible areas of influence, regarding current and former H.O.D. It also offers two kinds of sum up: sum up of score 4 or 1, for all current H.O.D of departments, in each area of influence; and sum up of score 4 or 1 for both current and former H.O.D.

E. Table 12A shows the location of each college, regarding the distribution of scoring, from the highest to the lowest, concerning all possible areas of influence.

F. Tables 13A-20A present lists of the three most important statements in the actual T.E.C by the order of their importance, as presented in gathered.

G. Column Diagrams 9D-16D the distribution of the H.O.D’s responses to the questionnaire, total score divided to areas of influence.

A. Table 1A. Heads of departments — cadence’s duration

<table>
<thead>
<tr>
<th></th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>4-5*</td>
<td>1-2*</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>'Heads'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>'Heads'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* These 'Heads' returned their responses at the end of their fourth or first year (on May - June, 2003). But, as resulted from the questionnaire they have been selected for the case studies. The case studies’ research has started during summer 2003, and will permeate to their fifth or second year, accordingly.

** The former Head of Department retired, and did not respond to the questionnaire

*** The former Head of Department retired years ago
Diagram 1D - Scoring's distribution of all Colleges, concerning current and former H.O.D. for each question in the Academic area of influence.

Diagram 2D - Scoring's distribution of all Colleges, concerning current and former H.O.D. for each question in the Societal area of influence.

Diagram 3D - Scoring's distribution of all Colleges, concerning current and former H.O.D. for each question in the Schools' area of influence.

Diagram 4D - Scoring's distribution of all Colleges, concerning current and former H.O.D. for each question in the Colleges' area of influence.
Diagram 5D - Scoring's distribution of all Colleges, concerning current and former H.O.D, for each question in the **Departmental** area of influence

Diagram 6D - Scoring's distribution of all Colleges, concerning current and former H.O.D, for each question in the **Technological Innovation** area of influence

Diagram 7D - Scoring's distribution of all Colleges, concerning current and former H.O.D, for each question in the **M.O.E.'s** area of influence

Diagram 8D - Scoring's distribution of all Colleges, concerning current and former H.O.D, for each question in the **Students'** area of influence
### Appendix no. 5b - Questionnaire's Grading summarising Tables 10A - 20A

D. **Table 10A. Distribution of high scores (3-4), for all areas of influence, regarding Current (C) and Former (F) H.O.D. (In brackets appearances of score 4)**

<table>
<thead>
<tr>
<th>Influences</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total score 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td>3</td>
<td>4(1)</td>
<td>4(2)</td>
<td>2</td>
<td>4</td>
<td>4(1)</td>
<td>4(2)</td>
<td>3</td>
<td>5(1)</td>
<td>4(1)</td>
</tr>
<tr>
<td><strong>Societal</strong></td>
<td>3</td>
<td>6(2)</td>
<td>9(7)</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>9(6)</td>
<td>7(4)</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td>4(4)</td>
<td>5(1)</td>
<td>8(3)</td>
<td>4(1)</td>
<td>6</td>
<td>5(3)</td>
<td>2</td>
<td>2</td>
<td>6(2)</td>
<td>5(1)</td>
</tr>
<tr>
<td><strong>Colleges</strong></td>
<td>6(2)</td>
<td>4(3)</td>
<td>3(2)</td>
<td>3(1)</td>
<td>3(1)</td>
<td>4(4)</td>
<td>5(3)</td>
<td>4(2)</td>
<td>5(2)</td>
<td>5(3)</td>
</tr>
<tr>
<td><strong>Departments</strong></td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
<td>2</td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
<td>4</td>
<td>1(1)</td>
<td>1(1)</td>
</tr>
<tr>
<td><strong>Technological Innovations</strong></td>
<td>5(2)</td>
<td>-</td>
<td>9(7)</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>9(5)</td>
</tr>
<tr>
<td><strong>M.O.E</strong></td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>6(3)</td>
<td>1</td>
<td>3(2)</td>
<td>3(1)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td>3(2)</td>
<td>6(2)</td>
<td>3(2)</td>
<td>6(2)</td>
<td>3</td>
<td>3(1)</td>
<td>-</td>
<td>3</td>
<td>4(2)</td>
<td>2(1)</td>
</tr>
</tbody>
</table>

### Table 11A - Distribution of low scores (1-2), for all areas of influence, regarding Current (C) and Former (F) H.O.D. (In brackets appearances of score 1)

<table>
<thead>
<tr>
<th>Influences</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total score 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td>5(1)</td>
<td>3(2)</td>
<td>4(2)</td>
<td>6</td>
<td>4(1)</td>
<td>4(1)</td>
<td>4(1)</td>
<td>5(1)</td>
<td>3(1)</td>
<td>3(1)</td>
</tr>
<tr>
<td><strong>Societal</strong></td>
<td>8</td>
<td>4(1)</td>
<td>2(1)</td>
<td>5</td>
<td>9(4)</td>
<td>7(3)</td>
<td>9(2)</td>
<td>3</td>
<td>2(1)</td>
<td>4(1)</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td>5</td>
<td>2(1)</td>
<td>1(1)</td>
<td>5(1)</td>
<td>3(2)</td>
<td>4(2)</td>
<td>7(1)</td>
<td>7(3)</td>
<td>3(2)</td>
<td>4(1)</td>
</tr>
<tr>
<td><strong>Colleges</strong></td>
<td>1</td>
<td>3(1)</td>
<td>4(3)</td>
<td>4</td>
<td>4(1)</td>
<td>3(1)</td>
<td>2</td>
<td>3(1)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Departments</strong></td>
<td>2(1)</td>
<td>2</td>
<td>2(1)</td>
<td>2(1)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4(2)</td>
<td>4(1)</td>
</tr>
<tr>
<td><strong>Technological Innovations</strong></td>
<td>3(1)</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>9(4)</td>
<td>9(3)</td>
<td>9(2)</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>M.O.E</strong></td>
<td>4(1)</td>
<td>1</td>
<td>4(1)</td>
<td>3(1)</td>
<td>2(1)</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4(2)</td>
<td>5(1)</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td>4(1)</td>
<td>1(1)</td>
<td>3(2)</td>
<td>5(2)</td>
<td>3</td>
<td>4</td>
<td>4(2)</td>
<td>2</td>
<td>3</td>
<td>5(1)</td>
</tr>
</tbody>
</table>
### Table 4A - Schools' influences - given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>2 X 3 2</td>
<td>3 2</td>
<td>2 1</td>
<td>3 2</td>
<td>X 3 3</td>
<td>1 2</td>
<td>2</td>
<td>4 5</td>
<td>4 1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>4 X 3 3</td>
<td>3 3</td>
<td>4 3</td>
<td>4 3</td>
<td>4 4 4</td>
<td>4 3</td>
<td>3</td>
<td>- -</td>
<td>9 6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>2 2 4 2</td>
<td>1 1</td>
<td>2 1 1</td>
<td>2 2 1</td>
<td>2 1 2</td>
<td>2 2</td>
<td>2</td>
<td>8 6</td>
<td>1 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>4 3 4 4</td>
<td>3 4</td>
<td>3 2 4</td>
<td>4 4 4</td>
<td>4 3 4</td>
<td>3 4</td>
<td>3</td>
<td>1 3</td>
<td>8 4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>4 3 4 2</td>
<td>3 4</td>
<td>2 2 3</td>
<td>2 3 4</td>
<td>4 4 4</td>
<td>4 4</td>
<td>3</td>
<td>1 1</td>
<td>18 4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>4 3 3 3</td>
<td>3 4</td>
<td>2 2 3</td>
<td>3 3 4</td>
<td>4 4 3</td>
<td>4 3</td>
<td>3</td>
<td>1 1</td>
<td>1 8</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>2 4 3 2</td>
<td>2 2</td>
<td>2 3 3</td>
<td>2 4 2</td>
<td>2 2 3</td>
<td>2</td>
<td>2</td>
<td>6 3</td>
<td>3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>2 1 1 1</td>
<td>1 1</td>
<td>1 1 1</td>
<td>1 1 1</td>
<td>1 1 1</td>
<td>1 1</td>
<td>1</td>
<td>9 7</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>2 3 3 3</td>
<td>3 3</td>
<td>2 2 2</td>
<td>2 2 1</td>
<td>1 3 1</td>
<td>3 3</td>
<td>3</td>
<td>5 2</td>
<td>4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26 19</td>
<td>28 21</td>
<td>22 23</td>
<td>19 17</td>
<td>24 22</td>
<td>22 29</td>
<td>23 25</td>
<td>24 24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 5A - Colleges' influences - given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>3 3 1 2</td>
<td>1 1</td>
<td>3 1 2</td>
<td>2 2</td>
<td>3 1</td>
<td>2 X 2</td>
<td>1</td>
<td>6 5</td>
<td>3 1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>3 4 2 3</td>
<td>3 4</td>
<td>2 2 4</td>
<td>3 3</td>
<td>4 3 4</td>
<td>4 4</td>
<td>3</td>
<td>2 1</td>
<td>7 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>2 2 4 2</td>
<td>3 4</td>
<td>3 3 4</td>
<td>3 3</td>
<td>4 4 3</td>
<td>4 3</td>
<td>2</td>
<td>2 2</td>
<td>7 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>4 4 3 3</td>
<td>2 2</td>
<td>3 2 3</td>
<td>2 3 4</td>
<td>4 4 4</td>
<td>4 1 1</td>
<td>3</td>
<td>3 2</td>
<td>6 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>3 2 1 2</td>
<td>2 2</td>
<td>2 2 4</td>
<td>2 2 2</td>
<td>2 1 2</td>
<td>1 2 4</td>
<td>3</td>
<td>5 6</td>
<td>4 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>3 1 1 2</td>
<td>2 2</td>
<td>2 4 4</td>
<td>3 3 3</td>
<td>3 3 4</td>
<td>4 3</td>
<td>3</td>
<td>2 2</td>
<td>7 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>4 4 4 4</td>
<td>4 4</td>
<td>4 4 3</td>
<td>3 3 4</td>
<td>4 4 3</td>
<td>3</td>
<td>4</td>
<td>- -</td>
<td>9 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22 21</td>
<td>16 18</td>
<td>17 21</td>
<td>22 19</td>
<td>21 22</td>
<td>23 21</td>
<td>20 20</td>
<td>20 23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 6A - Departments' influences – given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>3 2 3 3</td>
<td>3 3</td>
<td>4 3 1 1</td>
<td>3 4</td>
<td>4 2 3</td>
<td>4</td>
<td>1</td>
<td>3 8</td>
<td>8 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>2 3 1 1</td>
<td>2 2</td>
<td>2 2 2</td>
<td>2 3 2</td>
<td>3 2 2</td>
<td>3</td>
<td>2</td>
<td>7 4</td>
<td>2 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>3 4 4 2</td>
<td>3 3 3 2</td>
<td>2 2 4</td>
<td>4 4 3</td>
<td>4 3 4</td>
<td>3 4</td>
<td>3</td>
<td>1 2</td>
<td>8 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>4 4 4 3</td>
<td>4 3 2</td>
<td>4 4 4</td>
<td>4 4 4</td>
<td>4 4 4</td>
<td>4</td>
<td>4</td>
<td>1 -</td>
<td>8 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>1 2 1 2</td>
<td>2 2 2</td>
<td>2 2 1</td>
<td>2 1 1</td>
<td>2 2 2</td>
<td>2</td>
<td>2</td>
<td>9 7</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13 15</td>
<td>13 11</td>
<td>14 15</td>
<td>10 11</td>
<td>14 16</td>
<td>14 14</td>
<td>16 15</td>
<td>16 15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7A - T.I influences – given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>2</td>
<td>X</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>42</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>43</td>
<td>4</td>
<td>X</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>44</td>
<td>3</td>
<td>X</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>45</td>
<td>4</td>
<td>X</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>46</td>
<td>2</td>
<td>X</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>47</td>
<td>1</td>
<td>X</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>48</td>
<td>2</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>49</td>
<td>3</td>
<td>X</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>X</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>34</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 8A - M.O.E's influences – given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>X</td>
<td>2</td>
<td>X</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>51</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>52</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>53</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>54</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>55</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>56</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>X</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>57</td>
<td>1</td>
<td>X</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>X</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 9A - Students' influences – given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>X</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>59</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>60</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>2</td>
<td>X</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>61</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>62</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>63</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>X</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>64</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td>21</td>
<td>15</td>
</tr>
</tbody>
</table>
### B. Tables 2A-9A

#### Table 2A - Academic influences — given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C 3 1 F</td>
<td>C 2 2 F</td>
<td>C 2 2 F</td>
<td>C 2 F</td>
<td>C 3 F</td>
<td>C 3 2 F</td>
<td>C 3 2 F</td>
<td>C 2 F</td>
<td>C 2 2 Cu</td>
<td>7 6 Cu</td>
<td>2 1 Cu</td>
<td>Cu Fo</td>
</tr>
<tr>
<td>2</td>
<td>3 4 2 4</td>
<td>2 3 3 4</td>
<td>3 2 3 4</td>
<td>4 2 3 4</td>
<td>4 2 3 4</td>
<td>4 2 3 4</td>
<td>4 2 3 4</td>
<td>4 2 3 4</td>
<td>4 2 3 4</td>
<td>1 4 4 8 3</td>
<td>1 4 4 8 3</td>
<td>1 4 4 8 3</td>
</tr>
<tr>
<td>3</td>
<td>3 2 3 2</td>
<td>3 3 4 3</td>
<td>3 3 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>2 1 7 6</td>
<td>2 1 7 6</td>
<td>2 1 7 6</td>
</tr>
<tr>
<td>4</td>
<td>1 3 1 2</td>
<td>2 1 4 3</td>
<td>2 2 3 2</td>
<td>2 2 3 2</td>
<td>2 2 3 2</td>
<td>2 2 3 2</td>
<td>2 2 3 2</td>
<td>2 2 3 2</td>
<td>2 2 3 2</td>
<td>2 6 4 3 3</td>
<td>2 6 4 3 3</td>
<td>2 6 4 3 3</td>
</tr>
<tr>
<td>5</td>
<td>2 3 4 2</td>
<td>2 2 2 2</td>
<td>2 2 2 2</td>
<td>2 2 2 2</td>
<td>2 2 2 2</td>
<td>2 2 2 2</td>
<td>2 2 2 2</td>
<td>2 2 2 2</td>
<td>2 2 2 2</td>
<td>3 4 4 5 3</td>
<td>3 4 4 5 3</td>
<td>3 4 4 5 3</td>
</tr>
<tr>
<td>6</td>
<td>2 X 3 2</td>
<td>3 4 1 2</td>
<td>3 3 4 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>1 4 4 2 3</td>
<td>1 4 4 2 3</td>
<td>1 4 4 2 3</td>
</tr>
<tr>
<td>7</td>
<td>2 1 1 3</td>
<td>3 3 2 2</td>
<td>1 1 2 1</td>
<td>1 1 2 1</td>
<td>1 1 2 1</td>
<td>1 1 2 1</td>
<td>1 1 2 1</td>
<td>1 1 2 1</td>
<td>1 1 2 1</td>
<td>3 6 4 3 3</td>
<td>3 6 4 3 3</td>
<td>3 6 4 3 3</td>
</tr>
<tr>
<td>8</td>
<td>3 2 3 2</td>
<td>3 3 3 1</td>
<td>3 3 3 1</td>
<td>3 3 3 1</td>
<td>3 3 3 1</td>
<td>3 3 3 1</td>
<td>3 3 3 1</td>
<td>3 3 3 1</td>
<td>3 3 3 1</td>
<td>3 3 3 1 5 9 2</td>
<td>3 3 3 1 5 9 2</td>
<td>3 3 3 1 5 9 2</td>
</tr>
<tr>
<td>Total score</td>
<td>18 17 20 18</td>
<td>19 20 21 18</td>
<td>21 21 24 22</td>
<td>23 18 24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 3A - Society's influences — given scores

<table>
<thead>
<tr>
<th>Question</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
<th>College H</th>
<th>College I</th>
<th>Total Score 1-2</th>
<th>Total Score 3-4</th>
<th>Total Score X</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>2 1 1 2   X 2 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
<td>8</td>
<td>8 7</td>
<td>-</td>
<td>-</td>
<td>8 7 7 7 7 7 7 7 7 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2 4 4 3</td>
<td>3 3 2 3</td>
<td>4 4 3 4</td>
<td>4 4 3 4</td>
<td>4 4 3 4</td>
<td>3</td>
<td>3</td>
<td>3 3</td>
<td>3 3</td>
<td>3 3 3 3 3 3 3 3 3 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2 X 3 2</td>
<td>2 2 2 2</td>
<td>4 4 3 2</td>
<td>3 2 3 2</td>
<td>4 2 3 2</td>
<td>2</td>
<td>2 2</td>
<td>2 2 2</td>
<td>2 2 2</td>
<td>2 2 2 2 2 2 2 2 2 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3 3 4 2</td>
<td>2 2 3 2</td>
<td>3 2 3 2</td>
<td>4 2 3 2</td>
<td>4 2 3 2</td>
<td>3</td>
<td>3</td>
<td>3 3 2</td>
<td>3 3 2</td>
<td>3 3 3 3 3 3 3 3 3 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2 3 4 3</td>
<td>2 2 3 2</td>
<td>3 2 3 2</td>
<td>4 2 3 2</td>
<td>4 2 3 2</td>
<td>3</td>
<td>3</td>
<td>3 3 2</td>
<td>3 3 2</td>
<td>3 3 3 3 3 3 3 3 3 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2 2 3 3</td>
<td>1 1 2 2</td>
<td>2 2 3 2</td>
<td>3 2 3 2</td>
<td>3 2 3 2</td>
<td>3</td>
<td>3</td>
<td>3 3 2</td>
<td>3 3 2</td>
<td>3 3 3 3 3 3 3 3 3 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>3 2 4 2</td>
<td>1 1 2 3</td>
<td>3 2 3 2</td>
<td>4 2 3 2</td>
<td>4 2 3 2</td>
<td>X</td>
<td>3</td>
<td>3 3 2</td>
<td>3 3 2</td>
<td>3 3 3 3 3 3 3 3 3 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1 4 3 3</td>
<td>1 1 2 3</td>
<td>3 2 3 2</td>
<td>4 2 3 2</td>
<td>4 2 3 2</td>
<td>4</td>
<td>4</td>
<td>4 3 2</td>
<td>4 3 2</td>
<td>4 3 4 4 4 4 4 4 4 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>3 3 4 3</td>
<td>2 3 3 2</td>
<td>4 3 3 2</td>
<td>1 3 2 4</td>
<td>1 3 2 4</td>
<td>4</td>
<td>4</td>
<td>4 3 2</td>
<td>4 3 2</td>
<td>4 3 4 4 4 4 4 4 4 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>2 3 2 2</td>
<td>3 3 3 1</td>
<td>X 2 2 2</td>
<td>4 2 3 2</td>
<td>4 2 3 2</td>
<td>3</td>
<td>3</td>
<td>3 3 2</td>
<td>3 3 2</td>
<td>3 3 3 3 3 3 3 3 3 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>2 4 4 3</td>
<td>2 2 3 2</td>
<td>4 2 3 2</td>
<td>4 2 3 2</td>
<td>4 2 3 2</td>
<td>4</td>
<td>4</td>
<td>4 3 2</td>
<td>4 3 2</td>
<td>4 3 4 4 4 4 4 4 4 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>25 26 36 38</td>
<td>20 23 19 25</td>
<td>36 32 25 27</td>
<td>28 28 28 37</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35 35 35 35 35 35 35 35 35 35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix no. 5c - Distribution of H.O.D's responses, divided to areas of influence

Diagrams 9D - 16D the distribution of the H.O.D's responses to the questionnaire, total score divided to areas of influence

Diagram 9D - Distribution of the total score, given by each Head of Department, in the Academic area of influence

Diagram 10D - Distribution of the total score, given by each Head of Department, in the Society area of influence

Diagram 11D - Distribution of the total score, given by each Head of Department, in the Schools' area of influence

Diagram 12D - Distribution of the total score, given by each Head of Department, in the College's area of influence
Diagram 13D - Distribution of the total score, given by each Head of Department, in the Departments' area of influence

Diagram 14D - Distribution of the total score, given by each Head of Department, in the T.I area of influence

Diagram 15D - Distribution of the total score, given by each Head of Department, in the M.O.E.V area of influence

Diagram 16D - Distribution of the total score, given by each Head of Department, in the Students' area of influence
Appendix no. 5b – Questionnaire's Grading summarising Tables

D. Table 10A. Distribution of high scores (3-4), for all areas of influence, regarding Current (C) and F appearances of score 4)

<table>
<thead>
<tr>
<th>Influences</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
<td>F</td>
<td>C</td>
</tr>
<tr>
<td>8 questions</td>
<td>3</td>
<td>4(1)</td>
<td>4</td>
<td>4(2)</td>
<td>2</td>
<td>4</td>
<td>4(2)</td>
</tr>
<tr>
<td>Societal</td>
<td>3</td>
<td>6(2)</td>
<td>9(1)</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>11 questions</td>
<td>4(4)</td>
<td>5(1)</td>
<td>8(3)</td>
<td>4(1)</td>
<td>6</td>
<td>5(3)</td>
<td>2</td>
</tr>
<tr>
<td>Schools</td>
<td>4(4)</td>
<td>5(1)</td>
<td>8(3)</td>
<td>4(1)</td>
<td>6</td>
<td>5(3)</td>
<td>2</td>
</tr>
<tr>
<td>9 questions</td>
<td>6(2)</td>
<td>4(3)</td>
<td>3(2)</td>
<td>3(1)</td>
<td>3(1)</td>
<td>4(4)</td>
<td>5(3)</td>
</tr>
<tr>
<td>Colleges</td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
<td>2</td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
</tr>
<tr>
<td>7 questions</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3(2)</td>
<td>4</td>
<td>1(1)</td>
</tr>
<tr>
<td>Departments</td>
<td>5(2)</td>
<td>-</td>
<td>9(7)</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 questions</td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
<td>2</td>
<td>3(1)</td>
<td>3(1)</td>
<td>3(2)</td>
</tr>
<tr>
<td>Technological</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>6(3)</td>
<td>1</td>
</tr>
<tr>
<td>Innovations</td>
<td>3</td>
<td>4(2)</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>6(3)</td>
<td>1</td>
</tr>
<tr>
<td>9 questions</td>
<td>3</td>
<td>4(2)</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>6(3)</td>
<td>1</td>
</tr>
<tr>
<td>M.O.E</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>6(3)</td>
<td>1</td>
</tr>
<tr>
<td>8 questions</td>
<td>3</td>
<td>4(2)</td>
<td>4(1)</td>
<td>4(2)</td>
<td>4(1)</td>
<td>6(3)</td>
<td>1</td>
</tr>
<tr>
<td>Students</td>
<td>3(2)</td>
<td>6(2)</td>
<td>3(2)</td>
<td>6(2)</td>
<td>3</td>
<td>3(1)</td>
<td>-</td>
</tr>
<tr>
<td>7 questions</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3(2)</td>
<td>4</td>
<td>2(1)</td>
</tr>
<tr>
<td>Total score 4</td>
<td>(12)</td>
<td>(13)</td>
<td>(26)</td>
<td>(6)</td>
<td>(3)</td>
<td>(13)</td>
<td>(7)</td>
</tr>
</tbody>
</table>

Total 13 (7) (26) (6) (3) (13) (7) (4) (20) (15) (23) (25) (15)
<table>
<thead>
<tr>
<th>Influences</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
<th>College D</th>
<th>College E</th>
<th>College F</th>
<th>College G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>5 (1)</td>
<td>3 (2)</td>
<td>4 (2)</td>
<td>6</td>
<td>4 (1)</td>
<td>4 (1)</td>
<td>5 (1)</td>
</tr>
<tr>
<td>Societal</td>
<td>8</td>
<td>4 (1)</td>
<td>2 (1)</td>
<td>5</td>
<td>9 (4)</td>
<td>7 (3)</td>
<td>9 (2)</td>
</tr>
<tr>
<td>Schools</td>
<td>5</td>
<td>2 (1)</td>
<td>1 (1)</td>
<td>5 (1)</td>
<td>3 (2)</td>
<td>4 (2)</td>
<td>7 (1)</td>
</tr>
<tr>
<td>Colleges</td>
<td>1</td>
<td>3 (1)</td>
<td>4 (3)</td>
<td>4</td>
<td>4 (1)</td>
<td>3 (1)</td>
<td>2</td>
</tr>
<tr>
<td>Departments</td>
<td>2 (1)</td>
<td>2</td>
<td>2 (1)</td>
<td>2 (1)</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Technological Innovations</td>
<td>3 (1)</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>9 (4)</td>
<td>9 (3)</td>
<td>9 (2)</td>
</tr>
<tr>
<td>M.O.E</td>
<td>4 (1)</td>
<td>1</td>
<td>4 (1)</td>
<td>3 (1)</td>
<td>2 (1)</td>
<td>4 (2)</td>
<td>4 (2)</td>
</tr>
<tr>
<td>Students</td>
<td>4 (1)</td>
<td>1 (1)</td>
<td>3 (2)</td>
<td>5 (2)</td>
<td>3</td>
<td>4</td>
<td>4 (2)</td>
</tr>
<tr>
<td>Total score</td>
<td>(5)</td>
<td>(6)</td>
<td>(11)</td>
<td>(5)</td>
<td>(13)</td>
<td>(10)</td>
<td>(9)</td>
</tr>
</tbody>
</table>

Table 11A - Distribution of low scores (1-2), for all areas of influence, regarding Current (C) and Former appearances of score 1)
E. Table 12A - Location of 'A' college, regarding the distribution of scoring, from the highest to possible areas of influence

<table>
<thead>
<tr>
<th>Possible Influences</th>
<th>Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Academic</td>
<td>F I H G D D B</td>
</tr>
<tr>
<td>Societal</td>
<td>H E B I G F A</td>
</tr>
<tr>
<td>Schools</td>
<td>B A H I E G F</td>
</tr>
<tr>
<td>Colleges</td>
<td>F I A C E G H</td>
</tr>
<tr>
<td>Departments</td>
<td>H I D F C G A</td>
</tr>
<tr>
<td>Technological</td>
<td>B E F A G I H</td>
</tr>
<tr>
<td>innovations</td>
<td></td>
</tr>
<tr>
<td>M.O.E</td>
<td>A H F G E B I</td>
</tr>
<tr>
<td>Students</td>
<td>E G H I A F B</td>
</tr>
</tbody>
</table>
F. The Questionnaire’s Rating summarising Tables 13A – 20A, for all areas of influence - examples

Table 13A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible Academic influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Theoretical courses complement the learning from field-based practice</td>
<td>11</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2. The courses’ requirements emphasise high academic abilities</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4. Theoretical courses are basis for field-based practice</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>5. Current academic research concerning learning processes</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. Lecturers’ involvement in research enforces the academic focus of the departments’ T.E.C</td>
<td>6</td>
<td>1</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>7. Staff’s expertise determine which courses’ are included the departments’ T.E.C</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Current academic research concerning reading processes influences the relevant courses</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1. The T.E.C mostly aims at theoretic knowledge accumulation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 14A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible Society's influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. The T.E.C reflects general humanistic values</td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>13. The T.E.C fosters critical thinking by teachers</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>19. TEC trains students to work in different societal environments</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>12. The T.E.C is influenced by current circumstances in Israel</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>18. The T.E.C encourages students to be involved in societal projects</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. The T.E.C offers a variety of courses that deal with moral dilemmas</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>11. The T.E.C emphasizes values of socialization in the Israeli society</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. Jewish tradition is interweaved in different courses</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>15. The department offers new areas for specialisation in order to “attract” students</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>9. Teachers’ public image influences the T.E.C</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>16. The T.E.C offers mixed Jewish and Arab courses in order to bring closer Jews and Arabs</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 15A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible Schools' influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. School-college partnership has helped to integrate between the theoretical and the field-based T.E.C</td>
<td>11</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21. Schools' “agenda” influences the field-based T.E.C</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>28. Mentors, schoolteachers and students create a learning community</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>25. The field-based T.E.C is cooperatively set by the training schoolteachers and the teacher-educators</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>24. The field-based T.E.C is coordinated with the training school-teachers</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>20. Schools’ agenda influences the whole T.E.C</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>26. Courses have been changed in order to meet schools’ needs</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>22. The department imposes a fixed field-based curriculum to the training school teachers</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27. School-teachers are part of the college department’s staff</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 16A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible Colleges’ influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. The college enables the department to shape its own T.E.C according to its educational belief</td>
<td>12</td>
<td>8</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>35. The college enables departmental staff development, due to its preferences</td>
<td>13</td>
<td>2</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>32. The college enforces cross-department fundamental courses</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>29. The college imposes a common T.E.C on all departments</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>30. Adding/changing courses requires official college's approval</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>34. The college imposes specialisation areas on the department</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>33. The college determines the departmental staff’s placement</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 17A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible Departments' influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. The departmental educational belief determines the guiding principles for the field-based T.E.C</td>
<td>14</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>38. The departmental educational belief determines the guiding principles for the education and pedagogy courses</td>
<td>14</td>
<td>-</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>36. The departments' staff is involved in shaping its T.E.C</td>
<td>11</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>37. The departmental educational belief determines the guiding principles of the T.E.C's specialisation areas</td>
<td>6</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>40. The departmental educational belief is influenced by parallel departments in other C.F.T.E</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 18A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible Technological Innovation influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>46. IT has influenced ways of communication between staff and students</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>45. Mentors interweave Information technology (I.T) in training courses</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>47. Students often use I.T in their field-based work</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>41. I.T has influenced the overall T.E.C</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>42. IT has made T.E.C courses more flexible</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>43. The T.E.C operates some distance-learning courses</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>44. I.T has changed lecturers’ teaching-learning processes in many courses</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>49. The use of technologic tools have significantly changed the teaching-learning processes in many courses</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>48. The use of information resources has changes many courses in the department</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 19A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible M.O.E's influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>55. Special education courses have been added to the TEC as a result of the M.O.E's “Inclusion” policy</td>
<td>11</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>52. The M.O.E's reduction policy influences the field-based T.E.C</td>
<td>7</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>53. The M.O.E's grants' policy influences the opening of specialisation area</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>54. Reading courses have changed due to the M.O.E's policy</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>51. The departmental TEC is indirectly influenced from the M.O.E’s policy, through compelled requirements from schools</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>50. The departmental TEC represents the M.O.E's societal-political policy</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>56. The M.O.E’s policy concerning ‘Mathemtic teaching’ has changed the relevant courses in the T.E.C</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>57. The M.O.E’s “Standards” policy causes changes the foci of the T.E.C</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 20A - The three most important statements in the actual T.E.C, by the order of their importance, concerning the possible Students' influences

<table>
<thead>
<tr>
<th>Statement no'</th>
<th>Total choice</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>63. The T.E.C is differential and adapted to students' progress</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>64. The T.E.C offers inquiry processes that meet students’ personal interests in many courses</td>
<td>10</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>62. The T.E.C is dynamic and adjusts itself students’ diversity</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>61. Students’ needs are conceived as a central factor for shaping the theoretical T.E.C</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>59. The students’ multi-cultural background influences the T.E.C</td>
<td>6</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>58. Students’ abilities influence the T.E.C</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>60. The T.E.C considers students’ previous knowledge</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
The total score of current and former H.O.D

<table>
<thead>
<tr>
<th>College</th>
<th>College</th>
<th>College</th>
<th>College</th>
<th>College</th>
<th>College</th>
<th>College</th>
<th>College</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
</tr>
</tbody>
</table>

Appendix no. 5d. Distribution of the Colleges', an example

The primary school departments in the different Colleges
Appendix no. 5e – Unfilled Table for organising the rating the most important statements (an example of one area of influence)

The three most important statements in the actual Colleges’ influences on T.E.C, by the order of their importance

<table>
<thead>
<tr>
<th>Statement no’</th>
<th>First rating</th>
<th>Second rating</th>
<th>Third rating</th>
<th>Total choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. The college enables the department to shape its own T.E.C according to its educational belief</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. The college enables departmental staff development, due to its preferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. The college enforces cross-department fundamental courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. The college imposes a common T.E.C on all departments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Adding/changing courses requires official college's approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. The college imposes the departmental specialization areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. The college determines the departmental staff’s placement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix no.5f – A summarising Table of the Rating, according to the statements’ importance (an unfilled Table)

Rating statements according to their importance (the number of statements in each area of influence, and the number of influences in each level of influence is not obligatory).

<table>
<thead>
<tr>
<th>Level of influence</th>
<th>Section</th>
<th>Statements Placed first</th>
<th>Placed second</th>
<th>Placed third</th>
<th>Total number of electors</th>
</tr>
</thead>
</table>
## Appendix no. 6 – The Questionnaire close part – types of responses

All tables are based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

Table 21A - External factors - responses that show S.C by both current and former H.O.D

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Current Low</th>
<th>Former Low</th>
<th>Current High</th>
<th>Former High</th>
<th>Current X</th>
<th>Former X</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The T.E.C mostly aims at theoretic knowledge accumulation</td>
<td>7</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>3</td>
<td>Theoretical courses complement the learning from field-based practice</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>6</td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>9</td>
<td>Teachers’ public image influences the T.E.C</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>10</td>
<td>The T.E.C reflects general humanistic values</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>21</td>
<td>Schools’ agenda influences the field-based T.E.C</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>22</td>
<td>The department imposes a fixed field-based curriculum on the training schoolteachers</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>23</td>
<td>School-college partnership has helped to integrate the theoretical and the field-based T.E.C</td>
<td>1</td>
<td>9</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>25</td>
<td>Field-based T.E.C is cooperatively set by the training schoolteachers and teacher-educators</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>27</td>
<td>Schoolteachers are part of the college department’s staff</td>
<td>9</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td>55</td>
<td>Special education courses have been added to the TEC as a result of the M.O.E’s “Inclusion” policy</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
</tbody>
</table>
Table 22A - External areas of influence, S.C type of response, H.O.D’s extreme low and high scores, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score 1</th>
<th></th>
<th></th>
<th>Score 4</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>Former</td>
<td>Current</td>
<td>Former</td>
<td>Current</td>
<td>Former</td>
</tr>
<tr>
<td></td>
<td>H.O.D</td>
<td>H.O.D</td>
<td>H.O.D</td>
<td>H.O.D</td>
<td>H.O.D</td>
<td>H.O.D</td>
</tr>
<tr>
<td>1. The T.E.C mostly aims at theoretic knowledge accumulation</td>
<td>1/9</td>
<td>~11</td>
<td>1/7</td>
<td>~14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Theoretical courses complement the learning from field-based practice</td>
<td>1/9</td>
<td>~11</td>
<td>1/7</td>
<td>~14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Teachers’ public image influences the T.E.C</td>
<td>7/9</td>
<td>~77</td>
<td>5/7</td>
<td>~71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The T.E.C reflects general humanistic values</td>
<td>4/9</td>
<td>~44</td>
<td>3/7</td>
<td>~42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Schools’ agenda influences the field-based T.E.C</td>
<td>3/9</td>
<td>~33</td>
<td>2/7</td>
<td>~28</td>
<td>1/9</td>
<td>~11</td>
</tr>
<tr>
<td>22. The department imposes a fixed field-based curriculum on the training schoolteachers</td>
<td>4/9</td>
<td>~44</td>
<td>5/7</td>
<td>~71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. School-college partnership has helped to integrate the theoretical and the field-based T.E.C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Field-based T.E.C is cooperatively set by the training schoolteachers and teacher-educators</td>
<td>4/9</td>
<td>~44</td>
<td>3/7</td>
<td>~42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Schoolteachers are part of the college department’s staff</td>
<td>7/9</td>
<td>~77</td>
<td>7/7</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. Special education courses have been added to the TEC as a result of the M.O.E’s “Inclusion” policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5/9</td>
<td>~55</td>
</tr>
</tbody>
</table>
Table 23A - Internal factors - responses that show S.C by both current and former H.O.D, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Current Low</th>
<th>Current High</th>
<th>Former Low</th>
<th>Former High</th>
<th>Current X</th>
<th>Former X</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>College 30. Adding/changing courses requires official college's approval</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td></td>
<td>College 35. The college enables departmental staff development, due to the departments' preferences</td>
<td></td>
<td>9</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td></td>
<td>Departmental 39. The departmental educational belief determines the guiding principles for the field-based T.E.C</td>
<td>1</td>
<td>8</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
<tr>
<td></td>
<td>Departmental 40. The departmental educational belief is influenced by parallel departments in other C.F.T.E</td>
<td>9</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S.C</td>
</tr>
</tbody>
</table>

Table 24A - Internal areas of influence, S.C type of response, H.O.D’s extreme low and high scores, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score 1</th>
<th>Score 4</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College 30. Adding/changing courses requires official college's approval</td>
<td>Current H.O.D</td>
<td>4/9</td>
<td>~44</td>
<td>4/7</td>
<td>~57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College 35. The college enables departmental staff development, due to the departments' preferences</td>
<td>Current H.O.D</td>
<td>4/9</td>
<td>~77</td>
<td>6/7</td>
<td>~85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental 39. The departmental educational belief determines the guiding principles for the field-based T.E.C</td>
<td>Current H.O.D</td>
<td>7/9</td>
<td>~77</td>
<td>5/7</td>
<td>~71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departmental 40. The departmental educational belief is influenced by parallel departments in other C.F.T.E</td>
<td>Current H.O.D</td>
<td>4/9</td>
<td>~44</td>
<td>1/7</td>
<td>~14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 25A - External influences - combined type of response, S.C by either current or former H.O.D, and alternatively M.C or M.R, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Current Low</th>
<th>Former Low</th>
<th>Current High</th>
<th>Former High</th>
<th>Current X</th>
<th>Former X</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. The courses’ requirements emphasise high academic abilities</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>3</td>
<td></td>
<td></td>
<td>S.C.C.H M.R.F.H</td>
</tr>
<tr>
<td></td>
<td>8. Lecturers’ involvement in research enforces the academic focus of the departments’ T.E.C</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
<td>S.C.C.H M.C.F.H</td>
</tr>
<tr>
<td></td>
<td>Societal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. The T.E.C fosters teachers’ critical thinking</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td>M.C.C.H S.C.F.H</td>
</tr>
<tr>
<td></td>
<td>17. Jewish tradition is interwoven in different courses</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td></td>
<td></td>
<td>S.C.C.H M.R.F.H</td>
</tr>
<tr>
<td></td>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24. The field-based TEC is coordinated with the training schoolteachers</td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td></td>
<td></td>
<td>S.C.C.H M.R.F.H</td>
</tr>
<tr>
<td></td>
<td>M.O.E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>51. The departmental T.E.C is indirectly influenced by the M.O.E’s policy, through compelled requirements from schools</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>S.C.C.H M.C.F.H</td>
</tr>
<tr>
<td></td>
<td>52. The M.O.E’s reduction policy influences the field-based T.E.C</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td></td>
<td>M.C.C.H S.C.F.H</td>
</tr>
<tr>
<td></td>
<td>54. Reading courses have changed due to the M.O.E’s policy</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td></td>
<td>S.C.C.H M.R.F.H</td>
</tr>
<tr>
<td></td>
<td>57. The M.O.E’s “Standards” policy causes changes the foci of the T.E.C</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td>M.C.C.H S.C.F.H</td>
</tr>
</tbody>
</table>
Table 26A - External influences - H.O.D’s extreme low and high scores in the combined type of response, which shows S.C by either current or former H.O.D and M.C or M.R by the others, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score 1 Totally disagree</th>
<th>Score 4 Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current H.O.D %</td>
<td>Former H.O.D %</td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The courses’ requirements emphasise high academic abilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lecturers’ involvement in research enforces the academic focus of the departments’ T.E.C</td>
<td>1/7 ~14</td>
<td>1/9 ~11</td>
</tr>
<tr>
<td><strong>Societal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. The T.E.C fosters teachers’ critical thinking</td>
<td>3/9 ~33</td>
<td>2/7 ~28</td>
</tr>
<tr>
<td>17. Jewish tradition is interwoven in different courses</td>
<td>1/7 ~14</td>
<td>4/9 ~44</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. The field-based TEC is coordinated with the training schoolteachers</td>
<td>4/9 ~44</td>
<td>3/7 ~42</td>
</tr>
<tr>
<td><strong>M.O.E</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51. The departmental T.E.C is indirectly influences by the M.O.E’s policy, through compelled requirements from schools</td>
<td>2/9 ~22</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>52. The M.O.E’s reduction policy influences the field-based T.E.C</td>
<td>1/7 ~14</td>
<td>3/9 ~33</td>
</tr>
<tr>
<td>54. Reading courses have changed due to the M.O.E’s policy</td>
<td>3/9 ~33</td>
<td>2/7 ~28</td>
</tr>
<tr>
<td>57. The M.O.E’s “Standards” policy causes changes the foci of the T.E.C</td>
<td>4/9 ~44</td>
<td>2/7 ~28</td>
</tr>
</tbody>
</table>
Table 27A - Internal influences - combined type of response, S.C by either current or former H.O.D, and alternatively M.C or M.R, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Current Low</th>
<th>Former Low</th>
<th>Current High</th>
<th>Former High</th>
<th>Current X</th>
<th>Former X</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td></td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.C.F.H</td>
</tr>
<tr>
<td></td>
<td>The college enables the department to shape its own T.E.C</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td>M.R.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S.C.F.H</td>
</tr>
<tr>
<td></td>
<td>The college determines the departmental staff’s placement</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td></td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.C.F.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td></td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.R.F.H</td>
</tr>
<tr>
<td></td>
<td>The departmental educational belief determines the guiding principles of the T.E.C’s specialisation areas</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.R.F.H</td>
</tr>
<tr>
<td></td>
<td>The departmental educational belief determines the guiding principles for the education and pedagogy courses</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td></td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.C.F.H</td>
</tr>
<tr>
<td></td>
<td>Students’ abilities influence the T.E.C</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.R.F.H</td>
</tr>
<tr>
<td></td>
<td>The T.E.C considers students’ previous knowledge</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.C.F.H</td>
</tr>
<tr>
<td></td>
<td>The T.E.C is differential and adapted to students’ progress</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.C.F.H</td>
</tr>
<tr>
<td></td>
<td>The T.E.C offers inquiry processes that meet students’ personal interests in many courses</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td></td>
<td>S.C.C.H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M.C.F.H</td>
</tr>
</tbody>
</table>
Table 28A - Internal influences - H.O.D’s extreme low and high scores in the combined type of response, which shows S.C by either current or former H.O.D and M.C or M.R by the others, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score 1 Totally disagree</th>
<th>Score 4 Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current H.O.D %</td>
<td>Former H.O.D %</td>
</tr>
<tr>
<td>College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. The college enables the department to shape its own T.E.C</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>33. The college determines the departmental staff’s placement</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>34. The college imposes specialisation areas on the department</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>36. The departments’ staff is involved in shaping its T.E.C</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>Departmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. The departmental educational belief determines the guiding principles of the T.E.C’s specialisation areas</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>38. The departmental educational belief determines the guiding principles for the education and pedagogy courses</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. Students’ abilities influence the T.E.C</td>
<td>3/9 ~33</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>60. The T.E.C considers students’ previous knowledge</td>
<td>2/9 ~22</td>
<td></td>
</tr>
<tr>
<td>63. The T.E.C is differential and adapted to students’ progress</td>
<td>1/9 ~11</td>
<td>3/9 ~33</td>
</tr>
<tr>
<td>64. The T.E.C offers inquiry processes that meet students’ personal interests in many courses</td>
<td>1/7 ~14</td>
<td>5/9 ~55</td>
</tr>
</tbody>
</table>
Table 29A - External influences - Responses that show M.C or M.R by either current or former H.O.D, based on Tables 2A - 20A and Diagrams 1D - 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Current Low</th>
<th>Former Low</th>
<th>Current High</th>
<th>Former High</th>
<th>Current X</th>
<th>Former X</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Academic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Theoretical courses are basis for field-based practice</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td>6.</td>
<td>Current academic research concerning reading processes influences the relevant courses</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>M.C.C.H</td>
</tr>
<tr>
<td>7.</td>
<td>Staff’s expertise determine which courses’ are included in the departments’ T.E.C</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td></td>
<td><strong>Societal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>The T.E.C emphasises values of socialisation in the Israeli society</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td>14.</td>
<td>The T.E.C offers a variety of courses that deal with moral dilemmas</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
<td>M.R.C.H</td>
</tr>
<tr>
<td>18.</td>
<td>The T.E.C encourages students to be involved in societal projects</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td></td>
<td><strong>Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Schools’ agenda influences the whole T.E.C</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>M.R.C.H</td>
</tr>
<tr>
<td>26.</td>
<td>Courses have been changed in order to meet schools’ needs</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td>28.</td>
<td>Mentors, schoolteachers and students create a learning community</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td></td>
<td><strong>Technological</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>IT has influenced the overall T.E.C</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td>47.</td>
<td>Students often use IT in their field-based work</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td>48.</td>
<td>The use of information resources has changes many courses</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td></td>
<td><strong>M.O.E</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>The departmental T.E.C represents the M.O.E’s societal-political policy</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td>M.C.C.H</td>
</tr>
<tr>
<td>53.</td>
<td>The M.O.E’s grants’ policy influences the opening of specialisation areas</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td>M.R.C.H</td>
</tr>
<tr>
<td>56.</td>
<td>The M.O.E’s policy concerning ‘Mathematic teaching’ has changed the relevant courses in the T.E.C</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>M.C.C.H</td>
</tr>
</tbody>
</table>
Table 30A - External influences - H.O.D's extreme low and high scores, which show M.C or M.R by either current or former H.O.D, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score 1 Totally disagree</th>
<th>Score 4 Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current H.O.D %</td>
<td>Former H.O.D %</td>
</tr>
<tr>
<td>4. Theoretical courses are basis for field-based practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2/9 ~22</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>6. Current academic research concerning reading processes influences the relevant courses</td>
<td>1/9 ~11</td>
<td></td>
</tr>
<tr>
<td>7. Staff’s expertise determine which courses’ are included in the departments’ T.E.C</td>
<td>2/7 ~22</td>
<td>3/7 ~42</td>
</tr>
<tr>
<td>11. The T.E.C emphasises values of socialisation in the Israeli society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. The T.E.C offers a variety of courses that deal with moral dilemmas</td>
<td>1/9 ~14</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>18. The T.E.C encourages students to be involved in societal projects</td>
<td>1/9 ~11</td>
<td></td>
</tr>
<tr>
<td>20. Schools’ agenda influences the whole T.E.C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Courses have been changed in order to meet schools’ needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Mentors, schoolteachers and students create a learning community</td>
<td>2/9 ~22</td>
<td></td>
</tr>
<tr>
<td>41. I.T has influenced the overall TEC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Students often use I.T in their field-based work</td>
<td>2/9 ~22</td>
<td></td>
</tr>
<tr>
<td>48. The use of information resources has changes many</td>
<td>2/9 ~22</td>
<td></td>
</tr>
<tr>
<td>50. The departmental T.E.C represents the M.O.E’s societal-political policy</td>
<td>3/9 ~33</td>
<td>2/7 ~28</td>
</tr>
<tr>
<td>53. The M.O.E’s grants’ policy influences the opening of specialisation areas</td>
<td>1/7 ~14</td>
<td></td>
</tr>
<tr>
<td>56. The M.O.E’s policy concerning ‘Mathematic teaching’ has changed the relevant courses in the T.E.C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 31A - Internal influences - Responses that show M.C or M.R by either current or former H.O.D, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Current Low</th>
<th>Former Low</th>
<th>Current High</th>
<th>Former High</th>
<th>Current X</th>
<th>Former X</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>College</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>The college imposes a common T.E.C on all departments</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td>M.C</td>
</tr>
<tr>
<td>32</td>
<td>The college enforces cross-department fundamental courses</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td></td>
<td></td>
<td>M.C</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>The students’ multicultural background influences the T.E.C</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td>M.C</td>
</tr>
<tr>
<td>62</td>
<td>The T.E.C is dynamic and adjusts itself students’ diversity</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
<td>M.C.C.H M.R.F.H</td>
</tr>
</tbody>
</table>

Table 32A - Internal influences - H.O.D’s extreme low and high scores, which show M.C or M.R by either current H.O.D or former H.O.D, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score 1 Totally disagree</th>
<th>Score 4 Totally agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. The college imposes a common T.E.C on all departments</td>
<td>3/9 ~33</td>
<td>3/7 ~42</td>
</tr>
<tr>
<td>32. The college enforces cross-department fundamental courses</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. The students’ multicultural background influences the T.E.C</td>
<td>1/9 ~11</td>
<td>1/9 ~11</td>
</tr>
<tr>
<td>62. The T.E.C is dynamic and adjusts itself students’ diversity</td>
<td>1/9 ~11</td>
<td>1/7 ~14</td>
</tr>
<tr>
<td>No.</td>
<td>Statement</td>
<td>Current Low</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Academic</td>
<td>5. Current academic research concerning learning processes influences the T.E.C’s rationale</td>
<td>4</td>
</tr>
<tr>
<td>Societal</td>
<td>12. The T.E.C is influenced by current circumstances in Israel</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>15. The department offers new areas for specialisation in order to “attract” students</td>
<td>4</td>
</tr>
</tbody>
</table>
<ins>Table 33A - External influences – M.R by both current and former H.O.D, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)</ins>
Table 34A - External influences - H.O.D’s extreme low and high scores, which show M.R by both current and former H.O.D, based on Tables 2A – 20A and Diagrams 1D – 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Current H.O.D</th>
<th>%</th>
<th>Former H.O.D</th>
<th>%</th>
<th>Current H.O.D</th>
<th>%</th>
<th>Former H.O.D</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Current academic research concerning learning processes influences the T.E.C’s rationale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. The T.E.C is influenced by current circumstances in Israel</td>
<td>1/9</td>
<td>~11</td>
<td></td>
<td></td>
<td>2/9</td>
<td>~22</td>
<td></td>
<td>1/7</td>
</tr>
<tr>
<td>15. The department offers new areas for specialisation in order to “attract” students</td>
<td>1/9</td>
<td>~11</td>
<td>1/7</td>
<td>~14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. The T.E.C offers mixed Jewish and Arab courses in order to bring closer Jews and Arabs</td>
<td>3/9</td>
<td>~33</td>
<td>2/7</td>
<td>~28</td>
<td>4/9</td>
<td>~44</td>
<td></td>
<td>2/7</td>
</tr>
<tr>
<td>19. T.E.C trains students to work in different societal environments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/7</td>
<td>~14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. I.T has made T.E.C courses more flexible</td>
<td>1/9</td>
<td>~11</td>
<td>2/7</td>
<td>~28</td>
<td>1/9</td>
<td>~11</td>
<td>1/7</td>
<td>~14</td>
</tr>
<tr>
<td>43. The T.E.C operates some distance-learning courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/7</td>
<td>~14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. I.T has changed lecturers’ teaching-learning processes in many courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1/9</td>
<td>~11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Mentors interweave I.T in training courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/9</td>
<td>~33</td>
<td>2/7</td>
<td>~28</td>
</tr>
<tr>
<td>46. I.T has influenced ways of communication between staff and students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/9</td>
<td>~44</td>
<td>1/7</td>
<td>~14</td>
</tr>
<tr>
<td>49. The use of technologic tools have significantly changed the teaching-learning processes in many courses</td>
<td>2/9</td>
<td>~22</td>
<td></td>
<td></td>
<td>1/9</td>
<td>~11</td>
<td>1/7</td>
<td>~14</td>
</tr>
</tbody>
</table>
Table 35A - Internal influences - Responses that show M.R by both current and former H.O.D, based on Tables 2A - 20A and Diagrams 1D - 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Current Low</th>
<th>Former Low</th>
<th>Current High</th>
<th>Former High</th>
<th>Current X</th>
<th>Former X</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>61. Students' needs are conceived as a central factor for shaping the theoretical T.E.C</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>M.R</td>
</tr>
</tbody>
</table>

Table 36A - Internal influences - H.O.D's extreme low and high scores, which show M.R by both current and former H.O.D, based on Tables 2A - 20A and Diagrams 1D - 8D (Appendix no. 5a, 5b)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score 1</th>
<th>Score 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Totally disagree</td>
<td>Totally agree</td>
</tr>
<tr>
<td></td>
<td>Current H.O.D</td>
<td>%</td>
</tr>
<tr>
<td>Students 61. Students' needs are conceived as a central factor for shaping the theoretical T.E.C</td>
<td>3/9</td>
<td>~33</td>
</tr>
</tbody>
</table>
### Table 37A - External influences - Comments' analysis

<table>
<thead>
<tr>
<th>No.</th>
<th>Areas of influence</th>
<th>Heads of Department</th>
<th>The comments</th>
<th>Types of reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Academic</td>
<td>A1</td>
<td><em>Academic attitude is dominant in the disciplinary courses.</em></td>
<td>B</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td><em>Academic concerns increase.</em></td>
<td>B</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td><em>More attention given to research.</em></td>
<td>B</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td><em>More attention to academic requirements even in pedagogical and practical courses.</em></td>
<td>B</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>A2</td>
<td><em>Theoretical courses should complement and widen the field experience.</em></td>
<td>A</td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td><em>Academic courses are conceived of the basis for experiencing.</em></td>
<td>A</td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>B1</td>
<td><em>Courses emphasise academic and theoretical knowledge, and connect it simultaneously with practical and reflexive knowledge.</em></td>
<td>C</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td><em>Most members of staff, besides methodological and pedagogical counsellors are very academic concerned.</em></td>
<td>C</td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td>B2</td>
<td><em>Academic influences differ from area to area, from course to course and from teacher to teacher.</em></td>
<td>C</td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td>A2</td>
<td><em>Critical teaching means educating teachers to think, to assess, to give feedback, not to simply accept things.</em></td>
<td>C</td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td>A2</td>
<td><em>Nobody thought about offering new areas of specialisation in order to attract students.</em></td>
<td>C</td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td>H1</td>
<td><em>We opened new specialisations in attractive disciplines.</em></td>
<td>B</td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td>F2</td>
<td><em>Involvement in society occurs only while experiencing fieldwork at schools.</em></td>
<td>C</td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td>A1</td>
<td><em>The use of technology in the college gets wider and deeper.</em></td>
<td>B</td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td></td>
<td><em>Students are not prepared to apply their technological studies in the fieldwork.</em></td>
<td>C</td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td></td>
<td><em>Schools organisation limits possibilities of technological applications.</em></td>
<td>C</td>
</tr>
<tr>
<td>18.</td>
<td></td>
<td>A2</td>
<td><em>Technological issues were not relevant to my period.</em></td>
<td>C</td>
</tr>
<tr>
<td>19.</td>
<td></td>
<td>F2</td>
<td><em>Students cannot actually apply advanced technological studies in schools, because schools are not developed enough, and are not prepared to integrate computers into the ordinary lessons' timetable.</em></td>
<td>C</td>
</tr>
<tr>
<td>20.</td>
<td></td>
<td>A2</td>
<td><em>Students did not study applied computer courses.</em></td>
<td>B</td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td>F2</td>
<td><em>Students do not really internalise these instructional means.</em></td>
<td>B</td>
</tr>
<tr>
<td>22.</td>
<td></td>
<td>G2</td>
<td><em>I.T does not actually deeply influence teacher education.</em></td>
<td>B</td>
</tr>
<tr>
<td>23.</td>
<td></td>
<td>F2</td>
<td><em>I do not integrate advanced technology in my teaching.</em></td>
<td>C</td>
</tr>
<tr>
<td>24.</td>
<td></td>
<td>G2</td>
<td><em>I.T eases access to information.</em></td>
<td>A</td>
</tr>
<tr>
<td>25.</td>
<td></td>
<td>G2</td>
<td><em>Students prepare presentations by computers, but I doubt whether they improve or enrich the contents and their understandings.</em></td>
<td>C</td>
</tr>
<tr>
<td>No.</td>
<td>Group</td>
<td>Statement</td>
<td>Code</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------------------------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>A1</td>
<td>The M.O.E is a real trouble!</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>A1</td>
<td>The M.O.E determines and compels, regularly, new directives, sometimes completely opposed to our educational beliefs.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>A1</td>
<td>T.E.C are influenced by the M.O.E’s policy.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>F1</td>
<td>The M.O.E’s policy, mostly influences non-pedagogical considerations, therefore it is not at all significant.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>G2</td>
<td>The M.O.E is the “owner”, thus it dictates its preferred beliefs</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>A2</td>
<td>The M.O.E’s directives concerning approaches to reading and mathematic teaching were not relevant in my times. The M.O.E’s directives did not cause changes in reading and mathematic courses, because we teach according to our belief.</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>G2</td>
<td>The societal policy that the MOE dictates influences the T.E.C, but it is not necessarily desirable.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td></td>
<td>The M.O.E’s ‘reduction policy’ dictates influences the T.E.C, but it is not necessarily desirable.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>F1</td>
<td>The M.O.E prevented the opening of secondary specialisation in special education.</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>G2</td>
<td>The M.O.E’s ‘grant policy’ caused closing of the Humanistic specialisations, because students preferred the granted disciplines.</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>G2</td>
<td>Adding new courses depends on the M.O.E’s rather on college’s requirements.</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td></td>
<td>Schools’ agenda influences the T.E.C only when referring to the pedagogical courses and counselling.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>A1</td>
<td>Disciplines’ counsellors meet students in school only in their third year of study and even then only rarely.</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>A1</td>
<td>All changes occur as part of the pedagogical counselling and not as part of changing the disciplinary courses.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>G2</td>
<td>At least on one course stemmed from the field experience at school, a course that offered integration of children with special needs in regular schools.</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>G1</td>
<td>P.D.S demand change of courses.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>E1</td>
<td>Some courses will even be operated in the schools, with both students and schoolteachers.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>E1</td>
<td>Learning community works in our two partner-schools.</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>B1</td>
<td>Learning community is one of the departmental purposes.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>B1</td>
<td>Next year we will operate Professional Development School (P.D.S) in two schools.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>E1</td>
<td>We work on improving students’ practical experience and increase mutual relations between school and the T.E.</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
## Table 38A - Internal influences – Comments’ analysis

<table>
<thead>
<tr>
<th>Areas of influence</th>
<th>No.</th>
<th>Heads of Departments</th>
<th>The comments</th>
<th>Types of reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
<td>1.</td>
<td>A1</td>
<td>Many departmental plans of change get postponed or cancelled, because of the need to get the Academic Organiser’s approval for all departmental plans. The Academic Organiser’s involvement in selecting courses and contents was an obstacle to the possibility that the department would independently shape its own T.E.C.</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>A2</td>
<td>The college recommends to jointly operating inter-departmental educational and fundamental courses, rather than demands it.</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>A2</td>
<td>The college recommends to jointly operating inter-departmental educational and fundamental courses, rather than demands it.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>4.</td>
<td>G2</td>
<td>Change of courses depends on teachers’ autonomous decision, rather than official college’s approvals.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>5.</td>
<td>A1</td>
<td>Departmental plans of change depend on the college’s commitment to steady members of staff.</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>6.</td>
<td>A1</td>
<td>Many times the demands of Heads of the discipline faculties are in contrast with the departmental beliefs.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>7.</td>
<td>B1</td>
<td>Our aim is to link up with the disciplinary staff in order to influence the whole T.E.C.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>8.</td>
<td>A2</td>
<td>If the pedagogical counsellors and the Heads of the disciplinary faculties are regarded as staff than in our college the staff is not really involved in the T.E.C shaping.</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>9.</td>
<td>E1</td>
<td>In approving the ‘child and the childhood program’ all pedagogical counsellors and other disciplinary teachers actively participated.</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>B1</td>
<td>The department’s staff constitutes learning and planning community. In planning the P.D.S only the departmental staff participated.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>E1</td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>Department</td>
<td>12</td>
<td>A1</td>
<td>Even if formally courses do not change, actual instruction processes consider students’ abilities, so students influence the TEC shaping.</td>
<td>B</td>
</tr>
<tr>
<td>Learners</td>
<td>13</td>
<td>A2</td>
<td>Inquiry processes that meet students’ personal interests were less relevant in my times.</td>
<td>A</td>
</tr>
</tbody>
</table>
Appendix no. 7 – Case study’s T.E.C

Tables 47A – 57A show the different T.E.C in the last three phases. Tables: 47A-57A were organised for this research from timetables, and translated. Tables: 54A-57A were only translated.

Index:

Bold letters – the ‘Academism’ courses

* Change of course’s name

(a.), (b.), (c.) and (d.) Directions of emphasis (previous page)

< Courses given to choice between years of study

(“) Course organised according to personal level

+ Change of courses’ organisation

= Swap of courses

# Change of clusters’ titles

@ A move between years of study

^\^ Added courses

~ Choice courses

<> Split courses

() Addition / Reduction of hours

X Total hours presentation

(*) T.E.C that appeared for the first time as tables with a list of courses organised under general titles, for all four years of study.
### Table 57A - The curriculum for 2003-4

<table>
<thead>
<tr>
<th>Foundation Studies</th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic writing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Identity (b.)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Computer applications</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational Studies</th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Educational Psychology</td>
<td>1</td>
<td>&lt;2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmental Psychology</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational thought</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology of Education</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* From a learner to a teacher</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Inquiry learning</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Curriculum planning</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Teaching in an heterogeneous class</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** New pedagogic concepts</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* The teacher as an educator - research processes and educational dilemmas</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Didactic</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Educational-qualitative research- attached to &quot;the course 'Teacher as an educator'&quot;</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Educational-quantitative research</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement and Assessment</td>
<td></td>
<td></td>
<td>&lt;1</td>
<td></td>
</tr>
</tbody>
</table>

| Seminar | | | 1 | |
| In-service workshop | | | 2 | |
| Teaching training | 4 | 5 | 9 | |
| Main Specialisation Discipline | | 26-30 | | |
| Secondary Specialisation Discipline | | 12-18 | | |

### Multi-disciplinary Specialisation

<table>
<thead>
<tr>
<th>Technical Studies</th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Introduction to &quot;Learning defects&quot; and &quot;inclusion&quot;</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Class navigation and behaviour analysis</td>
<td></td>
<td>&lt;2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Norm and Reading defects</td>
<td></td>
<td></td>
<td>&lt;1</td>
<td></td>
</tr>
<tr>
<td>** Norm and Mathematic defects</td>
<td></td>
<td></td>
<td>&lt;1</td>
<td></td>
</tr>
<tr>
<td>Methods for imparting reading and writing teaching</td>
<td></td>
<td></td>
<td>&lt;2</td>
<td></td>
</tr>
<tr>
<td>&lt; A choice cluster</td>
<td></td>
<td></td>
<td>&lt;8</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic for the primary school teacher</th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
<th>Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holidays and special days (b.)</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>seasonal Nature (a.) / Children’s Literature / Introduction to Bible studies / Everyday Mathematic (which are not included in chosen specialisations)</td>
<td></td>
<td></td>
<td>&lt;4</td>
<td></td>
</tr>
</tbody>
</table>
Table 56A - The curriculum for 2001-2 – The first year of study

<table>
<thead>
<tr>
<th>Educational Studies</th>
<th>The Science and Mathematic route</th>
<th>The Inclusion and Humanistic route</th>
<th>The Creation, Society and Environment route</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Educational thought</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Developmental Psychology</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Introduction to Educational Psychology</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pedagogical Counselling</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>* Teaching training</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Social aspects of informal education in a multi-culture society</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Educational Studies</td>
<td>Computer</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Foundation Studies</td>
<td>Academic writing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Foundation Studies</td>
<td>Physical Education</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Foundation Studies</td>
<td>(*) English</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Foundation Studies</td>
<td>Judaism (b.)</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Foundation Studies</td>
<td>Language</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Foundation Studies</td>
<td>Art</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Foundation Studies</td>
<td>Bible</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>34</td>
<td>36</td>
<td>35</td>
</tr>
</tbody>
</table>

| Arts | Music | 1 | * Movement and Education | 1 | Integrating art into Education | 1 |
| **Total** | | | | 3 | | 1 |

| Inclusion & Humanistic Studies | Groups and numbers | 1 | Arithmetic basics | 1 | Everyday Mathematic | 1 |
| Inclusion & Humanistic Studies | Language | | 1 | Bible | 2 |
| Inclusion & Humanistic Studies | Literature | | 4 | |

<p>| Specialization routes | Creation and Culture focus | Literature as a verbal art | 2 |
| Specialization routes | Art's history | 1 |
| Specialization routes | Communication focus | Mass communication and actuality | 2 |
| Specialization routes | Geography and environment focus | Geography of the 'Middle East' | 1 or |
| Specialization routes | Geography of Jerusalem | 1 |
| Specialization routes | Social and political Geography | 2 |
| <strong>Total</strong> | 34 | 36 | 35 |</p>
<table>
<thead>
<tr>
<th>Language and Expression</th>
<th>4</th>
<th>2</th>
<th>* (1) Language</th>
<th>2</th>
<th>2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible</td>
<td>2</td>
<td></td>
<td>Bible</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holidays and special days</td>
<td>1</td>
<td></td>
<td>** Sages' culture (b.)</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>** The year circle (b.)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>Holidays and special days (b.)</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>* Introduction to Literature</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td># Children's Literature</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>+ National prose</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Basics and their teaching</td>
<td>3</td>
<td></td>
<td>* () Science</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>* Nature and Environment (a.)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>* () Mathematics</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The nature of our country</td>
<td>2</td>
<td></td>
<td>Israeli studies (c.)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The built up of the Israeli state (A compulsory cluster)</td>
<td>3</td>
<td>3</td>
<td>Jewish and Israeli Identity (b.)</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>Holocaust Studies (b.)</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Main specialisation</td>
<td>18-24</td>
<td></td>
<td>Main Specialisation</td>
<td>22-24</td>
<td>22-24</td>
<td>22-24</td>
</tr>
<tr>
<td>Secondary specialisation</td>
<td></td>
<td></td>
<td>Secondary Specialisation</td>
<td>8-10</td>
<td>8-10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>2</th>
<th>2</th>
<th>1</th>
<th>Art</th>
<th>&lt;&gt; Music</th>
<th>1</th>
<th>1</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer's Language</td>
<td>2</td>
<td></td>
<td>&lt;&gt; Visual art</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>4</td>
<td></td>
<td>Drama or cinema</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td></td>
<td>* () Computer</td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>English</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>* () Physical education</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>&quot;@ First aid</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>&quot;&quot; Academic Writing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>Interweaved in specific courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>21+ Spec.</td>
<td>17+ Spec.</td>
<td>5+ Spec.</td>
<td>37</td>
<td>24+5 Spec</td>
<td>27+5 Spec</td>
<td>16</td>
<td>24+ Spec</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compulsory Studies</th>
<th>2</th>
<th>2</th>
<th>1</th>
<th>Compulsory S. / Foundation S.</th>
<th>Art</th>
<th>&lt;&gt; Music</th>
<th>1</th>
<th>1</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer's Language</td>
<td>2</td>
<td></td>
<td>&lt;&gt; Visual art</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>4</td>
<td></td>
<td>Drama or cinema</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td></td>
<td>* () Computer</td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>English</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>* () Physical education</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>&quot;@ First aid</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>&quot;&quot; Academic Writing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td>Interweaved in specific courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>21+ Spec.</td>
<td>17+ Spec.</td>
<td>5+ Spec.</td>
<td>37</td>
<td>24+5 Spec</td>
<td>27+5 Spec</td>
<td>16</td>
<td>24+ Spec</td>
<td>27+ Spec</td>
</tr>
</tbody>
</table>
### Table 55A - The T.E.C in 1986 (Academism) versus the T.E.C in 2000-2001/2001-02

#### The Seminary Section

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to educational thought</td>
<td>2</td>
<td>First Y.</td>
<td>First Y.</td>
<td>1</td>
</tr>
<tr>
<td>Sociological basics in education</td>
<td>1-2</td>
<td>2nd Y.</td>
<td>1st Y.</td>
<td>1</td>
</tr>
<tr>
<td>Learning defects</td>
<td>1</td>
<td>3rd Y.</td>
<td>1st Y.</td>
<td>1</td>
</tr>
<tr>
<td>The irregular child</td>
<td>1</td>
<td>4th Y.</td>
<td>1st Y.</td>
<td>1</td>
</tr>
<tr>
<td>Basics in teaching therapy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparing for the educator's role</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The education in Israel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education in the Kibbutz (lb.)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic education</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media in education</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### The Primary School Section

<table>
<thead>
<tr>
<th>Name of Courses</th>
<th>2000-2001</th>
<th>2001-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>* () Educational thought + Directed Reading</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Sociology of education</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Learning defects</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Children with special needs</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Measurement and Assessment</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>** Educational research</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>** In-service workshop</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>** Critical T.V watching</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

#### The Education and Teaching Section

<table>
<thead>
<tr>
<th>Name of Courses</th>
<th>2000-2001</th>
<th>2001-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Introduction to developmental Psychology</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Social Psychology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>* () The cognition development and thinking processes</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>** Class navigation</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>* Pedagogical counselling</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Didactic according to specialisations</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>* Methods for imparting reading and writing teaching</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Seminar</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Practicum</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Practicum</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Practicum</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Total of 24 hours in the four years</td>
<td>3 x 6</td>
<td>24</td>
</tr>
<tr>
<td>Cluster A - Bible or History</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Cluster A - History</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Cluster B - Literature or Science</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Cluster B - Israeli studies</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Cluster C - # Nature sciences or Mathematics and Computer</td>
<td>30</td>
<td>1 x 6 (in Humanistic studies)</td>
</tr>
<tr>
<td>Cluster C - Mathematics and Computer</td>
<td>24</td>
<td>&quot;</td>
</tr>
<tr>
<td># Cluster C - Biology sciences</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Cluster D - Physics sciences or Language and Expression</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Total</td>
<td>120-126</td>
<td>120-126</td>
</tr>
</tbody>
</table>

### Foundation Studies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>- Children's Literature</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Science Basics and their teaching</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>The nature of our country</td>
<td>2 (a.)</td>
<td>3 (a.)</td>
</tr>
<tr>
<td>Arithmetic Basics</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Computer's Language</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Language and Expression</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>English</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Drama * Qualifications (Arts)</td>
<td>2</td>
<td>&lt;6</td>
</tr>
<tr>
<td>Creation</td>
<td>2</td>
<td>&lt;6</td>
</tr>
<tr>
<td>Physical education</td>
<td>2</td>
<td>&lt;2</td>
</tr>
<tr>
<td>The built up of the Israeli state</td>
<td>3 (c.) (d.)</td>
<td>&lt;# Israel – legacy and revival</td>
</tr>
<tr>
<td>Bible</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>+ Literature</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Children’s Literature</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Physics Studies (Basics)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Biological Studies - The seasonal fauna and flora</td>
<td>3</td>
<td>3 (a.)</td>
</tr>
<tr>
<td>* Mathematics</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Computers</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>&lt; Language</td>
<td>&lt;4</td>
<td>&lt;4</td>
</tr>
<tr>
<td>&lt; English</td>
<td>&lt;4 - 6</td>
<td>&lt;4 - 6</td>
</tr>
<tr>
<td>&lt; Qualifications (Arts)</td>
<td>&lt;6</td>
<td>&lt;6</td>
</tr>
<tr>
<td>* Movement</td>
<td>&lt;2</td>
<td>&lt;2</td>
</tr>
<tr>
<td>* Creation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Physical education</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>The built up of the Israeli state</td>
<td>3 (c.) (d.)</td>
<td>&lt;# Israel – legacy and revival</td>
</tr>
</tbody>
</table>
C. The T.E.C in the Fourth Phase

Table 54A - The T.E.C in the 'Preparation for the primary school' period (1986 versus 1991-2 and 1992-3) (*)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Courses</td>
<td>First Y.</td>
<td>Second Y.</td>
</tr>
<tr>
<td>Introduction to educational thought</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Sociological basics in education</td>
<td>1-2</td>
<td>-</td>
</tr>
<tr>
<td>The education in Israel</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Education in the Kibbutz</td>
<td>1(b)</td>
<td>-</td>
</tr>
<tr>
<td>Learning defects</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Aesthetic education</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>The irregular child</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Basics in teaching therapy</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to developmental Psychology</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological and Social processes in class</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychology topics - choice, not specified</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General Didactic</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Language Didactic</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mathematic Didactic</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Methods for imparting reading and writing teaching</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Practicum</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

* X Practicum 18
Table 52A - The T.E.C in the 'Early and late childhood educators' section' period
(1986 versus 1988/9 and 1990/1) – The third year of study

<table>
<thead>
<tr>
<th>Name of course</th>
<th>1986 The Academism</th>
<th>1988-1989 Hours</th>
<th>1990-1991 Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language didactic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children's Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td>2 hours, given to choice</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>= Stage management in school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Creation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Integration arts into teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Music</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Music, idea and execution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The built up of the Israeli state (A compulsory cluster) - 1986</td>
<td><em>The Kibbutz and the Society</em></td>
<td>1(d.)</td>
<td>1(d.)</td>
</tr>
<tr>
<td>Didactic</td>
<td>5-6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>* Didactic Workshop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Pedagogical Counselling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The educational thought - introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology of education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methods for imparting reading and writing teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media in Education courses, not specified</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction and developmental Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Youth Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Psychological and social factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= The irregular child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Correcting teaching' in Mathematic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Learning defects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) The educator's role in class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Educational research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disciplinary didactics (Mathematic, History, Geography, Bible Israeli studies, Biology)</td>
<td>1-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practicum</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Cluster A - Bible or</td>
<td>2-3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cluster A - History</td>
<td>2-3</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>^ Basic topics of the Zionist history</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cluster B - Literature</td>
<td>2-3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Cluster B - Israeli studies</td>
<td>2-3 (a.)</td>
<td>3 (a.)</td>
<td>3 (a.)</td>
</tr>
<tr>
<td>Cluster C - Biologic sciences</td>
<td>4-5 or</td>
<td>4 (a.)</td>
<td>5 (a.)</td>
</tr>
<tr>
<td>(B) Nature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Cluster C - Mathematic and Computer</td>
<td>2-3</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Cluster D - Physics sciences</td>
<td>4-5 or</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Cluster D - Language and Expression</td>
<td>2-3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

| Disciplinary Specialisations          |                    |                |               |
|                                      |                    |                |               |
|                                      |                    |                |               |
|                                      |                    |                |               |
| Total                                 | 21 + 8-16          | 20-21 + 10-16  | 10-14        |

Table 53A - The Fourth year of study - The T.E.C offered in the Academism proposal, 1986

<table>
<thead>
<tr>
<th>Name of course</th>
<th>The Academism T.E.C proposal 1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifications</td>
<td>1 (not specified)</td>
</tr>
<tr>
<td>Education</td>
<td>3 (not specified)</td>
</tr>
<tr>
<td>Didactics</td>
<td>2</td>
</tr>
<tr>
<td>Disciplinary courses for each main specialisation</td>
<td>9-11 (depends on the specialisation discipline)</td>
</tr>
<tr>
<td>Disciplinary courses for each secondary specialisation</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18-20, depend on the specialisation discipline</td>
</tr>
</tbody>
</table>
Table 51: The T.E.C in the 'Section for early and late childhood educators' section' period (1986 versus 1988/9 and 1990/1) – The Second year of study

<table>
<thead>
<tr>
<th>Name of course</th>
<th>1986 The Academism</th>
<th>1988-1989 Hours</th>
<th>1990-1991 Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compulsory Studies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and expression</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Didactic of Nature studies</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children's Literature</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Qualifications</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td>2 hours, given to choice</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Creation</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>= Integration arts into teaching</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>= Music, idea and execution</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>= Music</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>The built up of the Israeli state (A compulsory cluster) – 1986</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judaism</td>
<td>2 (b.)</td>
<td>2(b.)</td>
<td>-</td>
</tr>
<tr>
<td>The Kibbutz</td>
<td>1(d.)</td>
<td>1(d.)</td>
<td>-</td>
</tr>
<tr>
<td>Zionism</td>
<td>1(c.)</td>
<td>1(c.)</td>
<td>-</td>
</tr>
<tr>
<td>* The (Zionist) settlement's history</td>
<td>-</td>
<td>2(c.)</td>
<td>2(c.)</td>
</tr>
<tr>
<td><strong>Educational Studies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Didactic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Didactic workshop</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>* Pedagogical Counselling</td>
<td>-</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>The educational thought - introduction</td>
<td></td>
<td>4 hours</td>
<td>-</td>
</tr>
<tr>
<td>Sociology of education</td>
<td></td>
<td>education courses, not specified</td>
<td>1</td>
</tr>
<tr>
<td>Methods for imparting reading and writing teaching</td>
<td></td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Media in education</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Disciplinary Specializations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* @ Psychology - Piaget</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Practicum</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cluster A - Bible</td>
<td>2 or</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Cluster A - History</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cluster B – Literature</td>
<td>2 or</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Cluster B - Israeli studies</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cluster C - Biologic sciences</td>
<td>3 or</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td># Nature</td>
<td>5 (a.)</td>
<td>-</td>
<td>5(a.)</td>
</tr>
<tr>
<td>Cluster C – Mathematic and Computer</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Cluster D – Physics sciences</td>
<td>3 or</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Cluster D – Language and Expression</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24 + 8-10 (Spec.)</td>
<td>23 + 9-14 (Spec.)</td>
<td>23 + 10-15 (Spec.)</td>
</tr>
</tbody>
</table>
### B. The T.E.C in the Third Phase

Table 50A - The T.E.C in the 'Section for early and late childhood educators' section' period (1986 versus 1988/9 and 1990/1) – The First year of study

<table>
<thead>
<tr>
<th>Compulsory Studies</th>
<th>Name of course</th>
<th>1986 - The Academism Hours</th>
<th>1988-1989 Hours</th>
<th>1990-1991 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language and expression</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>(*) Language – by levels</td>
<td></td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Arithmetic basics</td>
<td></td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mathematics basics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bible</td>
<td></td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Bible – Genesis and introduction to the Bible</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>English</td>
<td></td>
<td>4</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>(*) English – by levels</td>
<td></td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Science basics and their teaching</td>
<td></td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics basics and their teaching</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Science basics and their teaching</td>
<td></td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>The nature of our country</td>
<td></td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nature</td>
<td></td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>The seasonal flora and fauna</td>
<td></td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Computer Language</td>
<td></td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Introduction to computer programming</td>
<td></td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Physical education</td>
<td></td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Movement</td>
<td></td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Holidays and special days</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>(*) Holidays and their origins</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Qualifications Drama</td>
<td></td>
<td>2 hours, given to choice</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Theatre in school</td>
<td></td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Creation</td>
<td></td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Integrating arts to teaching</td>
<td></td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>The build up of the Israeli state (A compulsory cluster) - 1986</td>
<td>The (Zionist) settlement’s history</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Disciplinary Specialisations</td>
<td></td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cluster A - Literature</td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cluster B - Israeli studies</td>
<td></td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Physical Geography</td>
<td></td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Cluster C - Biology sciences</td>
<td></td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>39 + 6</td>
<td>41 + 3</td>
<td>41 + 2</td>
</tr>
</tbody>
</table>
Table 49A - The T.E.C in the 'Seminary section' period (1984/5-1986/7 + Academism, 1986)  
- The third year of study

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic history</td>
<td>7 (a.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Holidays and special days</td>
<td>3 (b.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Judaism</td>
<td>-</td>
<td>-</td>
<td>2 (b.)</td>
<td>-</td>
</tr>
<tr>
<td>(i) Nature studies - animals and their habitat / Botanic</td>
<td>2+2 (a.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(i) Communication</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[Music or Art ]</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1 or</td>
</tr>
<tr>
<td>Music, idea and execution</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Integrating Art in teaching</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Drama</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pedagogical counselling</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>* Didactic workshop</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>* Didactic</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Educational Sociology</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(a) An introduction to special education</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(i) Psychology</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>(i) The childhood’s psychology</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>** Psychology and communication</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>@ Media and Education</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>@ Aesthetic education</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>+ Disciplinary didactics (Mathematics, Language, Israeli Studies, Bible)</td>
<td>2</td>
<td>2+1</td>
<td>2+1</td>
<td>-</td>
</tr>
<tr>
<td>+ Preparing for the educator’s role</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>* Personal conversations / Library</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| Qualifications, 16 compulsory + 8 education, not specified, + 8-19 disciplinary hours, depend on the kind of specialisation, and on its kind (main or secondary) |

| * (i) Observation and practicum | 8 | 6 | - | - |
| * Practicum | - | - | 6 | 6 |

The built up of the Israeli state (A compulsory cluster) - 1986

| The Kibbutz      | 1 (b.) | - | - | 1 |
| The “Joint Education” | 2 (d.) | - | - | - |
| The settlement’s history | - | - | 1 (c.) | - |
| Democracy        | -     | - | 1(c.) | 1(c.) |

The Zionist history

| Cluster A - History | - | 2 (c.) | 2 (c.) | 1(c.) |
| Cluster B - Literature | - | 2 or | 2 or | 2-3 or |
| Cluster B - Israeli studies | - | 2 | 4 | 2-3 |
| Cluster C - Biology sciences | - | 4 or | 4 or | 4-5 or |
| Cluster C - Nature sciences | - | 5 or | 5 or | 5-3 or |
| Cluster C - Mathematical and Computers | - | 4 | 7 | 2-3 |
| Cluster D - Physics sciences | - | 2 or | 4 or | 4-5 or |
| Cluster D - Language and Expression | - | 2 | 2 | 2-3 |

| Total | 34 | 27+ | 14-19 | - |
| (Spec.) | (Spec.) | - | - | - |
Table 48A - The T.E.C in the 'Seminary section' period (1984/5 – 1986/7 + Academism, 1986–)

The second year of study

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>* Hebrew Language</td>
<td>2.5</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>* Language and expression</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>* () Nature</td>
<td>2 (a.)</td>
<td>-</td>
<td>1 (a.)</td>
<td>-</td>
</tr>
<tr>
<td>* Nature studies – animals and their habitat</td>
<td>2 (a.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Science basics</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Science</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Science basics and their teaching</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>(i) Bible studies</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Children's Literature</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Computers</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Texts' logical analysis</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Physical Geography of Israel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 (a.)</td>
</tr>
<tr>
<td>* Jewish studies - introduction</td>
<td>2+2 (b.)</td>
<td>2 (b.)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Jewish studies – advanced studies</td>
<td>2 (b.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Holidays and special days</td>
<td>-</td>
<td>-</td>
<td>1.5(b.)</td>
<td>-</td>
</tr>
<tr>
<td>* () Judaism</td>
<td>-</td>
<td>-</td>
<td>1 (b.)</td>
<td>2 (b.)</td>
</tr>
<tr>
<td>Music and Art</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2 hours, given to choice</td>
</tr>
<tr>
<td>= Music</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>= Music, idea and execution</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>= Integrating Art in teaching</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

The built up of the Israeli state (A compulsory Cluster, 1986)

| History – thought and policy in the Zionist movement and the Labor party | 2 | - | - | - |
| The Kibbutz | - | 1 (d.) | - | 1 (d.) |
| The "Joint Education" | - | - | 2 (d.) | - |
| The settlement’s history | - | - | 1 (c.) | - |
| Democracy | - | - | 1 (c.) | 1 (c.) |
| (i) The Zionist history | - | - | 2 (c.) | 1 (c.) |

Pedagogical counselling

| Educational Sociology | 4 | 4 | 7 hours Education courses, not specified |
| * () Psychology | - | - | 2 | 2 |
| * Educational Psychology | - | - | 4 | 4 |
| * Media and Education | - | - | 1 | - |
| * Aesthetic education | - | - | 1 | - |
| * Didactic workshop | - | - | 4 | 4 |
| * General didactic | - | - | 4 | 4 |
| (i) Disciplinary didactic (Mathematics and Geometry) | 2 | 1 | - | 1-3 |
| ** Personal conversations | - | - | 1 | - |
| * Library | - | - | 1 | - |
| * Does it matter to be boys or girls? | - | - | 1 | - |
| * Personal work in a learning center | - | - | 1 | - |
| * Observation and practicum | 6 | 6 | - | - |
| * Practicum | - | - | 6 | 6 |

Disciplinary Specialisation

| Cluster A - Bible + didactic | 2+1 or | 2+1 or | 2 or |
| Cluster A - History | 2 | 2+1 | 2 |
| Cluster B - Literature | 2 or | 2+1 or | 2 or |
| Cluster B - Israeli studies + didactic | 2+1 | 2+1 (a.) | 2 |
| Cluster C - Biology sciences | 4 or | 4 or | 3 or |
| Cluster C - Nature sciences | 1 or | 1 or | 2 or |
| Cluster C - Mathematic and Computers | 3 or | 2 or | 3 or |
| Cluster D - Physics sciences | 4 or | 4 or | 3 or |
| Cluster D - Language and Expression | 3 or | 3 or | 3 or |

Total: 36.5 + 33.5 + 31 + 32 (compulsory) 7 or 14 choice hours, depend on the specialisation 9 or 12 choice hours, depend on the specialisation
### A. The T.E.C in the Second Phase

**Table 47A - ‘The Seminary section’ period (1984/5 - 1986/7) - The First year of study**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours</td>
<td>Hours</td>
<td>Hours</td>
<td>1986</td>
</tr>
<tr>
<td>Hebrew Language</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(*) Hebrew grammar</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written expression</td>
<td>2</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and expression</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arithmetic and geometry basics</td>
<td>3</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>-</td>
<td></td>
<td>2+1</td>
<td></td>
</tr>
<tr>
<td>(*) Arithmetic basics</td>
<td>-</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bible</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Science basics</td>
<td>3</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Science basics and their teaching</td>
<td>-</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>The nature of our country</td>
<td>-</td>
<td></td>
<td>2 (a.)</td>
<td>2 (a.)</td>
</tr>
<tr>
<td>Movement</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Gymnastics activities and games</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(*) Physical education</td>
<td>-</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Nature studies</td>
<td>2 (a.)</td>
<td>2 (a.)</td>
<td>2 (a.)</td>
<td></td>
</tr>
<tr>
<td>Computers</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Language</td>
<td>-</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Holidays and special days</td>
<td>2 (b.)</td>
<td>2+1 (b.)</td>
<td>-</td>
<td>1 (b.)</td>
</tr>
<tr>
<td>The Jewish folklore cycle</td>
<td>-</td>
<td></td>
<td></td>
<td>1 (b.)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37</td>
<td>40</td>
<td>44</td>
<td>45</td>
</tr>
</tbody>
</table>

**Qualifications**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic Art</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Crafts</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Creation</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Theatre in school</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The built up of the Israeli State (A Compulsory cluster) - 1986</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directions and problems in the Zionist history</td>
<td>2 (c.)</td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>The built up of the Israeli state</td>
<td>-</td>
<td></td>
<td>2 (c.)</td>
<td></td>
</tr>
<tr>
<td>The history of the Zionist Settlement</td>
<td>2 (c.)</td>
<td>2 (c.)</td>
<td>-</td>
<td>2 (c.)</td>
</tr>
<tr>
<td>The settlement's history</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedagogical counselling</td>
<td>-</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>General didactic</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>(*) The educational thought</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basics of Sociology in education</td>
<td>-</td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Teaching reading and writing</td>
<td>2</td>
<td></td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Methods for imparting reading and writing teaching</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Introduction and developmental Psychology</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>(*) Psychology</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Personal work in the learning centers/ Library</td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Observation and practicum</td>
<td>-</td>
<td></td>
<td>1 (a.)</td>
<td></td>
</tr>
<tr>
<td>Practicum</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Educational Studies**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster B - Literature</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Cluster B - Israeli studies</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2 (a.)</td>
</tr>
<tr>
<td>Cluster C - Biologic sciences</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total**

| Total | 37 + Pedagog. counselling | 40 | 41 | 45 |