Perceptions of Curriculum Change of Israeli Secondary Headteachers: Managing and Leading the Pilot of "Bagrut 2000"

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By

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ABSTRACT

This thesis reports and analyses the perceptions of curriculum change of Israeli secondary headteachers who led and managed the implementation of the pilot of a significant change to the curriculum known as “Bagrut 2000”. “Bagrut 2000” represents an approach to reforming and reorganizing secondary education studies.

The research paradigm is interpretive. The data were collected mainly from semi-structured in-depth interviews with 19 headteachers. The 19 schools that these headteachers manage are from the different educational sectors and different regions of the country.

The analysis offered was based on a typology of the headteachers’ perceptions according to their preliminary decision-making process in entering “Bagrut 2000”. Three types of headteachers were found. Type 1 – those who had decided alone to participate in the curriculum change, Type 2 - those who had applied a participatory decision-making process and Type 3 - those who had begun, in their schools, the changes in teaching, learning and evaluation methods prior to “Bagrut 2000”.

The presentation of the findings shows that no significant differences were found in the personal data of the headteachers or the schools’ characteristics. All the headteachers perceived the change as a requirement. No significant differences were found in the different stages of the implementation, as “Bagrut 2000” is a combination of imposed and voluntarily change. In addition, although the issue of partners in the staff was perceived as a very important goal, there was a gap between this perception and the actions taken by Type 1 headteachers. Differences were found between the types when focusing on opposition. However, all the headteachers, regardless of the type they belonged to, could be described as ‘transformational’ and ‘people-oriented’ leaders. Yet, when the change was not by mutual agreement between partners in the enterprise, the leadership included both ‘transactional’ and ‘task-oriented’ characteristics.

One of the central issues that any headteacher will have to deal with is the constantly evolving nature of the curriculum. It is believed that the research outlined in this submission will be relevant to our developing knowledge of headteachers’ perceptions of curriculum change.
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Chapter 1: Introduction

Setting the Scene

In Israel, schools in general, and secondary schools in particular, are blamed for not preparing their students properly for the changes in society. The focus on the faulty preparation of the students for their future roles is centered on the secondary schools, since they are responsible for the shaping of the "desired graduate" (Chen, 1995; Ben Dror, 1992). From the educational point of view, curricular change, based on changing the evaluation, teaching and learning methods, is one of the steps that needs to be taken in order to accomplish the goals of the "desired graduate".

"Bagrut 2000" represents an approach to reforming and reorganizing secondary education studies. The general meaning of "Bagrut 2000" is that the final assessment in the different subjects will be of two kinds: nation-wide and in-school. The pilot of "Bagrut 2000" is a combination of an imposed change and a school initiative.

This thesis examines and characterizes (according to the interpretive paradigm) a typology of the perceptions of curriculum change of Israeli secondary headteachers as leaders and managers. The perceptions of the headteachers are based on their experience in the pilot of "Bagrut 2000" and were derived from in-depth interviews with these headteachers.

This introduction focuses on the following issues: the urgency of curriculum changes in secondary schools in Israel, the importance of the headteachers as leaders and managers of a curriculum change, a review of the origins, history and structure of secondary schools in Israel, together with a detailed explanation about the curriculum
change of “Bagrut 2000”. Furthermore, it includes information about the pilot programme and schools that participate in this specific change of “Bagrut 2000”. The over-arching question and the questions that derive from it end the introduction chapter of this thesis.

Introduction

The need to look seriously at the future is part of the very nature of education (Postman, 1997, p. 30). According to Passig (1997), the beginning of the 21st century is described as one of high impact and profound changes. These changes are influencing politics, society, art, economy, industry, technology, information and thus, inevitably, education. Despite ceaseless efforts worldwide to develop and improve schools, the principles upon which they are based have not changed significantly since the industrial revolution (Chen, 1995, p. 87). The emergence of a “knowledge society” as described by Bell (1973) and Toffler (1974) also requires far-reaching changes in the structure, function and objectives of education. Indeed, most social institutions have undergone broad and meaningful changes over the past hundred years (Ben-Dror, 1992, p. 8). Moreover, according to Dimmock (1997, p. 1), many theories and perspectives explain the reasons for the need of educational systems to be restructured, especially in the last decade. Hargreaves (1994, p. 10) summarizes by arguing that:

"...The rules of the world are changing. It is time for the rules of teaching to change with them... Our basic structure of schooling and teaching were established for other purposes at other times. Many of our schools and teachers are still geared to the age of heavy mechanical industry with isolated teachers processing batches of children in classes or standards, in age-based cohorts. While society moves into a post-industrial, post-modern age, our
According to Samuel (1990, p. 40), a need to change arises when an organization's functioning is not compatible with the expectations of its participants or any governing body with influence in the organization. Davies (1997, p. 95) argues that:

"...The management of change is fraught with tensions: tensions between desired change and imposed, often unwanted, change; between planned and unplanned; between systematic planning and evolutionary change..."

A different point of view is that of Bamberger (1995, p. 160) who claims that change in education is something that stems from the outside, and that at best, can only be adopted by headteachers. Fullan (1993, p. 8), recognizing the importance of external change, argues that the ability to manage such change is an essential skill for all those who are involved in education and schools.

"...What is the best way to manage change? Is there in fact one best way? Or should it depend on our circumstances? Where do we begin? We need to start by attempting to understand as much as possible about the process of change in order to have a fair chance of managing it effectively..."

(Davies and Ellison, 1997, p. 95)

In responding to the changes, most educational programs and innovations have concentrated on improving existing structures, seeking to achieve instant changes and improvements (Chen, 1995, p. 88). However, despite efforts to improve the existing structure, the education system, nowadays, is facing an ongoing crisis (Sharan, 1995; Hargreaves, 1994; Fuchs, 1995; Inbar and Pereg, 1999). Schools are
blamed for not preparing the students properly for the changes in society on entering the 21st century (Chen, 1995; Ben-Dror, 1992; Hargreaves, 1994; Davies 1997).

"...It seems that the crisis in education exists and cannot be ignored. At the threshold of the 21st century there exists among all involved in education a strong feeling for a need for change of objectives and direction. Changes in structure and content at school become crucial, not less than the future image schools should aim and strive for..." (Paldi, 1997, p.13).

Dimmock (2000, p. 1) maintains that for many countries the changes in the education system involve significant curriculum changes. Moreover, he argues that these curriculum changes occur beyond the classroom and the day to day experience of learners. As Kelly (1999, p. 1) explains:

"...Any definition of curriculum, if it is to be practically effective and productive, must offer more than a statement about the knowledge-content or merely the subjects which schooling is to teach or transmit. It must go far beyond this to an explanation, and indeed a justification, of the purposes of such transmission..."

Fuchs (1995, p. 19), Sharan (1995, p. 7), and Aviram (1997, p. 29) point out some of the difficulties. They claim that teachers in Israel lack the experience and skills to qualify students to cope with the challenges facing them and, at the same time, they lack the experience and skills of the more indirect aspects of instruction, such as dialogue with students, parents and other interpersonal exchanges. Moreover, there are associated difficulties in finding appropriate methods of instruction and evaluation. Arnon (1994, p. 60) claims that teaching should take place not only with the intention of conveying information, but also considering the thinking abilities involved in the process and developing them. In other words, the curriculums should be perceived as contents and frameworks of thinking.
"...The world of knowledge, which the curriculum is supposed to provide must include enough room that would enable the students to exercise their thinking skills. As a result, educators and scientists started asking the basic questions – which knowledge is learned, and how is it learned...?"

(Aron, 1994, p. 60)

The problem of instruction and evaluation may also be particularly difficult where interdisciplinary subjects are concerned.

The final decade of the 20th century was characterized, according to Birenbaum (1997), by a growing awareness of the importance of achievement assessment to the design of the curriculum and teaching and learning methods. The term "assessment", according to Birenbaum (1997, p. 53), as opposed to "testing", is an "umbrella" term, which includes a wide variety of strategies and tools, such as portfolios, observations of the students' behavior in the classroom, personal meetings between the student and the teacher, students' self-assessment, peer-assessment, and, of course, different types of tests.

Caspi (1994, p. 2), speaking at the third convention of the Israeli Quality Association, claimed that the headteacher is expected to have managerial expertise and initiate educational leadership that would lead towards change. As Davies (1997, p.11) claims:

"...Leaders and managers in schools are faced with the challenge of operating in a rapidly changing world. In this world the globalization of economic systems, technological advance and the increased expectations that society has of its education system have replaced past certainties with new and uncertain frameworks. Dynamic change has become the order of the day..."
Fuchs and Herz-Lazarowitz (1992, p. 76) maintain that one of the unique tasks of a headteacher, is his/her ability to lead the school by his/her educational beliefs, thoughts and ideas. Headteachers are challenged to manage because of their expectations to “change” things. It would appear that change is a central feature of the headteacher’s role. The researchers Avi-Itzhak and Ben-Peretz (1987, p.1) indicate that the headteacher’s position enables him/her to facilitate or block improvement or change.

“...Headship... is less to do with managing a steady-state school organisation and more to do with anticipating and responding to new initiatives, challenges and opportunities...”

(Hall et al., 1997, p. 166)

The researchers Caspi (1994), Fuchs and Herz-Lazarowitz (1992), Inbar (1992), and Kula and Globman (1994), claim that, for school headteachers, the instilling of a change today has become a prestigious "status symbol", indicating their schools’ development and progressiveness. As Fullan (1991, p. 28) points out:

"...Innovations are not neutral in their benefits and that there are many reasons other than educational merit that influence decisions to change. A closer examination reveals that innovations can be adopted for symbolic, political or personal reasons: to appease community pressure, to appear innovative, to gain more resources. All of these forms represent symbolic rather than real change..."
The Secondary Schools in Israel

According to Amir (1997, pp. 9-12), the structure of the secondary education system in Israel is a consequence of the European secondary education system. Amir (1997) states that the founders of the Jewish settlements in Israel, who arrived from Europe at the beginning of the 20th century, brought with them a tradition of secondary education, based on the high schools (gymnasiums) in Europe. Until then, different types of educational institutions existed in Israel. Some were schools affiliated with different countries or organizations, such as “Alliance”, which had the goal of spreading the French culture among the Jewish population. In addition, there were also religious schools that served the orthodox population (Rozner and Moore, 1998, p. 147).

The goal of the secondary school system in Israel, just like its European counterpart, was to prepare its students for higher academic education (Paldi, 1997, p. 3). The meaning of the Hebrew term for secondary education, -“tichon” - meaning “middle school”, shows that its founders didn’t consider it to be an entity in itself, but rather a stage on the way towards higher academic education (Adar, and Levi, 1995). This approach dictated the schools’ curricula that were, in essence, an introduction to university disciplines. This model of secondary education remained after the State of Israel was founded in 1948 (Chen, 1995, p. 7). The public six year secondary school system was established, but it did not significantly change the orientation of the secondary school grade levels, which still served as a preparatory stage towards higher education (Elboim-Dror, 1997, p. 116). In 1975, following the legislation of the Compulsory Elementary and Secondary Education Act, which was extended to the 12th grade (free of tuition
fee but not compulsory after the age of 16), "comprehensive" secondary schools were established alongside the non-vocational secondary schools. The comprehensive secondary schools included junior high schools (which were compulsory), and included both vocational and non-vocational students (Amir, 1997). The initial idea behind the establishment of the comprehensive schools was a good one. The goal was to integrate students from different social strata, and to advance students from lower socio-economic classes (Ilan et al., 1996). At the same time, the technological subjects taught in the schools diversified and extended into different areas, and once again, elite groups were created. These students received the best technological education, as well as a "Bagrut" diploma (Amir, 1997, p. 7). The Bagrut (matriculation) examination system began during the British mandate period, in 1937 (Ben-Eliyahu, 1998, pp. 105-106). The Bagrut exams are mainly external, written exams. The authority of the Ministry of Education regarding the conducting of the Bagrut exams was defined in the Ministry's General Director's guidelines:

"...The Ministry of Education and Culture will be responsible for the curricula, the examination program, composing the questionnaires for the examinations, and organizing and grading the examinations in every subject..."


According to figures supplied by the former Minister of Education, Mr. Yossi Sarid (1999):

"...Over 60 per cent of the students in Israel do not receive the Bagrut diploma. Six per cent of the students in the wealthier communities do not reach the 12th grade; The worrisome figures skyrocket among weaker populations – 21 per cent of the students do not reach the 12th..."
According to figures supplied by the Ministry of Education's statistics department (2000), there are 660 secondary schools in Israel. The number of secondary school students in Israel is constantly growing. In 1990 there were 245,000 secondary school students, out of which 61,000 were 12th grade students. The 1997 figures were 291,000 and 81,000 respectively, growing to 302,000 and 81,000 in the year 2000. The data for the year 2000 represent a growth rate of 23 per cent from 1990 and 4 per cent from 1997 in the total number of secondary school students, and 38 per cent from 1990 and 4 per cent from 1997 in the number of 12th grade students. In 2002, the data show that 331,000 students were studying in the secondary schools in Israel (a growth rate of 10 per cent) out of which 93,000 were in the 12th grade (a growth of more than 10 percent).

The percentage of secondary school students among all adolescents has been growing annually in both the Jewish and the Arab sectors, and among female and male students. In the Jewish sector the percentage of female students has been higher than that of male students all through the years (99.8 per cent and 93.4 per cent respectively); this is the case also in the Arab sector since 1990 (72.2 per cent and 67.5 per cent respectively).

**The Secondary Education System**

In Israel, attempts have been made to improve the education system in secondary schools by adopting a strategy of specific, monitored changes (Porat 1995, p. 21). The starting point for all the changes and innovations in the secondary education system in Israel indicates that the current framework of
studies is basically focused on preparation for the Bagrut examinations (Nevo, 1980; Poor 1989; Levi, 1997). Successfully finishing these exams, at the end of the 12th grade, is the climax that the students, the parents and all those involved in the secondary education, aspire to (Paldi, 1997, p. 13). The Bagrut examinations system has been in use in Israel for the last sixty-five years. According to Ben-Eliyahu (1998, p. 12), over this period, it has undergone a series of changes and developments. Still, these changes are within the basic framework of the examinations – summative assessments based on a combination of the in-school performance assessment (a score based on the whole school year) with an external assessment (the Bagrut exam score) (Chen, 1995, p. 9). Moreover, the Ministry of Education requires a reasonable compatibility between the two scores in order to have control over the schools and the teachers. Evaluating the students' achievements using the Bagrut exams is basically intended for certification needs. Secondary school graduates who have received the Bagrut diploma have achieved the necessary recognition for their personal achievements in every subject they were tested on (Dori 1999; Levi, 1997). The graduate can use the diploma for higher education and for entering the labour market. Thus, any change in the Bagrut examination system requires careful attention that is based on criteria of practicality, applicability, fairness and accuracy (Ben-Peretz, 1998). Furthermore, since there is a high level of interdependency between the matriculation exam assessment system and the teaching and learning processes, every improvement in the teaching and learning processes necessitates a suitable change in the assessment system (Ministry of Education Report, 1999a, p. 10). Ilan (1996, pp. 1-3) states that, within the framework of the external achievements assessment system, there is
still room for evaluation by the school, through the "overall year score". Still, the methods of teaching are only with accordance to the external achievements assessment system and there is no place for alternative teaching methods or assessments such as the portfolio, for example.

According to the Shild report (1990, section 2.1.1), as long as secondary education studies are concluded with an external assessment, the Ministry of Education has a powerful means of controlling the teaching and learning methods in secondary schools. The teachers focus on preparing their students for the examinations, and the students focus on the examinations almost exclusively. In addition to the general guidelines given to the schools (regarding the contents and the methods of teaching), the external examinations system enables the Ministry of Education to control the realization of the guidelines, by both the teachers and the students. Ben-Eliyahu (1998, p. 5) contends that two negative outcomes might arise from this. The first is the increasing trend of examination-dictated studying, and the second is the impairing of the teachers' autonomous status, thus reducing the teachers' involvement in the learning process.

Regarding the teachers' involvement and the development of assessment alternatives, Nevo (1995, p. 101) clearly states that:

"...Whatever the developments are, it is important that schools and teachers be involved in their crystallization. Too many things happen in education far away from the school building. Too many important decisions in education are made by high level administrators and experts without the involvement of teachers. It is very important to make sure that this does not happen with student evaluation..."
According to Porat (1995, p. 46), strengthening the in-school evaluation system goes together with the perception of teaching as a profession. Moreover, the professional status of the teacher requires more autonomy over the process of achievements evaluation.

The researchers Birenbaum (1997) and Levi (1997) recommend a reform in the evaluation methods used, by combining alternative assessment methods with the examination. These alternatives will serve as tools for a true, authentic and formative achievements evaluation, which takes place in real-life situations, or in simulations thereof. Evaluations of this type can be used for performance assessment, by identifying and diagnosing the student's success patterns along with the problems he/she faces throughout the learning process. It is a continuous assessment process that doesn't focus on a single examination at the end of the process. Formative assessment can be a source of challenge and interest for the student, and a basis for more significant learning.

Alternative assessment can supply meaningful feedback, for both the teachers and the students (Efrat-Bahat, et al., 1997). This continuous process involves both the student and the teacher in creating the tools to evaluate the student's progress with unconventional methods, and makes the student more involved in designing the learning-teaching process, the measurements for progress, and the assessment process itself.

As part of the alternative assessment, the format of reporting might also change. Instead of a single grade, a complete achievements profile is likely to be supplied for every student, for every one of the skills or other evaluated dimensions, using an array of alternative evaluation tools (Velizker, 1995; Putman, 1995; McGuff, 1990). This approach to profiling focuses on the
student, and makes him or her involved in the learning and evaluation processes. In making the profile it will be possible to include a wide range of learning experiences and documentary patterns, most of which have practical applications to teaching and learning.

This alternative approach to achievement evaluation, which developed as an antithesis to the traditional approach, has gained popularity over the last decade in Israel. The result of the alternative approach to achievement evaluation was a change and innovation in the secondary education system - "Bagrut 2000". The pilot of this curriculum change is the basis for the headteachers' perceptions of change, which this thesis analyses.

The Curriculum Change: "Bagrut 2000"

The change represents an approach to reforming education. "Bagrut 2000" is intended to promote the implementation of the Ben-Peretz Committee recommendations (1994) for reorganizing secondary education studies in Israel. The process of change in the secondary education system itself started in 1995 (Ministry of Education, 1995).

The Ben-Peretz Committee (1994) was guided by two sets of considerations: the pedagogical aspects of the Bagrut (matriculation) exam structure, and the social aspects.

Regarding the pedagogical aspects, the committee stated (p. 8):

"...The main operative assumption in the basis of the recommendations brought in this document is that there is a strong interrelationship between achievements evaluation methods, and learning and teaching methods. The diversification of the teaching very much depends on finding evaluation methods that would be compatible with the wide
As stated earlier, the Ben-Peretz Committee was guided also by aspects of social engineering. According to Ben-Peretz (1998), the existing gaps between different sectors in the population, in terms of eligibility for the Bagrut diploma, have a significant adverse effect on the principles of social equality and the rights of every individual for equal opportunities in education. This situation leads to tensions and poses great danger of polarity and social division based on descent and social status.

The report (p.10) indicates that:

"...There is an apparent social need to increase the percentage of students eligible for the matriculation diploma, without lowering the academic level. The committee members believe that a situation in which over half of the individuals in each age group are not eligible for the Bagrut diploma is intolerable. The committee members believe that shifting part of the authority over student assessment to the schools would create the climate and the conditions for allowing more students to realize their potential..."

The Ministry of Education committee (1996), which deals with the above recommendation of the Ben-Peretz Committee, states that the main starting point that guided the committee’s considerations in making its recommendations was that complete school education, over twelve years, should be given to all students, every year. A full 100 per cent learning rate should be aimed for. The committee believed that the secondary education system should be adapted to serve all youngsters. It should supply them with the best education possible, in order to complete their studies and receive a Bagrut diploma that would enable them to continue to higher education or help them in the labor market. The committee’s recommendations were basically intended to create a pedagogical
and organizational framework that would enable the development of a process of promoting secondary education in Israel, thus enlarging the number of students eligible for the Bagrut diploma.

The Ben-Peretz Committee recommended that the curricula and their derivative achievement evaluation methods would be constructed in three levels: the basic level, the regular level, and the intensified level. The structure would be modular-accumulative, in order to allow mobility from level to level. Moreover, the final assessment in the different subjects would be of two kinds – nation-wide and in-school. The record of assessment in the Bagrut diploma would not include a distinction between the two. The committee also recommended that the acknowledged assessment (both nation-wide and in-school) would be given in seven core subjects and in two electives. In addition, students that fulfilled the requirements of the acknowledged assessment (nation-wide and in-school) according to the suggested system would be eligible for a standard Bagrut diploma. The committee further recommended that the linkage between the Bagrut diploma and the requirements of higher education institutions would be kept. A guidance and control framework would be established, in order to help the schools create a valid and significant assessment system, and diversified it by using alternative evaluation methods. The means of control over the schools evaluation methods would be determined.

"...An inspection framework shall be used to monitor the operation of the different subjects' staff. The inspection will be conducted annually, and will be made of a set of procedures, including the documentation of the process, the evaluation tools developed by the staff, and a sample of the students' achievements, as evaluated by the teachers...The inspection process will also include a dialogue that will be held with every subject staff, and a feedback report that will be handed to the schools' head teachers, project coordinators, subject coordinators, the project's
administration, and subject inspector and the accompanying instructor..." (The Ben – Peretz Committee report, 1995)

Finally, the committee’s idea was that the whole process would be continuing, perpetual and controlled, in a way that would ensure the terms needed for its success. To do that, the General Director of the Ministry of Education and the chairman of the University Presidents’ Committee appointed a committee whose members would include representatives from the universities and the Ministry of Education. The role of the committee would be to monitor the change of “Bagrut 2000” and to submit its recommendations for expanding this change.

The Ben-Peretz Committee (1994) perceived the whole issue of achievement assessment in schools, including the Bagrut exam system, as an inseparable part of the teaching-learning process. According to the Ministry of Education (1995, section 1.2), the structure of the curriculum and the assessment methods used force the teachers to use teaching styles that are mostly traditional and frontal. Since the Bagrut examination system is centralized and very much dominant, it affects the teaching methods used, as well as the learning methods, at all grade levels of the secondary school systems.

Referring to the above pedagogical aspects, the committee stated that:

"...The basic presumption of the recommendations brought in this document is that there is a strong interdependency between the achievement evaluation methods, and the methods of teaching and learning. Diversifying the teaching, thus, very much depends on adapting the evaluation methods to the various teaching methods, by means of bringing the evaluation process closer to the teaching, by transferring the evaluation authority as much as possible to the schools. The committee believes that the examinations as they are today do not allow adequate expression of the depth and the creativity of learning..."

(The Ben-Peretz committee report, 1995, p. 11)
Another pedagogical aspect that the committee dealt with was in-school assessment. According to Birenbaum (1997, pp. 41-45), the importance and prominence of in-school evaluation is apparent in the teaching-learning process, as it provides feedback about the studying process, as well as determines and designs the contents and character of teaching. The need to change the assessment and teaching methods in schools was crucial, in light of the great development in communications, and "the explosion of knowledge" (Passig, 1997, p. 154). Following the acknowledgement of the value of the ability to ask questions, and not just to provide answers, came the need to develop structures and skills for acquiring knowledge, as well as the ability to accumulate knowledge in order to develop creativity rather than retrieving information (Dori and Herschovitz, 1999, pp. 411-430). The assessment methods used today are not considered to aim at these goals of education sufficiently (Nisan, 1980, pp.139-156). The committee's recommendations stated that:

"...As part of enforcing the in-school evaluation, the issue is, in general, implementing a continuous evaluation process that would combine exams with alternative evaluation methods, such as composing research papers, projects, evaluation according to the student's portfolio, etc..."

(The Ben-Peretz committee report, 1994, p. 12 )

The committee also recommended that:

"...A guidance and control framework will be established, in order to help the schools create a valid and significant evaluation system, and diversify it by using alternative evaluation methods. The means of control over the schools evaluation methods will be determined..."

(The Ben-Peretz committee report, 1994 p. 19 )

Regarding the above, Birenbaum (1997, p. 73) pointed out that the quality of assessment is measured according to two main criteria: validity and reliability.
Validity is the most important consideration in developing a measurement or assessment tool, especially if it is used for reaching important decisions, i.e. for critical assessment.

The most commonly used definition for validity was coined by Messick (1989), according to which, validity is an integrative-evaluative assessment of the extent to which the empirical evidence and the theoretical rationale support deriving the adequate conclusions and taking adequate actions, based on the scores of the test or any other means of evaluation.

According to Moss (1996), the dissatisfaction with the existing criteria for alternative assessment derives from their disregard for the characteristics of direct performance assessment. This is due to the fact that these criteria are designed with the goal of indirect assessment tools in mind, i.e. tools that are used as indicators of performance.

The second measure for evaluation is reliability, which refers to the extent of accuracy of the measurement or the assessments that were provided by the subjects. The underlying assumption is that every measurement in the behavioral sciences includes an innate level of error, and so the subject’s performance, which is the outcome of the individual’s behavior, would vary from one measurement to another, even if the measurements were conducted under strictly controlled conditions. The reason for the variance can be attributed to the goal of the measurement or the state of the examinee. The examinee might be trying harder, be more attentive, be less anxious or generally feel better in one measurement compared to another. No examinee is exactly consistent from measurement to measurement. Due to this variance, the scores the examinees
receive are always considered to be estimations, which include an innate error
(Birenbaum, 1997, p. 179).

The committee’s idea was that:

"...Of the nine subjects in the Jewish non religious schools, the Arab schools and the Druse schools, and the ten subjects in the Jewish religious schools, up to three in school grades would be recognized in the first stage..."

(The Ben-Peretz committee report, 1994, p. 21)

In fact, the meaning of the new assessment is instituted in three subjects within the school. Furthermore, the following operational necessities derive from the above recommendations: firstly, the gradual and controlled authorization granted to schools to administer their own evaluation systems; secondly, guiding and training the teachers in alternative assessment; thirdly, creating a control mechanism (in-school and external) over the achievement evaluation process; and finally, creating teams that would implement the directives, oversee their operation, develop assessment tools, and monitor colleagues in the process.

Therefore, the teaching-learning processes, the guidance and the control, are built upon four bases: teachers and students in study groups, teachers of a certain subject preparing teaching materials, a school project supervising team and the regional or national school management, and a guidance and control center.

The Ben-Peretz Committee (1995) recommended that implementation would take place in a structured manner that is based on four components. The first component is that basic goals have to be clear, as well as the long term and short term objectives. The second is resources such as money, human resources, space and time. The third is perception and behaviors. In order for the reconstruction
process to take place properly, all involved must develop certain perceptions and behaviors. Finally, structural changes and changes in roles would take place in several areas, such as decentralization, independent local management, extensive involvement in the process, and mutual decision-making of all the partners at school.

Millstein (1994, p. 70) stated that during the guidance period, difficulties could arise, indicating loss and lack of stability. It is a process that could confuse and undermine the existing distribution of authority. This was the reason for Millstein’s recommendation to construct a process that should include change implementation strategies to deal with opposition to change.

The recommendations brought in the committee’s report were intended to be implemented in two stages. The first stage was supposed to take 6 years, (starting Sept. 1996) with the change in the Bagrut examination system. At the end of the first stage, there will be three subjects with in-school assessment that will be recognized as the same as the nationwide Bagrut examinations. In the second stage, the number of recognized in-school subjects will grow, and the number of national Bagrut examinations will be limited to three or four. In the revised version of the Ben-Peretz report (1996), two specific goals were set. The first one deals with the transference of three subjects on the Bagrut exams list to in-school evaluation. This will also include extending the assessment period over a number of years, diversifying it in various ways, and linking it to the teaching-learning process. The issue of the second goal is deepening the process of learning,
so as to fulfill its full potential, while enforcing the teaching efforts, diversifying them and linking the assessment methods to the discipline's contents and methods.

The revised version (1996) also states the predicted outcomes following the "Bagrut 2000" program:

One) The teachers that will take part in the program will teach with more diverse teaching methods, while ensuring significant and in-depth learning.

Two) The teachers will make use of evaluation methods with the highest levels of validity and significance.

Three) The achievement evaluation process will serve as a basis for continuous improvement of the academic and educational activities.

Four) The teachers will acquire the tools, knowledge and skills needed for in-school evaluation in a variety of methods, enhancing the school educational and academic goals.

Five) In-school alternative evaluation methods will be developed.

Six) The teachers in each subject will set up teams and develop effective teamwork behavior patterns.

Seven) The students will become more involved and personally responsible regarding the evaluation of the teaching objectives and their own academic achievements.

Eight) The parents will be aware of the project, familiar with its principles, and will have an affirmative opinion about it.

Nine) The required organizational framework will be created by allocating the resources needed for the project and by adjusting the time schedule according to the program's needs (for instance, teachers meetings and
teacher-student sessions). The framework will also be created by organizational and physical changes in the schools in order to adapt it to the project.

Ten) An instruction and control framework will include in-school and external instruction system and in-school and external control mechanisms, over the in-school achievement evaluation. Furthermore the external instructors will become a professional authority, and will be able to answer any need.

Eleven) The status of the subjects assessment by the school will not be lower than those externally evaluated.

The Pilot Schools

At the beginning of this “Bagrut 2000” curriculum change (from September 1996), a pilot program was instituted. Twenty-two schools agreed to participate in the project. The schools in the pilot project are from the various education sectors (general, religious, agricultural, Arab) and from different regions of the country. The socio-economic background of the students in the school is diverse. The pilot program was expected to last for six years.

According to an internal directive of the pedagogical administration in the secondary education department from 31st of December, 1999, the Ministry of Education intended to integrate alternative evaluation methods gradually, over a period of three years, starting from September 2001 in all secondary schools. The plan was to offer guidance to about 220 secondary schools annually. The target population for the plan was the entire teaching staff in every school. Two
groups of instructors would take part in the instructional effort: instructors of alternative assessment methods who would write research papers, and disciplinary instructors. The purpose of the instruction was to instill the concept of alternative assessment into the school's educational culture, and expand the knowledge of the different evaluation tools. Both purposes would later help in the implementation stage.

The Purpose of the Study

The purpose of this study is to examine and analyze the perceptions of curriculum change of Israeli secondary school headteachers as leaders managing a curriculum change. These perceptions of the headteachers are based on the participation of their schools in the pilot of “Bagrut 2000”.

The Over-Arching Question

The over-arching question of the research is: What are the perceptions of curriculum change of Israeli secondary school headteachers: leading and managing the pilot of “Bagrut 2000”? The findings and analysis of the perceptions of those headteachers who have introduced “Bagrut 2000” will lead to typology and will illuminate the perceptions of headteachers regarding curriculum changes and innovations in secondary schools in Israel. According to the purpose of the study and the research questions, the research will be qualitative. The research will be based on semi-structured in-
depth interviews with 19 out of the 22 school's headteachers, an additional in-depth interview with the head of "Bagrut 2000", as well as an analysis of documents.

"...Qualitative researchers usually work with small samples of people, nested in their context and studied in-depth unlike quantitative researchers who aim for larger numbers of context-stripped cases and seek statistical significance..."

(Miles and Huberman, 1994, p. 27)

Summary

This chapter explained the central role of the headteachers in introducing changes in general, and curricular changes in particular, which implies the importance of presenting and analyzing the headteachers' perceptions as to the subject of curricular change, as leaders and managers of the schools. The chapter includes a comprehensive review of the state of the Israeli secondary school system, as well as a detailed explanation of the motives for making the "Bagrut 2000" change as well as the essence of the change. It should be mentioned that "Bagrut 2000" is the most significant curricular change that took place in the Israeli secondary school system in the past decade. In addition, the chapter includes a detailed description of the headteacher population that took part in the pilot of "Bagrut 2000". The analysis of the over-arching question was performed on this population, following which a typology for the change perceptions of this headteacher population was formed. The findings and analysis of the research will be discussed and compared with the literature review. Indeed, the literature review chapter will cover three areas: change, leadership and management.
"...Curriculum change may...signal the need for a fundamental rethinking of...leadership and management..."

(Dimmock, 2000, p. 80)

The headteachers' perceptions and their behavior will be analyzed by focusing on the essence of the change as well as their management and leadership styles in the course of the pilot of "Bagrut 2000". The conclusions and recommendations will contribute to the knowledge of the perceptions of change of headteachers in Israel as leaders and managers of educational changes in general and curriculum changes in particular.

As was mentioned above, change, management and leadership are the themes that relate to this research. All of them are now developed in chapter 2, where the literature is reviewed.
Chapter 2: Literature Review

Setting the Scene

This chapter includes a review of change as a primary topic as well as leadership and management as secondary topics, all aimed at reaching a better understanding of the headteachers’ perceptions of curricular change. This thesis deals mostly with the perceptions of curricular change of the secondary school headteachers that took part in the pilot of "Bagrut 2000". Indeed, the headteachers’ own accounts regarding curricular change included their perceptions about leadership and management. A proper and successful introduction of change requires sufficient leadership and management skills. The introduction of changes in general and changes in education in particular, demands actions and functions on a daily basis. Though management does not stand alone as the purpose of any organization, it does focus on the day-to-day function.

The literature review is based on these three issues and it is structured around the key issues raised in the over-arching question and the questions that derive from it, as outlined on page 23. Indeed, the over-arching question deals with the perceptions of curriculum change of Israeli secondary headteachers, whilst the questions derived from it focus on the issue of change as well as issues of leadership and management. The first research question deals with the headteachers’ beliefs in relation to the implementation of a curricular change in the education system. This specific question deals both with the change itself and with the vision, which is part of the topic of leadership. The topic of
management comes into play both in the analysis of the initial stages of the change (question no. 3), as well as in the question that deals with the contribution of the headteachers to a successful implementation of the change (question no. 4). The second research question, which deals with the motives for introducing the change, refers to all three topics. The main topic, the headteachers' perceptions of change, serves as a common thread throughout all of the research questions. The headteachers' perceptions of leadership and management are also part of their perceptions of change, and further support of this link is provided in the four questions that derive from the over-arching question.

For these reasons the thematic priorities which are presented in the following pages include theories of educational change, stages that characterize the change process as well as characteristics of the process of instilling changes in the education system. Every introduction of a change process encounters opposition. Therefore, this issue is included, too, in the literature review. The many rapid changes in the present led to the development of the “new lessons” concept, regarding the introduction of change. Moreover, the understanding of social and educational change processes, and their adaptation in unstable conditions, is based on living on the edge of chaos, as well as issues that are part of the chaos theory. Both the “new lessons” and the chaos theory will be discussed in the “change” chapter of the literary review. Special emphasis will be placed on ‘knowledge creation’ and the ‘butterfly effect’, both of which are key terms in the chaos theory.
As for the management issue, this review deals with managerialism as the most dominant ideology of the English government during the 1990's. Moreover, it focuses on the special nature of management in education, as well as on the growth of professionalism as management requires it. Theories and models of educational management such as the Formal Models, Collegial Models, Political Models, Subjectives Models, Ambiguity Models and Cultural Models are part of this review as they illuminate the educational institution's beliefs, as well as the behaviour of the individuals who are part of the institution. As was mentioned earlier, leadership is not less important, especially in times of rapid changes. In this thesis the issues of transformational, as well as transactional leadership, will be reviewed alongside other styles, theories and models of leadership. A discussion about educational leadership and distributed leadership will be followed by a description of some empirical studies as examples of leadership and change in operation.

Introduction

Change and innovation in school systems are today key terms in the educational community in Israel and worldwide.

"...Change is an ever-present reality for all those working in education. The obligation to change originates from multiple sources, including new legislation, inspection, pressures from staff, parents and students, and new technology developments, all in the context of the need to survive in an increasingly competitive environment..." 

(Lumby 1998, p. 191)
Much of the credit, to schools that are functioning well and whose achievements are high, belongs to the headteacher (Sergiovanni, 1991 p. 83; Morrison, 1995, p. 15). It is clear that planned changes bear the mark of the headteacher as central for leading and managing change (Sergiovanni, 1991, p. 83).

"...Principal has become increasingly important. The principal has always been the 'gate keeper' of change, often determining the fate of innovations coming from the outside or from teacher initiatives on the inside...More and more onus for initiative has landed at the principal’s doorstep. Principals are now expected to lead change, and thus they have become a critical source of initiation..."

(Fullan, 2001, p.59)

On the whole, the quality of the headteachers often makes the difference between the success or failure of a school (DfEE, 1997, p. 46). Furthermore, the introduction of the change process is done by different ways and styles of management and leadership (Morrison, 1998, p. 15). Terrell and Terrell (1999, p. 97) indicate that leading and managing staff has, at its heart, the ability to manage change in order to bring about higher standards of education. The above researchers (1999, p. 100) argue that the problem of the headteachers, deputies, teachers, etc., is that they need to be both leaders and managers. Moreover, the argument is that leadership needs to be conducted through the management of school:

"...Leadership needs to be displayed through the day-to-day management in school...the challenge is how to get both vision and mission statement into the day-to-day leadership and management of the schools..."

(Terrell and Terrell, 1999, p. 105)

Sergiovanni (1998, p. 279) claims that what the headteacher should do specifically to manage change at the school level is a complex matter for which the headteacher has little preparation. Fullan (2001, p. 82) reports that all major studies of innovations show
that, on the one hand, the headteacher influences the changes strongly, but on the other hand, also indicate that most headteachers do not play instructional roles. A different point of view belongs to Lumby (1998) who argues that the headteacher, as well as the teachers, have a critical role in the speed and direction of the change process. Fullan (2001 p. 81) is more specific, pointing out that the more negative experiences with implementation attempts teachers or others have, the more cynical they are likely to be about the next change presented.

Watson's (1993, p. 192) argument summarises the above by claiming that, without effective management and appropriate leadership, the vision and the changes derived from it are unlikely to be realized.

The outlined situation requires studying - to examine the perceptions of headteachers with regard to the characteristics of the change processes, as well as their perceptions of the most appropriate educational leadership and management of the change.

To sum up, the three components - change, leadership and management - will comprise the literature review.

**Change in Education**

**Introduction**

The presence of many innovations in schools is the result of the current epoch indicating that they may be disconnected, episodic, fragmented and superficial projects. Handy (1989, p. 120) notes that the nature of change in a world of constant changes, as in recent years, is sudden and has an impact. His starting point is that the rate of change is so rapid, that one must find ways to adapt to change or simply
perish. There is no way to control the rate of change but there is a way to be prepared for it in advance (Handy, 1990, pp. 168-187).

Another point of view belongs to Mintzberg (1987) who argues that one can accept a definition of change that emphasizes its preplanned, predictable nature, or, alternatively, an emergent approach that begins with the assumption that change is a continuous, open-ended and largely unpredictable process, which aligns and realigns an organization because of the changing environment of the organization. Mintzberg's definition can be applied to education as described by Morrison (1998, p. 13):

"...The environment of education - most recently the political, economic and technological - has changed dramatically, where schools have had to cope with changes both to their external and internal environments. The rise of school development planning can be seen as an attempt to insert a rational model of school planning and change into a frequently disordered and fluctuating system whose overall direction is mutable..."

(Morrison, 1998, p. 13)

Such changes seem to be occurring internationally. According to Hatch (2000, p. 9), in a survey of schools in the districts of California and Texas, 66% of the schools were engaged in three or more improvement programs, whilst 22% with six or more. Moreover, 19% of the schools were involved in nine or more different improvement programs simultaneously. Fullan (2001, p. 83) claims that schools that take on, or are forced to take on, every policy and innovation that comes along, may look innovative at a distance but which are actually meaningless.

"...The individual school may be the unit of change, but frequently change is the result of system initiatives that live or die based on the strategies and supports offered by the larger organization..."

(Fullan, 2001, p. 80)
From the middle of the 1970's, there is a clear and definite literature that suggests that changes possess certain characteristics (Morrison, 1998, p. 14) that are related to the process of the change, to the individual, and to the development of the change. There are two general types of change: voluntary and imposed. Earl and Lee (1999, p. 37) claim that success is achieved by a combination of external stimulus and support as well as internal school mobilization involving teachers, heads and students. According to Fullan (2001, p. 32), change, whether imposed or initiated, represents a personal and collective experience, characterized by ambivalence and uncertainty. Middlewood (2001, p. 107) and Dimmock (2000) claim that the curriculum is the 'core business' of a school and that the headteacher's responsibility for the curriculum is important. As this study deals with the perceptions of curriculum change of the headteachers that participated in the pilot of "Bagrut 2000", the characteristics of the change process will focus mainly on those that are important during times of instilling curriculum changes.

Perspectives and Theories on Educational Change

The change process can be represented from six perspectives: the technological, the cultural, the micro-political, the biographical, the structural and the socio-historical perspectives (Hopkins et al., 1994). Blekin, Edwards and Kelly (1997, p. 216) claim that each perspective alone cannot encapsulate the phenomena of educational change with which it is concerned, but the six perspectives together are adequate explanations. Moreover:
"...Each of these perspectives provides us with a valuable lens through which to view the change process. And each is important in its own right. Looking at a specific problem, at a particular point in time, may emphasize one view at the expense of another; but in the long run, all are equally valuable..."

(Hopkins, Ainscow and West, 1994, p. 35)

The first perspective, the technological one, assumes that most educational policies are based on a rational logic (Hopkins et al., 1994; Bannette and Preedy, 1997; Dalin, 1998). According to Liberman and Rosenholtz (1987, p. 81), schools are rational organizations that are "readily manipulated and easily changed". This perspective emphasizes the management of change. Moreover, Harris, Bannette and Preedy (1997) claim that those who wish to affect a change should therefore try to convince the potential beneficiaries of the advantages that such a change will entail. As Hopkins et al. (1994, p. 32) summarize:

"...The technological approach continue to be the dominant perspective, and by trying to pretend otherwise, one also falls into the 'if only' trap. The approach, as we have already said, is logical, it makes sense..."

The second perspective, the cultural perspective, considers the values and norms that are involved in an organization or a community and are crucial to the process. This perspective examines the change process within its socio-cultural environment (Harris et al., 1997). One of its central concerns is: "...The meaning of teaching to teachers and the origins of those meanings..." (Feiman-Nemser and Floden, 1986, p. 505). Hopkins and Ainscow (1994, p. 33) argue that the perspective demonstrates a commitment to the everyday reality, to the cultural norms that are disturbed when a change threatens. Dalin's (1998, p. 99) point of
view states that theories associated with norms and values have their roots in psychology. He adds that changes in attitudes and behavior are important as much as changes in products.

"...People act on the basis of social norms and a commonly accepted perception of reality - briefly put, a normative culture. On a personal level, we act on the basis of internalized experiences, habits and values. Changes are therefore not only changes on an external plane, but just as much on a personal plane in terms of norms, roles and relations...."

(Dalin, 1998, p. 99)

The micro-political perspective stresses the idea that change is a process in which power, authority and competing interests are in focus (Dalin, 1998, p. 107). From this perspective, the distribution of power in schools becomes a crucial issue in attempting to understand the process of change. As Hopkins et al. (1994, p. 32) claim, changes involve certain individuals and groups who are doing new things which disrupt the status quo.

"...From a micro-political perspective, change is seen as potentially, perhaps inherently, destabilizing in that it invariably leads to a rearrangement of the power relationships between individuals and groups...."

Ball's (1989) argument concerning this perspective is that subject departments are the most significant organizational and political divisions within secondary schools. It should be remembered, according to Blenkin et al. (1997, p. 222), that subject departments have their own divisions and conflicts and when engaged in a change, tend to have strife.

The next perspective, the biographical, focuses on the way in which change influences and impinges upon the life and career of the participants (Huberman,

"...it is centrally concerned with examining change in relation to the biographical experiences of individual practitioners, in terms of their hopes, aspirations, fears, commitments, beliefs and values..."

The above researchers claim that the success of curricular innovations is contingent upon the professional development of teachers. As for the opposition to change, this perspective explains it from the psychological point of view, meaning:

"...Any event that brings about a change in personal identity involves feelings of loss, anxiety and conflict..."

As for the structural perspective, the assumption is that the process of schooling is based on and reflects the social, political and economic structure (Fuchs, 1995, p. 97).

"...The structures that impinge on the work of teachers operate at a number of levels and in different ways. At the macro level there are those social, economic and political structures that are part of Western industrialized society itself..."

(Harris, Bannette and Preedy, 1997, p. 226)

Fox (1998, p. 71) argues that in the classroom itself there are sets of structures that include the implementation of national and local policies, resources, pupils and parents expectations.

The last perspective, the socio-historical one, is an attempt to understand the historical essence of different subjects (Goodson, 1991 p. 8). The meaning that this
perspective offers is a useful framework for analyzing the process of curriculum change. Harris, Bannette and Preedy (1997, p. 228) summarize the perspectives and argue that:

"...The theoretical perspectives have been from studies of the realities of change within individual institutions or rather, the detailed realities of the sources of resistance to change which have been identified as offering explanations of the ineffectiveness of many attempts as change and as factors which must be taken into account if planned change is to "take" in a school..."

The above six perspectives provide a partial picture and information about the change process. The new reality of the present has brought about new theories of change. The understanding of a complex change includes more, according to Fullan (2001, p. 18), Inbar and Pereg (1999, p. 13) and Morrison (1998, p. 5).

"...Change, uncertainty and openness are the order of the day...A premium is placed on organizations that can respond to, live with, cope with and lead change. ..."
(Morrison, 1998, p. 5)

The Chaos Theory underpins it. The theory deals with adaptation under unstable conditions.

**The Chaos Theory**

The theory has been applied in science to many fields, such as astronomy, meteorology, economics, etc. As Gleick (1987, p. 90) declares:"...Chaos breaks across the lines that separate scientific discipline...". Nevertheless, most work focusing on the theory have been located within the business sector. Nonaka (1988)
has used self organisation as a means of understanding and creating self-renewal, and Stacey (1991) used the theory to illustrate the successful achievements of companies by using instability to innovate. Gunter (1997, p. 90) claims that there is a recognition of the Chaos Theory in social processes within organisations. In the field of educational management, the Chaos Theory is fundamental to understanding social and educational processes and it is also known as the science of chaos and non-linear dynamics (Gunter, 1997, pp. 90-93). Stacey (1992, p. 21) argues that the Chaos Theory presents education managers with a choice of either stability or disintegration, and operates within 'bounded instability'.

"...A successful school or college would operate away from equilibrium between stability and disintegration. Management behaviour is therefore operating in an environment of constant order and disorder..."

(Gunter, 1997, p. 95)

Hayle's (1990) point of view, regarding the Chaos Theory, is that there are two different emphases: there is order within chaos and there is order out of chaos. Gunter (1997) adds that chaos and order are not opposites. The propositions of the theory are that all webs of non-linear feedback loops are connected to other people and organizations by webs of non-linear feedback loops. These non-linear systems can operate in the borders between stable and unstable conditions, at the edge of chaos. Moreover, the chaos theory assumes that all organizations are paradoxes. They are pulled to the extremes of stability and instability by different forces.

"...The new science of complexity claims that the link between cause and effect is difficult to trace, that change (planned and otherwise) unfolds in non-linear ways, that paradoxes and contradictions abound and that creativity solutions arise out of interaction under conditions of uncertainty, diversity and instability..."

(Fullan, 1999, p. 4)
Integration, maintenance controls, human desires for security and certainty are the forces toward stability, whilst decentralization, human desires for excitement and innovation, as well as isolation from the environment, are the forces that pull towards unstable situations (Fullan, 1999, p. 4-6). An organization at the extreme end of stability fails because it becomes ossified and cannot change easily. An organization at the extreme end of instability, disintegrates (Morrison, 1998). A successful organization has its own internal dynamic with irregular cycles and discontinuous trends, falling within qualitative patterns and, therefore, facing an unknowable future.

"...Success lies in sustaining an organization in the borders between stability and instability. This is a state of chaos, a difficult-to-maintain dissipative structure..."

(Stacey, 1996, p. 349)

The identification of features of chaotic systems allows for an understanding of social processes (Hayles, 1990; Gunter, 1997). The first feature is that systems are non-linear.

"...Systems are non-linear in that cause and effect are distant. A small cause can have a large effect and sensitivity to local conditions (butterfly effect) and can amplify the input through feedback loops..."

(Gunter, 1997, p. 90)

Another feature is that systems are complex and, therefore, different approaches to scale and measurement are needed.

"...A coastline cannot be measured in the same way as a triangle in which there is an instrument and a precise process based on the truth and accuracy of objective scales and numbers..."

(Gunter, 1997, p. 90)

Gunter (1997, p. 99) concludes and claims that the Chaos Theory enables us to conceptualize education as a complex human system in which a full interplay of
regenerative forces can take place. O'Neill (1994, pp. 112-114) also focuses on schools during times of uncertainty and turbulence. His point of view states that schools are sufficiently flexible to cope in such times and his perception is that bureaucratic structures are required to cope with accountability demands, whilst flexible structures are required to be able to cope with change in general and multiple innovations in particular.

Hargreave (1994) criticizes the theory and argues that the drive for control is strong in order to maintain stability and meet the needs of parents and pupils.

‘Knowledge creation’ and the ‘butterfly effect’ are two key terms in the theory (Fullan, 2001, pp. 4-6). As was mentioned above, the theory deals with adaptation under unstable conditions and also with learning (or knowledge) as wide terms.

"...Such systems operate in a manner that constitutes learning. Because those learning systems operate in environments that consist mainly of other learning systems, it follows that together they form a co-evolving suprasystem that, in a sense, creates and learns its way into the future..."

(Stacey, 1996, p. 10)

The term of knowledge creation is needed for the understanding of the change process.

"...By knowledge creation we mean the capacity...to create new knowledge, disseminate it throughout the organization, and embody it in products, services and systems..."

(Nonaka and Takeuchi, 1995, p. 3)

Nonaka and Takeuchi (1995, p. 3) indicate the difference between explicit and tacit knowledge. The latter is comprised of skills and beliefs as well as mental models and individuals' feelings. As such, they have to be shared for building mutual trust. Fullan (2000, p. 16) claims that tacit knowledge makes the headteachers' part in the change
process crucial. The explicit learning consists of words and numbers that are part of formal planning which is inadequate. Both take place better in a collaborative culture. According to Fullan (2001, p. 16):

"...The secret to success of living companies, complex adaptive systems and learning communities is that they consist of intricate, embedded interaction inside and outside the organisation which converts tacit knowledge to explicit knowledge on an ongoing basis..."

Collaboration is a good tool for conveying knowledge of all kinds and for organizational problem-solving. Caution must be taken to prevent a tightly knit culture that goes along with uncritical group-thinking (Inbar and Pereg, 1999, p. 31).

"...This is why a healthy respect for diversity and conflict is essential, along with openness and learning orientation to the environment and all its variety..."

(Fullan, 2001, p.16)

In addition to 'knowledge creation', the 'butterfly effect' serves also as a tool for understanding phenomena that occur in unstable times and that can be explained by the assistance of the Chaos Theory. In comparison with the great forces that are exerted around the world, it seems that a single butterfly flapping his wings has no effect. However, the force of the butterfly’s wings is considerable. The effects of its movement ripple away and may have an effect in different and distance places (Briggs and Peat, 1999, p. 32).

"...A small cause can have a large effect, and sensitivity to local conditions (butterfly effect) can amplify the input through feedback loops. Therefore, the flap of a butterfly’s wings could cause a thunderstorm in another part of the world..."

(Gunter, 1997, p.90)

The scientific insights regarding the ‘butterfly effect’ hold their ground also in education. Moreover, the identification of the butterfly effect as a major element in the Chaos Theory provides a deeper understanding of social and educational
processes (Hayles, 1990). When the effect of the butterfly is valued positively, this indicates that each unit and individual in the system makes up an inseparable part of the whole they create. Chaotic movement, innovations and changes in the present will create ripples that will come into effect in different places and times (Briggs and Peat, 1999, p.32).

"...The 'butterfly effect' allows us to recognize that one person can have an impact and therefore the lesson for teachers is to tap into and encourage the whole skills' base of colleagues..."

(Gunter, 1997, p. 100)

The above shows that theories and effective perspectives are involved in educational changes. Moreover, a chain of events is also involved and represents the process of instilling changes in the education system.

**Stages that Characterize the Change Process**

The different stages of the change process start at the moment the readiness for change appears and end when the change is implemented and has become a permanent element in the school (Fuchs, 1995, p. 33; Fullan, 1991). By nature, the stages are presented on a continuum, but according to Sarason (1982), Morrison (1998), and Fullan (2001), they do not occur linearly, and often, a certain stage can repeat itself twice or more; or, different stages can take place at the same time.

"...It is not a linear process but rather one in which events at one phase can feed back to alter decisions made at previous stages, which then proceed to work their way through in a continuous interactive way..."

(Fullan 2001, p. 50)
Researchers (Fullan, 1999; Huberman and Miles, 1984; Fuchs and Hertz-Lazarowits, 1992) indicate three to four stages in the change process. Three of the phases - initiation, implementation, and continuation - are agreed upon by all of them whilst the fourth stage - the outcome - is agreed upon by only some of them (Fuchs and Hertz-Lazarowits, 1992 and Fullan, 2001). The additional stage - the outcome - completes the overview of the change process (Morisson, 1998, p. 19).

"...Most researchers now see three broad phases to the change process. Phase 1 - variously labeled initiation, mobilization or adoption...Phase 2 - implementation or initial use...Phase 3 - called continuation, incorporation, reutilization, or institutionalization...The concept of outcome is to provide a more complete overview of the change process..."

(Fullan, 1999, pp. 47-48)

First Stage: Initiation

Fullan (2001, p. 50) claims that this stage of the process leads up to, and includes, a decision to adopt and proceed with change. Furthermore, the decision to begin with the initiation, is one of the key activities in this stage. The others are a review of the school’s current state as is regarded by Hopkins et al., (1994, p. 36).

"...It can take many different forms, ranging from a decision by a single authority to a broad-based mandate..."

(Fullan, 2001, p. 53)

The reasons for introducing educational changes derive from the desire to change existing patterns, values or curriculum as well as new needs. According to Fullan (2001, p. 65), there is a variety of sources for initiating changes in education.

The stage is characterized by gathering alternatives and decision-making processes regarding the adaptation of the contribution of the change, continuing or ending the change process and defining the objectives and goals. This is the time for examining
and evaluating the situation and deliberating with all those who are involved at different levels, directly or indirectly, in the change process (Fuchs, 1995; Fullan, 2001).

"...Innovations get initiated from many different sources and for different reasons. The matter of the need for change can be embedded in any one or several of the factors, depending on whose viewpoint one takes..."

(Fullan, 2001, p. 53)

At this stage, the emphasis is on the planning, organization, preparation and mobility (Fullan 1991, p. 47; Fuchs and Herz-Lazarowitz, 1992, pp. 9-13). According to Sarason (1982) the preparation stage can be influenced by the timing and by the way it is decided upon. Sometimes the change occurs naturally as the result of certain events in the school or its environment; at other times, the change can be imposed on the school by external bodies. Change can be motivated voluntarily due to dissatisfaction with the present situation. The motives and causes for change, then, have a great affect on the process.

"...In this stage, questions arise and ideas come up, regarding the activities in the school and in the classrooms..."

(Kula and Globman, 1994, pp. 120-121).

According to the above researchers, each of the sources of the change raises the need for examining the necessity of the change, and taking the best steps in order to achieve the change. At this stage, meetings take place, tours are held, guest lecturers are invited and discussions are held. In the end a decision is reached, regarding the adaptation of a certain change (Fuchs, 1995).

The main leadership dilemma, at this stage, is the question of consensus and agreement before proceeding versus being assertive (Fullan, 2001, p. 66). Hatch's
(2000, p. 38) point of view is that agreement may be more likely to reflect how effective the campaigns (for or against a proposed programme) have been, rather than to demonstrate whether or not a school has actually learned enough about a programme.

"...The processes of initiation can generate meaning of confusion, commitment or alienation, or simply ignorance on the part of participants and others affected by the change..."

(Hatch, 2000, p. 67)

After the initiation stage it is natural to embark on the second stage - the implementation.

**Second Stage: Implementation**

The implementation stage is the phase of the process in which the most attention is given to the change. Hence, this is the stage during which skills and understanding are being acquired (Hopkins et al., 1994, p. 37). During the implementation stage, the ‘sharing’ is crucial (Fuchs, 1995). Still, at this stage, the headteacher is required to have control and to support the teachers. Fullan (2001, p. 67) describes implementation as the stage during which the action takes place:

"...Implementation consists of the process of putting into practice an idea, programme, or set of activities and structures new to the people attempting or expected to change..."

(Fullan, 2001, p. 69)

This stage covers the first two or three years of operation. These years include the first experiences with the different programmes and ideas. These experiences contribute to
the understanding and the adaptation of the change. The change itself also changes in this stage. Gradually, the system adjusts itself to the change, and the change is adjusted to the school (Fuchs and Hertz-Lazarowitz 1992, p. 11). This means that only during this stage does the change have any chance of being absorbed by the system (Sharan et al., 1997; Fuchs, 1995).

"...Implementation for most changes takes two or more years; only then can we consider that the change has really had a chance to become implemented..."

(Fullan, 2001, p. 52)

According to Fullan (2001, p. 72), gathering the data on the implementation is crucial and affects the success of the change.

"...The key activities occurring during implementation are the carrying out of action plans, the developing and sustaining of commitment, the checking of progress and the overcoming of problems..."

(Hopkins et al., 1994, p. 37)

Third Stage: Continuation

"...Is the phase when innovation and change stop being regarded as something new and become part of the school’s usual way of doing things..."

(Hopkins et al., 1994, p. 38)

Establishing a change means going through a process in which the change becomes an integral part of the system, a routine. In other words, it means that the change is "built in" the life of the school. This does not occur spontaneously – in order for the change to become permanent, the responsibility for the change must be transferred from outside to inside agents (Sergiovanni, 1997; Huberman and Miles, 1984; Fuchs and Herz Lazarowits 1992).
According to Fullan (2001), Morrison (1998), and Fuchs (1995), the phase of continuation is a sort of extension of the implementation phase in that the new programme is sustained beyond the first two years. Fullan (2001, p. 52) argues that the line connecting stage 2 (implementation) and stage 3 (continuation) is vague and unclear. Fuchs (1995, p. 37) stipulates that in both stages, simple opportunity should be given for individual interpretation and expression of the meaning of the change. All, in order to reach a complete understanding of the change while creating a dialogue between all those involved – the supervisor, the teachers, the instructors and the headteachers. According to Hopkins et al., (1994, p. 38), the move from the second to the third stage involves the transformation of the change from the pilot programme to a school-wide initiative.

Problems at the phase of continuation arise regardless of the fact that the change is an external or internal initiation. Fullan (2001, p. 89) reports about a study by Datnow and Stringfield (2000), in which eight schools in Canada have implemented an external reform, but only three out of the eight schools have reached the continuation stage.

At this stage, it is important to pay attention to a number of problems that might arise. First of all, there is a high probability that a change, which at first seems simple to implement, could cause unpredictable problems. Usually, in such a case, laws are used to solve acute problems. Such laws, however, tend to create problems of their own as well as complications. Rather than solving the problems, they result in undesired scrutiny over the executors of the change. In addition, such laws limit and put constraints on the curriculum (McNeil, 2000).

Furthermore, it is important not to see this stage as solely a technical matter. The motivation and commitment of the teachers are extremely important. Without
making them part of the process and without their assuming responsibility for the process, changes can be initiated but will hardly stand the chance of lasting long.

"...Unless teachers were bound together by a moral commitment to growth, empathy and shared responsibility, they were as likely to replicate the prevailing school culture as to change it..."

(Oaks et al., 1999, p. 825)

Another very serious problem is the compatibility of the idea underlying the change with the school's specific state at a given time. Any idea, as good as it can be, would not match all of the specific situations in the different schools (Fullan, 2001, p. 90).

Forth Stage: Outcome

According to Fullan (1991, p. 48), the results are measured and determined according to the preset criteria (such as acquiring new skills, teaching methods, satisfaction). Fuchs and Herz-Lazarowitz (1992, p. 13) mentioned that in terms of the final results, there are two possible outcomes. The first is that the change will dissolve and disappear in time, leaving little significant traces on the students and on the school. The second, is that the change will become an integral and harmonious part of the school's operation, reflecting the school's unique policy and viewpoint.

Fullan (1991, p. 48) concludes:

"...The direction of change, which may be more or less defined at the early stages, moves to a phase of attempted use (implementation), which can be more or less effective in that use may or may not be accomplished. Continuation is an extension of the implementation phase in that the new programme is sustained beyond the first year or two (or whatever time frame is chosen). Outcome, depending on the objectives, can refer to several different types of results..."
To sum up, a broad outlook of the change process from its beginning to its completion reveals a number of distinct stages in the process. First, there is the "initiation" stage, when the initial decision as to entering the stage is reached, as well as the learning, planning and organization needed in order to actually begin implementing it. The "implementation" stage includes the actual execution of the change, adjusting to it and adjusting it to fit the needs of the school. Once the change takes a steady course, next comes the "continuation" stage, during which the characteristics of the change are examined in light of the specific conditions in each school. This is followed by the "outcomes" stage - assessing the outcomes of the change according to predetermined criteria. Hopkins et al., (1994, pp.38-39) conclude and argue:

"...The impact and outcomes of the innovation are dependent on the nature of the initiation decisions... the factors affecting implementation...and the degree to which institutionalization is achieved...The important point is that all this effort should have some impact on student learning..."

The four stages that characterize the change process are accomplished by means of several factors.

**Factors Influencing the Change in Education**

"...The number and dynamics of factors that interact and affect the process of educational change are too overwhelming to compute in anything resembling a fully determined way...

(Fullan, 2001, p. 49)

Despite the above, the more factors supporting the change process, the more the change will be accomplished (Fullan, 2001, P. 71). Dalin (1998), Fuchs (1995), and Fullan
classify the factors into three categories. The first category deals with factors which are characteristics of the change. In the next category, there are factors related to the school, whilst the third category deals with external factors.

1. Factors which are Characteristics of the Change:

The first group of factors that influences changes in education includes clarity and understanding of the content of change, need, complexity and practicality of the change. These factors usually belong to the first two stages of the change process, the initiation and the implementation stages. Moreover, these factors become more visible in the implementation stage.

1.1 Understanding and Clarity of the Content of the Change

Understanding and clarity of the content of the change have repercussions at the personal and institutional level. Fullan (1991) points out a definite correlation between the clarity of the change and the phases of its implementation. Without having an understanding of the institution’s policy, its goals and the connection with the rationale of the change, there is little hope for change. As Fullan (2001, p. 36) argues:

"...False clarity occurs when people think that they have changed but have only assimilated the superficial trappings of the new practice. Painful unclarity is experienced when unclear innovations are attempted under conditions that do not support the development of the subjective meaning of the change...."

In addition, there must be a time span for the idea of change to ripen. Bamberger (1995) adds that in the personal area, it is important that every person participating
in the process understands the consequences of the change on the modes of his or her functioning and what the areas of responsibility are in the changing system.

"...All sides have to know clearly the ways they should take, the means they should use in order to achieve the goal... The sense of unclarity and uncertainty may cause the participant frustration and anxiety, and compromise the possibility of reaching a satisfactory policy..."

(Fuchs and Hertz-Lazarowitz, 1990, pp. 33-34)

Fuchs (1995, pp. 132-136) and Fullan (2001, p. 77) claimed that those involved have to understand the essence of the change.

"...When a suggestion is raised to use alternative teaching methods, it is important to know what they are used for, what is in the basis of each method, and what goals can be achieved by using it..."

(Fuchs, 1995, p. 134)

The clarity should also apply to understanding the difference between the expectations and the actual reality of the change. Ambiguity in such situations would cause frustration and anxiety. The understanding and the clarity of the change process depend on the approach used by the staff, the availability of time, the efforts put into learning, whether or not the matter was discussed and explained in the open, and the constant control and monitoring over the process (Fuchs and Hertz-Lazarowitz, 1990, p. 33). Fullan (2001, p. 76) mentioned the special importance of clarity when teachers want to improve the curriculum in particular, or the school in general. Moreover, the more complex the change, the greater the importance of clarity

"...Lack of clarity – diffuse goals and unspecified means of implementation – represents a major problem at the implementation stage; teachers and others find that the change is simply not very clear as to what it means in practice..."

(Fullan, 2001, p. 77)
In conclusion, the importance of the process is vast. Without clarity of the goals and modus operandi, the change process would become riddled with tension, frustration and anxiety (Hopkins et al., 1994, p. 37). Still, it is important to remember, as claimed by Bamburger (1995) and Fullan (2001), that whilst clarity should not be taken for granted and should be constantly aimed at and worked on all through the change process, it should not be seen as an end in itself.

1.2 Practicality of the Change

The practicality of the change is associated directly with the essence and nature of the change. Fuchs (1995) claimed that it is important that the change be feasible, considering the availability of resources and conditions each school faces. It is also important that the teachers have free access to information relevant to the change process, and someone to turn to for consulting and assistance.

The ability to implement a change in the school depends on financial and physical resources, the size of the classrooms, equipment in the classrooms, labs, libraries, etc., (Fullan 1991; Fuchs 1995; Fuchs and Herz Lazarowits, 1990). Fuchs (1995) claims that from the psychological point of view, the lack of adequate conditions, resources and means, is also perceived by the teachers as lack of support. This can inhibit the development of the change. Fullan (2001, p. 79) connects the inadequate conditions and equipment on the one hand with perceived needs without time for development on the other hand. According to his opinion, shortage of time between the initiation decision and the implementation stage, can explain the problem.
1.3 Need and the Complexity of the Change:

"...Precise needs are often not clear at the beginning, especially with complex changes. People often become clearer about their needs only when they start doing things, and that is during the implementation itself..."

(Fullan, 2001, p. 76)

Many innovations are attempted without careful examination and without deliberating whether or not they address what are perceived to be priority needs (Morrison, 1998). The feeling that the change and the innovation are relevant and significant to the school, the teachers and the students, increases the chances of the change being absorbed into the system (Huberman and Miles, 1984, p. 77).

"...Here the question of a definition of need (as want, as deficit, as desired, as necessary) leads planners to assess the size of the need, the priorities of the needs, the numbers of people who are likely to be affected, the consequences if the needs are not met, how the needs can and should be met, the resources required to meet the needs, and how to operationalize needs..."

(Morrison, 1998, p. 13)

Fullan's (2001, p. 76) point of view is that the issue is not only whether a given need is important, but also how important it is in relation to other needs. When teachers learn to appreciate the contribution of the change, and perceive its effect as positive, their willingness to continue making an effort increases (Fuchs, 1995, p. 135). All in all, the practical implementation of the change depends on its relative importance to the school and to the people who make the change, on the personal level (Morish, 1976).

"...People involved must perceive both that the needs being addressed are significant and that they are making at least some progress toward meeting them..."

(Huberman and Miles, 1984)
Morrison (1998, p. 130) indicates that people's needs vary in content, priority and importance and interact with each other to produce new needs. According to Fullan (2001, p. 76), there are three complications with the needs:

"First, schools are faced with overloaded improvement agendas. Second, precise needs are often not clear at the beginning, especially with complex changes. People often become clearer about their needs only when they start doing things, that is, during implementation itself. Third, need interacts with the other factors to produce different patterns..."

The complexity of the change is directly correlated with its size, its extent, its scope, and the difficulties and problems it causes (Fuchs and Hertz-Lazarowitz, 1992, p. 34). Morrison (1988) linkes the complexity of the change also to the type of attitude and aptitude change it requires from both students and the teachers. Fullan (2001, p. 78) claimed that complex changes require a broader and more holistic understanding of the essence of the change, and the place and role of each of those involved in implementing it. Moreover, complex changes require more effort, according to their degree of complexity.

"...Simple changes may be easier to carry out, but they may not make much of a difference. Complex changes promise to accomplish more...but they also demand more effort, and failure takes a greater toll..."

(Fullan, 2001, p. 78)

2. Factors Related to the School:

The drive to implement a change at the institutional level can be internal or external. When the change is a result of external pressure, difficulties can arise in implementation. The external factor can become a driving force by the simple fact that on the one hand, it possesses the authority over the teaching staff at school, and on the other hand, it is a source of raising financial resources from external sources.
2.1 Collaboration and Collegiality

Collegiality and collaboration are generally considered important factors in instilling changes in education (Bush, 1995; Brundrett, 1998). Fullan (2001, p. 46) reports that in a study of 78 schools in Tennessee, Rosenholtz (1989) reports that schools, in which teachers have a shared consensus about the goals of their work, are more likely to incorporate new ideas directed at student learning.

"...The true value of collaborative cultures is that they simultaneously encourage passion and provide emotional support as people work through the rollercoaster of change..."

(Fullan, 2001, p. 38)

Collegiality is the best starting point for initiation and implementation of a change in the education system. Fullan (2001, p. 124) claims that collegiality among the staff is a strong indicator of a successful implementation. In particular, Campbell (1989) claims that it enables the implementation of curriculum reform in a smooth and successful way. In general, it encourages defining shared beliefs and values and leads to a good implementation process of a change.

Knowledge creation, one of the key terms to successful changes today, is according to Nonaka and Takeuchi (1995), carried out due to collaboration. Schools with a collaborative culture convert tacit knowledge into shared knowledge.

Brown and Eisenhardt (1998, p. 121) argue that the success of a change is possible if the members of the organization develop trust in each other.
Regarding collaboration in schools, Stacey (1996, p. 280) expands the idea and argues:

"...It is true dialogue in which people engage with each other, not to be in control but to provoke and be provoked, to learn and contribute to the learning of others, to change their own minds as well as the minds of others..."

The teachers, as the actual executors of the change, should find as many opportunities as possible to discuss the meaning of the change with other teachers and staff members. Fullan (2001, p. 124) claims that, for teachers, this is a good way to learn about the change and how to make the best of it, and even gain the ability to assess and evaluate it. The success of the school relies, to a great extent, on the collaboration between the teachers, or as commonly referred to today, the “professional learning community” (Fullan and Hargreaves, 1992).

An indication of the importance and of the need for collaboration can be found in research conducted by Rosenholtz (1989, p. 68). The researcher examined 78 schools, out of which she defined 65 as “stuck” or “learning impoverished”. Among the reasons Rosenholtz gave for the dire state of the schools was the lack of collegiality and collaboration among the teachers, regarding the school’s goals, vision, and commitment to the students.

Elaboration of the question of collegiality and collaboration in managing schools in general and in introducing changes in particular, will be given in the next chapter which reviews the literature about management.
2.2 Headteachers and Teachers

The headteacher and the teachers as agents of change are the most influential for the successful outcome of the process of change at school (Greidy, 1995 p. 17; Fullan, 1991). When it comes to educational changes, there are two distinct modes of management. The first is a change forced on the headteacher by external factors (Sharan et al., 1990, p. 17). In such a case, the headteacher might be required to implement the change even though he or she is not ready or mature enough for the change. The immaturity would be apparent in the headteacher's attitudes, perceptions and educational aptitude in the field of the change (Paldi, 1997, p. 10). Such a headteacher would express opposition and lack of commitment to the change. He or she would act passively and show no enthusiasm to implement the change, and his/her attitude and behavior would infect the rest of the teachers and staff members in the school (Inbar and Pereg, 1999). In the second mode, the change is the brainchild of the headteacher. The change is driven by a genuine inner need, by a profound understanding of the matter and by a great sense of importance. In such a case, the headteacher would be committed to the change and the school, and this would show in his or her leadership and involvement in the change process (Sharan et al., 1990).

The headteacher is the gatekeeper of the change and as such is a central figure in every phase of implementing the change: his/her psychological and practical support, backing and, at times, guidance are the necessary components at all levels: the school (teachers, parents and students), and the establishment level –
contacts with the Ministry of Education, the authorities and community (Fuchs and Herz-Lazarowitz, 1991; Inbar and Pereg, 1999). Sarason (1982) emphasizes that the success of the change depends on the headteacher’s ability to combine an open relationship with the staff while maintaining authority.

"...One of the roles unique to the headteacher is the ability to lead the school by realizing his educational concepts and beliefs. Many headteachers express their desire "to change things". We can assume that this aspect, of "change" in the school level, is an important and unique characteristic in the headteachers' thinking..."

(Fuchs and Herz-Lazarowitz, 1992, p. 76).

These researchers claim that, in Israel, many changes start out as local, in-school initiatives. Moreover, in those cases where the change initiative comes from the outside, the headteacher is still perceived as having the prerogative to choose whether to adopt or reject the change. Since the choice is the headteacher’s, he or she would naturally be more committed to the change and involved in implementing it in the school.

It is important to mention that one of the best indicators of active involvement of the headteachers is whether they attend workshop training and sessions. (Barkol, 1997 p. 88) Unless the headteachers gain understanding of the subject of the change, they will not be able to provide support (Fullan, 2001, p. 83).

As for the teachers, Sergiovanni (1998, p. 280) claimed that when change is introduced to schools, teachers cannot be ignored. Teachers make the day-to-day decisions and their decisions influence what happens to students. Fuchs (1995) reports that studies of teachers in schools who operate change, found that every person perceives the change and deals with it according to his or her personality, knowledge, personal experience and current level of professional development.
"...Some teachers, depending on their personality and influenced by their previous experiences and stage of career, are more self-actualized and have a greater sense of efficacy, which leads them to take action and persist in the effort required to bring about successful implementation..."

(Fullan, 1991 p. 77)

Nonetheless, many teachers are willing to adopt change at the individual classroom level and will do so under the right conditions. Fullan (2001, p. 60) explains the right conditions:

"...Most teachers do not have adequate information, access, time or energy; the innovations they do adopt are often individualistic and on a small scale and are unlikely to spread to other teachers..."

Relationships with other teachers are critical for implementing changes. Exchanging ideas and learning about the innovation through interaction with other teachers influence and contribute to the implementation of the change (McLaughlin et al., 2001). As Fullan (2001, p. 84) explains:

"...New meaning depends significantly on whether teachers are working as isolated individuals or are exchanging ideas, support and positive feelings about their work..."

In conclusion, the more the headteachers hold a central role in reaching the initial decision, whether or not to enter the change, and the more they themselves are involved and supportive, the better chance of succeeding the change stands. In addition, the success of the change depends on the teachers - their attitudes, behaviors, perceptions, and professionalism (Fullan, 2001, p. 115).

The headteachers' and the teachers' contribution is also influenced by their motivation. There are two categories of motivational theories: Active theories and internal theories.
Active theories focus on the needs of the teachers. These needs are translated into goals and desires. The second category deals with internal theories, according to which the motivation is related to characteristics of the personality (Sergiovanni, 1991, p. 240). Ido and Bashan (1994, p. 61) claim that the drive for change appears at the institutional level as well as the personal level. As for the institutional level, the accessibility of the teams to innovations in the realm of education has been proven to be influential to entering the process of change – the more educators learn of other experiences, the more openness they exhibit, the more their drive to experience increases and confidence in success grows (Shachar, 1996, p.101).

The teacher, as an individual, can function as a driving force for adoption of a change in the curriculum, or a hindering one. Teachers exposed to a clear, practical message of innovation can be counted upon to be reliable partners for the adoption of the change (Shachar and Sharan, 1990 p. 227).

Fullan’s (2001, pp.115-123) view is that one can point out several reasons for teachers to be willing to cooperate in entering a process of change. For example, teachers possess an inherent psychological composition for a need of initiative, innovation and liveliness (intellectual curiosity, superior functioning, etc.). Another example indicates that teachers assume that the change will entail, among other benefits, their professional promotion, rearrangements of functions, and responsibilities within the system. Moreover, there are passive teachers who may be influenced by rewards and incentives to participate in implementing the change.

"...When the valves are closed, a teacher's energy remains in a state of potential state and behaviour is not motivated. Arousing motivation results from opening the motive valve and is reflected in a release of energy in the form of motivated behaviour..."

(Sergiovanni, 1991, p. 240)
2.3 The Community and the District

The role of the community is quite varied. It ranges from apathy to active involvement. The active involvement of the community ranges between conflicts and cooperation, all depending on the conditions (Fullan, 1991). The fact that is derived from the variations of the communities is that communities support or block innovations in accordance, but most of them are apathetic to changes and innovations (Fullan, 2001, p. 60).

Fuchs (1995) includes in this variable some of the partners of the school such as the headteacher, the supervisor of the school, teachers, parents and other agents. Miles (1993) asserts that whatever the case, attending is one of the primary tasks of planning and implementing new programs of political stabilization in relation to the community.

"...Since communities vary and characteristics of school districts differ greatly, different combinations of factors will result in various initiation patterns - a perennial problem in understanding change processes."

(Shachar, 1996, p.115)

The district plays an important role in annotating changes. When the district is interested, it is the superintendent and/or the central staff that assists and gives the important support to access and obtain the necessary resources and additional support (Fullan, 2001, p. 58).

3. External Factors:

3.1 Government
Educational change on a large scale is enormously complex. Therefore, the involvement of the government is essential. Concerning changes in education and the role of the government, the variable of time plays an important role, as the timeline for implementation is usually longer than the time of a present government (Kula and Globman, 1994, p. 90).

"...Most change strategies that make a difference in the classroom take five years or more to yield results...out of phase with most political election cycles. The government must put educational investment beyond their own needs for political survival..."

(Schorr, 1997, p. 35)

Fuchs (1995, pp. 140-143) indicates that the government has become increasingly aware of the importance and difficulties of implementation. Government agencies are allocating resources to assess the quality of potential changes. Fullan’s (1991, p. 79) opinion is that:

"...Government agencies have been preoccupied with policy and program initiation, and until recently they underestimated the problems and processes of implementation...The relationship is more in the form of episodic events than processes: submission of requests for money, intermittent progress reports on what is being done, external evaluations - paper work, not people work..."

(Fullan, 1991, p. 79)

Fullan (2001, pp.219-224) reports, that in the last two decades, the efforts of the U.S. government (concerning educational reforms) have been concentrated on accountability and requirements only. As a result, overload and fragmentation of efforts increased.

"...Accountability-driven strategies by themselves can never work because you cannot change the practice of a large number of practitioners over whom you have little control and no proximity..." (Lusi, 1997, p.11)
As accountability is very important in general, and during the process of the change in particular, Fuchs (1995), Fullan (2001), and Morrison (1998), argue that the combination of accountability and incentives produces results. In England, for example, in the case of the national literacy and numeracy strategy, the government has blended accountability and incentives effectively to produce gains in literacy and numeracy. The above researchers claim that intensive action by governments is needed because of the forces of inertia in complex bureaucracies.

3.2 Supervision

The supervisor is perceived as having an important role in the success of the change process (Ben-Eliyahu, 1998, p. 140). Even when the change itself is not initiated or decided upon by the supervisor, it requires the supervisor’s approval and acknowledgment of its importance. The supervisor’s disagreement with the goals of the change, inflexibility on the supervisor’s part, or lack of adequate personnel might create a serious obstacle (Fuchs, 1995, p. 139).

“...Headteachers feel that the supervision system can be a significant factor of change, and even lead to its implementation...” (Fox, 1998, p. 51).

The supervisor has a crucial role also regarding the emotional aspect (Fuchs, 1995, p.139). Headteachers and teachers alike need to be praised, enforced, supported and appreciated by their superiors. A supervisor that is unsympathetic to the change process, or one that doesn’t understand the essence of the change and its goals, might interfere with, or impede, the change process. On the other hand, supervisors that fully understand the essence of the change would tend to
support and encourage the change process, and thus contribute to the success and
development of the process (Bar-kol, 1997; Ben-Eliyahu, 1998).

In summarizing the factors that influence the change in education, Morrison (1998, p. 143) identifies them as facilitating according to the stages of the change. At the initiation stage, a clear and well structured approach to the change, as well as voluntary participation and common values and concerns, are facilitating factors. Furthermore, availability of resources, ownership and active initiation also serve as facilitators. At the second stage, the main facilitating factors are incentives, peer interaction and support, as well as a successful use of levers of change. As for the stage of continuation, the main facilitating factors are ownership and availability of resources, as well as a clear direction of the change. Moreover, Morrison (1998, p. 144) suggests that there is a need to support change on the personal level and, at the same time, to empower and involve those who are affected by the change – doing all of the above by building ownership. Furthermore, the development of people's autonomy, improvement of information and promotion of a positive social, intellectual and physical environment, with a collaborative and supporting environment, act as facilitating factors to the change process.

In conclusion, in a study conducted by Leithwood, Leonard and Sharratt (2000), the researchers focused on organizational learning, at the school level, in different parts of Canada. Their conclusions were that schools which produced the desirable outcomes were those that functioned with several in-school variables (such as school leadership, vision, culture, structure, etc.,) and interacted with supportive out-of-school bodies (district, community and government).
Characteristics of the Process of Instilling Changes in the Education System

According to Bar-Kol (1997, p. 161), a great deal of awareness exists in Israel and elsewhere, regarding instilling change in schools. Real changes tend to be found in schools that are in the midst or the end of the process, in which the initiatives, the projects and the innovations are distinct and organized, making the situation in the school actually different than before (Shachar, 1996).

Three major characteristics are shared by all change processes. The first one is related to the process, the second one deals with the individual, and the third issue is related to the course of development of the change (Fuchs and Herz-Lazarowitz, 1992, pp. 5-7; Sharan, 1990).

Process Related Characteristics: Every change process is dynamic. In every change implementation process there are peaks of intensive work and lows of little work and even stagnation. The latter times of “letting go” are essential, since a certain period of time is needed periodically to assess the change process, plan, fix what needs to be fixed, and move on to the next step (Fuchs, 1995, p. 81). The change takes place on three levels: the conscious, the emotional and the practical-behavioral (Fuchs, 1995; Sharan, 1990). This approach embodies an underlying recognition in the ability of the individual to change as a result of theoretical learning in the field of the change, which is an essential stage in forming the conscious level in the person experiencing the change. However, alongside the theoretical-conscious change, personal experiencing in the field of the change is also needed. This experiencing is used as a springboard towards changing attitudes, thus bringing together the hands-on experiencing and the theoretical elements. Another area of
personal changing is the behavioral aspect, which includes acquiring teaching and social skills (Babad, 1986, quoted in Fuchs, 1995).

Another characteristic of the change process is that it is complex and multi-dimensional. This is due to the fact that the change takes place simultaneously in three dimensions: professional, personal and physical. In the professional dimension it includes educational ideologies, teaching practices, use of materials and other more practical issues. In the personal dimension, the change encompasses a large group of participants in the change process, including the headteacher, the teachers, the students, the parents, etc. As to the physical dimension, it includes the use and reorganization of structures and facilities, and the efficient utilization of financial resources. Moreover, what people do and think and the way their ideas and thoughts fit the situation will eventually determine the success of the change.

Fuchs and Hertz-Lazarowitz (1992) claim, in regard to this view, that for schools which are in their first steps of the change process, only part of the three dimensions mentioned are involved. On the other hand, for schools which are characterized by more established and formulized policies, change takes place with a balance between the three dimensions.

**Individual Related Characteristics:** Morrison (1999, p.15) argues that change concerns people more than context - especially in education. Moreover, it is a critical factor. "...Change changes people but people change change!" According to Dalin et al. (1993), the best laid plans stand or fall depending upon the people involved. Every attempt to change could involve disagreements, since every group of people could most probably have more than one perception of reality (Fox, 1998; Sharan, 1990). It must be understood that conflicts and confrontations are the basis for any successful
change, and so it is important to confront them. Processes of change always include elements of uncertainty, pain, anxiety and ambivalence, caused by its participants' senses of loss and insecurity. The definition and planning of the change must include those who would be affected by it, directly and indirectly, since any change in the organization would also change its people (Fuchs and Herz Lazarovitz, 1992).

"... Since every group of people possess multiple realities, any collective change attempt will necessarily involve conflict..."

(Fullan, 1991, p. 106)

Characteristics Related to the Course of Development of the Change: Every change process is made up of a number of sub-processes that are loosely and non-linearly interrelated.

"...Educational reform is complex, non-linear, frequently arbitrary, and always highly political. It is rife with unpredictable shifts and fragmented initiatives..."

(Hopkins, Ainscow and West, 1994, p. 13)

According to Hargreaves (1994), intensive and cumulative attention to the change process has also often led to goal displacement.

"...Goal displacement happens when we become so fascinated with the means by which we pursue our goals that these means ultimately take the place of the goals themselves. The original goals then become neglected or forgotten..."

(Hargreaves, 1994, p. 10)

Hargreaves (1994) claims that whilst efforts are channeled into the implementation of the change, the reasons for making the change in the first place are quickly forgotten, and later it is asked what the change was originally for. All the partners involved in the change process (teachers, coordinators, etc.) are unclear about the origins, purposes and relevance of the change. Along with the reasons for the change, goes the needed performance. A necessary
condition for every organization change is the existence of a gap between needed performances and present ones (Caspi, 1994; Gordon, 1995; Samuel, 1990). This gap can be manifested in terms of efficiency levels of organizational processes. However, this gap is not objectively sufficient to initiate a change; there is a need for this performance gap to become a perceived gap, i.e. the managers need to face the reality that the present or foreseen functioning of the organization is unsatisfactory (Samuel, 1990).

"...Many organizations are forced frequently to perform structural, functional or product line changes. These changes are a necessity to the existence in order to adapt to constraints and dictates from the environment. These are not given to the choice or influence of the organization itself..."
(Samuel, 1990. p. 222)

**Opposition to Change**

Opposition and resistance to change are natural, and according to Morrison (1998), Fuchs (1995), and Dalin et al. (1993), are unavoidable. According to Bar-El (1997, p. 73), the opposition to change can be defined as:

"...A mode of behavior aimed at preserving or defending individuals or units from the connived or perceived consequences of changes..."

The declaration of the change means ending the way things were done up to the time of the change, and to an extent, admitting that the way things were done up to that point was unsatisfactory. It is a hard and painful process that can be accompanied by the sense of loss, insecurity and even failure. But, the extent of the opposition to the change usually relates to its depth and significance (Ba’abad, 1993 quoted in Kula and Globman, 1995).
"...The opposition to the change takes the form of emotion, attitude or action (or any combination of the three), expressing disagreement, dissatisfaction and unwillingness to accept the change..."

(Fox, 1998, p. 29)

Opposition to change exists for many reasons, including fear of the unknown, lack of information, misinformation, threats to core skills and competence, as well as to status and power. Moreover, strong peer group norms, fear of failure or poor relationships, motivate the opposition to change (Plant, 1987, p. 18).

"...Antagonism to change may be entirely logical and reasonable on the part of the staff...If the total experience of the staff is considered, then a reluctance to take on additional work, which is nearly always the result of proposed change, is entirely logical. In this sense, resistance to change is always understandable..."

(Lumby, 1998, p. 197)

Dalin et al. (1993), Clarke (1994), Buchanan and Boddy (1992), and Fox (1998), claim that opposition to change derives from four significant issues: values, power, psychological and practical aspects. If there is no agreement with the proposed values or the change diminishes the power, then an opposition appears. Moreover, people oppose change because of the lack of security and confidence that they feel for the proposed change. Not less important are the practical reasons that are the basis for opposition, namely, if resources are insufficient to support the change. Morrison (1998, p. 50) suggests that:

"...Working on change is not solely working on the content of the change, nor solely on the organization of the change, but also on the personal dimensions of the change..."

Ansoff and McDonnell (1990, p. 416) argue that the opposition to change is proportional to the size of the discontinuities introduced into culture and power, and
inversely proportional to the speed of introduction. According to the above researchers, the circumstances in which individuals will oppose change include threats to their power over decisions or resources, perceived potential reduction in rewards, reputation or prestige, feelings of incompetence to carry out the proposed changes, and uncertainty as to how the proposed changes might affect them. According to Lumby (1998 p. 196), most changes are likely to involve one or more of these factors.

Reducing opposition is a key factor to the success of changes. Morrison (1998, p. 123) claims that opposition to change is lower if ownership of change is high and if the change is consonant with their values and their ideas. Furthermore, if the change promises new and interesting experiences and the participants feel that their security and autonomy are safe, than the opposition is reduced.

Concluding this part of the chapter, it should be mentioned that the areas and topics reviewed, according to the literature in the field, dealt with the characterizations, theories, perspectives, stages and factors that characterize changes in times of relative stability. Although these characterizations are also attributed to changes in times of turbulence, complexity and rapid changes, Fullan (1999, pp. 19-30) claims that they do not paint the full picture. The present time requires new “lessons” in addition to those existent.

**Lessons and Insights about the Change Process**

Fullan (1999) criticizes the key concepts of change, such as collegiality, accountability, etc, and claims that the new lessons contribute to the understanding of the change process when it occurs on the edge of chaos.
The lessons and insights of the change process in stable times are not the same as those in unstable and uncertain conditions. Furthermore, the latter lessons are more complex. A more coherent basis for understanding the process of complex changes in the new reality situation is needed, as the theoretical assumptions have changed over the last decade (Fullan, 1999 p. 18). Moreover, the more complex the change is, the less it can be enforced. As there is no one solution to isolation or group-thinking, both top-down and bottom-up strategies are needed. In addition, the change process will succeed more in interrelationships with the wider environment, as better learning takes place externally and internally. As was mentioned above, elaboration and adjustment of the lessons were needed in the last decade, when uncertainty was common. The new lessons are the result of it. Each lesson must be assisted by the others. Together, they provide the infrastructure and resources to make progress. The basis of change forces nowadays is to develop the capacity of schools as better agents of moral purposes in society. The first lesson, according to Fullan (1999, p. 19) is that moral purpose is complex and problematic:

"...Moral purpose is complex because it involves altering the power structure, because it is exceedingly difficult to make the changes necessary to motivate and support scores of individual students and teachers, and because moral purpose not only includes academic achievement, but also must find ways of motivating alienated students and families..."

(Fullan, 1999, p. 19)

Fullan (1999) claims that as long as the focus and attention is on academic achievement, gained by pressure on the students, the gap between advantaged and disadvantaged students will remain, and in some cases, will increase. To prevent this, Fullan suggests that greater attachment to the school and higher motivation to learning are needed.
The moral purpose is a complex change, for it is difficult to change the motivation of
the students and the support of the teachers. Furthermore, this moral purpose must be
the inspiration for changes in schools, but it is not the sole inspiration.

"...Moral purpose and change strategies combined to
promote greater attachment to the school and greater
academic achievement..."

(Fullan, 1999, p. 20)

According to Fullan (1999), theories of change and theories of education need each
other. The second lesson is derived from this assumption, indicating that change
efforts must be examined in terms of their educational theories. But: "...Any
good ideas or programmes that hope to spread must include in their theories of
action, a focus on context...". It must consider the various contexts which it will
encounter. Although it is important to work with explicit theories, it should be
remembered that there is no definitive theory of change for all situations.

The meaning of this two-way connection is that every examination of a change
must be done in linkage to educational theories. Such an examination would verify
the existence of values and educational norms in the change process. Moreover,
this also indicates that there are no “pure” change theories available. If every
change has to be examined in relation to educational theories, it means that every
change is unique, and, thus, any attempt to come up with a generalizing theory
would be futile.

The third lesson, according to Fullan (1999, p. 3), is that effectiveness requires the
forming of relationships with people who oppose the idea.

"...Working through the discomfort of each other’s
presence, learning from dissonance, and forging new
more complex agreements and capabilities is a new
requirement for living on the edge of chaos..."

(Fullan, 1999, p. 23)
In every change process there are oppositions, conflicts and diversity. They have their role in building the change. The added perspectives, in the perception of oppositions and conflicts, are positively associated with creative breakthroughs under complex conditions (Fullan, 1999, p. 22). Furthermore, heterogeneous cultures have greater conflicts but, at the same time, they contain stronger elements of breakthroughs (Stacey, 1996, p. 15).

"...People resist for what they view as good reasons. They may see alternatives we never dreamed of. They may understand problems about the minutiae of implementation that we never see from our lofty perch atop Mount Olympus..."

(Maurer, 1996, p. 49)

It is important to remember that Fullan’s new lessons are the result of operating on the edge of chaos. Such an era includes uncertainty to a certain degree but still has structure and open-endedness. The meaning of it, for the education system, is that the structured component includes:

"...Guidance of moral purpose, a small number of key priorities and a focus on knowledge and data raising from shared problem-solving and on assessment of results..."

(Fullan, 1999, p. 24)

On the other hand, the operation on open-endedness means that changes are carried out with few strict rules. Moreover, the activities are based on critical structured elements, such as deadlines and responsibilities for the outcomes. Most of all, it is important to create channels of communication with all the partners. This is the fourth lesson, and Fullan’s argument states that there is no place for many rules, formal channels of communication, or a rigid structure.

"...Effective organizations do trust the process, but not completely; they design the work in a way that is not left up to chance..."

(Fullan, 1999, p. 24)
The next lesson dwells on the personal issue - the development of a strong ego structure - by seeking and containing anxiety within creative bounds. Changes usually includes facing the unknown whilst the latter involves anxiety. According to Stacey (1996, p. 188), anxiety is an inevitable feature on the edge of chaos:

"...People fail to adapt because of the stress provoked by the problem and the changes it demands. They resist the pain, anxiety or conflict that accompanies a sustained interaction within the situation..."

(Heifetz, 1994 p. 37)

Fullan (1999) adds his point of view to the above. People know that not everything can be changed and they take responsibility for what can be changed. The responsibility derives from tolerance, understanding their self opposition to changes, and improving the general adaptive capacity of challenges.

As to the anxiety mentioned, it is important to point out (as claimed by Fullan) that collaboration-oriented cultures must take the anxiety factor into consideration, since any form of collaboration has to compensate for the variance among the different players, which has a significant effect over the extent of anxiety.

Lesson No. 6 teaches that collaborative cultures are anxiety provoking and anxiety containing. Fullan (1999 p. 26) argues that collaboration must foster a degree of difference on the one hand, and that collaborative cultures must go about their problem solving by providing a supporting environment on the other.
"...Collaborative cultures must go about their business of anxiety-related experimentation and problem solving providing a good enough holding environment..."
(Fullan, 1999, p. 26)

Since the natural state in complex societies is confusion connectedness and knowledge creation are critical. Changing tacit knowledge to explicit knowledge is important as it brings knowledge out into the open to be shared. Fullan (1999, p. 28) argues that coherence doesn't happen by accident. Effective organizations are those that selectively go about learning more, creating mechanisms of integration in all the fields (moral purpose, communication, intensive interaction, implementation plans) as well as serving the purpose of coherence (lesson No. 7).

"...The previous seven lessons in combination should make it abundantly clear once and for all, why there never can be a silver bullet of change...."
(Fullan, 1999, p. 28)

The last lesson argues that there is no single solution. Each organization has its own special combination of personalities and realities, ideas, insights and actions as general solutions. Each organization has to work out the ideas and actions on its own terms. Adoption and implementation without adjustment are bound to fail (Mintzberg, 1994, p. 27).

"...As you follow a process of continually converting your tacit knowledge about change into explicit change knowledge...you begin to craft your own theories of change. You become a critical consumer of innovation...no one can solve your change problems but yourself..."
(Fullan, 1999, p. 28)

To sum up, according to Fullan (1999), all the lessons contribute to the successful implementation of a change if they work together. In other words, the power of the lessons is in their combination.
Changes in educational institutions take place in a wide range of areas: curricular, social, structural, as well as changes concerning the well-being of the teachers, students and other participants in the educational process. Still, the curricular changes have a great impact. Curriculum is the substance on which teaching, learning and assessment is based (Dimmock, 2000, p. 78).

**Curriculum Change**

Curriculum is the compass for many aspects of schooling. Curriculum changes have been done all over the world in the last decade. In England and Wales, the new National Curriculum was implemented at the end of the 1980's. New curricula were introduced in the U.S.A., Hong-Kong, Australia and other countries as well (Dimmock, 2000, p. 79).

Israel is no different from other countries in this sense. Curricular changes, fundamental reforms and attempts to improve the teaching and learning methods began appearing in the second half of the 1990's (Ben-Eliyahu, 1998). This study, too, deals with the most fundamental curricular change carried out in the Israeli secondary school system. In regards to curricular changes, the themes that guide these changes are what the students should learn, as well as the expected outcomes.

"...Changing the curriculum is somewhat pointless and its potential benefits will be unrealized if curriculum change is not accomplished by concomitant to teaching practices and learning processes..."

(Dimmock, 2000, p. 80)
Any attempt to define the term “curriculum” should firstly present its many commonly used meanings.

Hidden curriculum includes all the materials and issues which are part of the consciousness of those responsible for the school arrangements. Planned curriculum is actually the pure syllabus, whilst received curriculum is the reality of the pupils’ experience. Other kinds of curriculum are the formal and the informal curriculum. The first has the allocation of teaching hours, and the second includes activities on a voluntary basis (Kelly, 1999, pp. 4-8).

Kelly (1999, pp. 75-100) claims that there are three approaches to curricular change. These approaches perceive the curricular change from different aspects of education and curriculum:

“...Three different approaches...one which sees these in terms of the acquisition of knowledge...a second which offers us a mechanism for achieving those we have decided to pursue and thus sees it as essentially an instrumental process and a third which puts to us the notion of education as the promotion of human development...” (p. 96)

The first approach, the “objective model”, enables the focusing of all the attention on developing the student’s understanding, as a response to changes in the past which focused on transferring knowledge. As to the “objectives and aims”, Kelly’s (1990, p. 80) claim was that:

“...The model allows us to have our goals, purposes, intentions and aims as educators, but frees us from the necessity of seeing these as extrinsic to the education process and from the restrictions of having only one, step by step, predetermined route to their achievement...”
Thus, Kelly (1999) claimed that the model proposes that during the planning and execution of curricular change, the emphasis would be on the principles and the development processes that would eventually result in the outcomes.

The second model is education as development:

"...Education cannot be planned without some reference to development..."

(Kelly, 1999, p. 83)

This model is characterized by viewing the individual as an active entity, and as such, he or she is entitled to control his/her own fate. The model perceives education as a process in which the individual has a high degree of control. Accordingly, then, this approach focuses on empowering the individual.

"...All the fundamental, underlying principles of the developmental model derive from the...ideological position which its advocates adopt and which they recognize the right of others to reject, provided that they appreciate to the full what it is they are rejecting..."

(Kelly, 1999, p. 87)

The claim is that this model is based not only on the educational principles that need to be taken into account whilst making curricular changes, but also on the premise that curricular changes have to consider the needs of the individual, the group, and the development of the individual as a derivative of focusing on the two variables. As Kelly (1999, p. 87) argues:

"...This is the only view of education one can take if one sees the individual in this light, so that to reject this view of education is to reject also the view of the autonomous individual, and of the democratic society, upon which it is based..."
The third model is the social dimension of development. This refers to curricular changes in democratic societies. Such changes emphasize the subject of equality.

Change, according to this model means:

"...It must do so by seriously and genuinely seeking to provide all young people with an educational diet which will secure them entry to, and involvement in, the democratic social context of which they are a part..." (p. 89)

According to Dimmock (2000, pp. 80-81), any curricular change should be based on the premise that a certain degree of variance exists among the students, and so the curricular change has to allow flexibility to adapt itself according to the students' variance. This means that the curricular change has to be clearly defined, in terms of its process, structure, underlying values and content. When a curricular change is the result of an in-school initiative, the aims of the change should be clearly correlated with those of the school. In addition, curricular change has to take into account the curriculum itself, the teachers, the students, and even the available advanced technological resources.

"Bagrut 2000" is a curricular change that assumes a great deal of responsibility over the students, the teachers, the curriculum and even the technological resources (Ben-Peretz, 1994). Still, the change can definitely be defined as an "Outcomes-Oriented Curriculum". Dimmock (2000, pp. 89-96) suggests a model for implementing a Student Outcomes' Curriculum. The model divides the process into three stages. The first - planning the curriculum; the second – learning the required goals and outcomes by the students, and the third (which is the result of the previous two) – devising the teaching strategies.

As to the first stage, the broad content guidelines for the curriculum will be derived from the desired and the expected outcomes. After setting the broad content guidelines,
the same process will repeat itself for the different units for each subject and course in
the curriculum, and then for each specific lesson plan:

"...The process involves fundamentally transforming the
curriculum by working downwards in ever increasing
degrees of specificity to bring greater definition to the
curriculum..." 
(Dimmock, 2000, p. 93)

At the center of the second stage are the students. This stage takes into account their
abilities, needs and areas of interest. This is the stage whereby the teachers are required
to match the students' abilities, needs and areas of interest to the study units and
specific topics.

"...A key to the success of the outcomes approach is
recognition of the need to develop student learning outcomes
or student learning goals at the classroom level to apply to
lessons, units/courses and learning areas..." 
(Dimmock, 2000, p. 93)

As mentioned, the third stage of devising the teaching strategies is the result and
combination of its two predecessors. By definition, the stage of devising teaching
strategies is outcomes and goals oriented. At this stage, it is possible to employ one of
the existing available strategies.

In conclusion, curriculum changes take place frequently. In regards to curricular
changes, it is important to pay attention to the different meanings and the different
points emphasized in each and every curriculum, in terms of the educational, social and
individual student aspects. Furthermore, it is important to pay special attention to the
different stages in the process of deploying the curricular change.
Summary

The professional literature dealing with change includes many definitions of the term. Some deal with the change itself, some refer to the place of the individual in the process, and others refer to the course of the process.

"...Change can be regarded as a dynamic and continuous process of development and growth that involves a reorganization in response to 'felt needs'. It is a process of transformation, a flow from one stage to another, either initiated by internal factors or external factors involving individuals, groups or institutions, leading to a realignment of existing values, practices and outcomes..."

(Morrison, 1998, p. 13)

The review of the change process, in the above chapter, indicates that changes in general, and in the curriculum in particular, should be carried out by an explicit process. Moreover, there are factors that help to achieve successful changes in the present-time reality. They are often described as one of a changing world, educational theories of change which constantly change and develop, and are not exempt from controversy and debate. Fullan's (1999, p. 18-29) "lessons" are very specific as to educational theories:

"...There never will be a definitive theory of change. It is a theoretical and empirical impossibility to generate a theory that applies to all situations..."

(Fullan, 1999, p. 21)

The role of change theories is only to provide directions and ideas, just as Fullan's (1999) "lessons". In a time of rapid changes, it seems that theories should be perceived only as recommendations. However, based on a review of the subject of change presented throughout this chapter and in the chapter's conclusion, Fullan's claim is not accepted by all researchers.
Implementing changes in general, and in the education system in particular, needs good management. Managing a change is simply good management. Successful change is about successful management (Morrison, 1998, p. 15). Managing change is a complex process. Nevertheless, the potential to manage change exists, and change will happen (Lumby, 1998).

Management

Introduction

The management process of change is extremely intricate, and is divided into organization, control, planning, and practical management (Keren, 1998).

This chapter will deal with the subject of managerialism as the guideline used by the British government for management in education in the last decade. Some researchers (Bush, 1995; Gunter, 1997) believe that management in education should be considered as a field of application, and so the special nature of management in education will also be examined. The models and theories in educational management will be presented as well, since they reflect the beliefs and the “nature” according to which schools are run. Management is mainly concerned with keeping the organization running, maintaining day to day functions, ensuring that work gets done, as well as monitoring outcomes and results (Whitaker, 1998, p. 22; Bush and Coleman, 2000).

"...Management is not the purpose of any organizations - it is a 'how?' not a 'what?'. Symptomatic of the underlying problem is the tendency in education to use 'management' as a noun rather than a verb - to see it as a descriptor of a few rather than the activity of the many...."

(West-Burnham, 1994, p. 11)
Definitions for management emphasize the importance of responsibility, the individual, the environment, and personal commitment as the determinants of successfully achieving the organizational goals (Keren, 1998).

"...Many definitions of educational management are partial, reflecting the particular stance of their authors..."  
(Bush, 1995, p. 1)

Different theories emphasize different aspects of management; each theory, can be seen as a partial contribution to the understanding of the concept of management (Bush, 1995). Bell (1992, p. 1) argues that the headteacher and the senior management team of each school have the responsibility for the overall management and administration of their school. He reports that in a study (NFER, 1989), which involved 630 headteachers, two-thirds of secondary and four-fifths of primary headteachers had indicated that being managers, instead of headteachers, was the most significant change in their role and as a result, there was an increasing volume of work which changed its nature.

"...It is clear to any teacher in any school in the last decade of the twentieth century that education is entering a new era. It has been suggested that the combined effects of economy, demography and ideology have produced a situation in which the management of schools requires new sets of understandings and skills..."  
(Bell, 1992, p. 4)

**Managerialism**

The scientific theories (the approach of Taylor, 1947) were the origins of managerialism and can be seen as the dominant ideology of management during the last decade, underpinning the thinking of the English government and educational institutions. Watson (1993, pp. 182-184) claims that managerialism
is a set of assumptions about the management of organizations (and especially educational organizations) which takes as its implicit that "...Managerialism is the process whereby the boss gets subordinates to do what he or she wants..." (Watson, 1993, p. 182). Its main principle is that better management should lead to a better world from the social and economical point of view (Wright, 2001, pp.281-288). Social progress should be achieved through greater economic productivity, and managers can carry it out only if they have the 'right to manage'.

"...Once managers are allowed the 'right to manage', then it quickly becomes apparent how managerialism privileges some, and rejects others, and so affects social groups..." (Helsby, 1999, p. 136)

The explanation of the managerialism's 'right to manage' lies in the headteachers' power and responsibility for the school budget and curricular issues (such as the requirement to supply data for comparative publication in league tables of examination performance) as well as securing the acquiescence of the staff.

"...Teachers are now regulated and more accountable than they were a decade ago. Their hours of work are stipulated; what they teach is prescribed...their work is regularly surveilled externally by OFSTED and increasingly subject to detailed internal monitoring heads..." (Wright, 2001, p. 284)

Although, according to the above, it seems as if managerialism offers the headteachers an approach that will solve problems in a rational way, Clarke (1994, p. 67) sees the danger that managerialism promises: to organize the irrational within a rational framework:

"...Managerialism is...coping with the complexities and uncertainties of the modern world - 'the chaos of the new' - through the quasi-scientific techniques of
strategic management and the delivery of fast paced changes and innovation..."

In short, according to Codd (1993, p. 159), the effect of managerialism is an organization which is hierarchical, competitive, individualistic and highly task-oriented. Moreover, Codd (1993) claims that managerialism is imposed upon schools and is characterized as undemocratic and wasteful of human initiative and capacity.

Helsby (1999) and Wright (2001) also criticize the managerialism approach for focusing upon top-down control. They argue that the staff serves only as a means to the organization's goals.

"...For however impeccable the logic of top-down control may be to those who subscribe to it, the evidence is that, at least within professionally oriented organizations, it works far less well than is often assumed..."

(Watson, 1993, p. 189)

Gunter (1997, p. 21) criticizes managerialism and the right to manage and compares it to the fictional Jurassic Park. She explains that:

"...The fictional Jurassic Park failed because the senior management thought that the right-to-manage strategy combined with skilful marketing would bring success...

Accordingly, Jurassic Management is clearly seen as having an impact on those that have responsibility for the governance of schools. Gunter argues that the growth of it need not lead to a growth of the management function within schools.

"...The models promoted by management writers are very seductive for education managers facing the restructuring of the system in relation to: curriculum,
Watson's (1993, p. 186) point of view is that headteachers make attempts to soften managerialism. They involve staff and other partners, and also improve the motivation, as well as the communication upwards, downwards and sideways. At the same time they encourage styles of leadership that focus on human sensitivities and the importance of interpersonal relationships. Still, the decisions are made by the senior staff and, as a result, there is still a top-down control orientation.

An alternative approach might be:

"...On this model, the clear managerial focus is upon the organization's mission and how it is to be delivered, and accountability therefore is not to a hierarchy, but to the organizational mission itself..."

(Watson, 1993, p. 193)

The meaning of the above is that every decision is to be judged against a set of criteria derived from the mission and not in essence from institutional policies that are created by the organizational hierarchy. Furthermore, the focus is upon the organization's mission and the way it should be delivered. At the same time, the accountability is not to a hierarchy, but to the organizational mission itself.

Gunter (1997) explains that in spite of the issues of empowerment, ownership and collegiality, human resources management is based on control, stability and the equilibrium of an organizational match with the environment. In order to keep the organization functioning efficiently, it is imperative to have
management activities. Thus, the meaning of management is defined as all the activities that are linked to the successful running of the school (Gunter, 1997).

"...Management is often regarded as a practical activity. The determination of aims, the allocation of resources and the evaluation of effectiveness all involve action..."

(Bush and Coleman, 2000, p. 38)

The Special Nature of Management in Education

Education management is generally regarded in the UK as a field of application rather than a discipline (Gunter, 1997 p. 84; Glatter, 1997, p. 51). It is defined by Bush (1995, p. 1) as a "...Field of study and practice concerned with the operation of educational organizations...". However, Gardner (1991 p. 142) claims that the main and central task in education is to manage learning in order to achieve genuine understanding. West-Burnham's et al. (1995 p. 66) point of view is that any study of management in education should be based on Gardner's premise.

Though educational management aims to put its roots into business theories, Fergusson (1994, p. 110) claims that business and education are different in their values and, therefore, it is a mistake to learn about education from business. Moreover, he argues that the perception of teachers who conceptualize education as a product that has to be measured is an anathema. Gunter (1997, p. 10) explains:

"...A business value system in education is flawed because the teacher's knowledge, skills and values are rooted in teaching and learning with motivation and reward intrinsically linked to this...For teachers, extrinsic values in which education is a product that should be deconstructed, costed and measured is an anathema..."
The management style in the school has direct implications for the school climate, thus directly affecting the teachers and the students (Blase, 1986; Farber, 1983; Fibkin, 1983). The democratic management style is based on the principles of equality, freedom and rationalism, and is characterized by openness, collegiality and cooperation (Zak, 1991). Schools with democratic management styles are usually considered to be more efficient (Hallinger and Murphy, 1986), and tend to have a better atmosphere, which leads to the teachers' personal, professional and social satisfaction (Zak, 1991). The authoritative management style, on the other hand, is based on the principles of controlling and dominance, and is characterized by lack of openness, alienation and inflexibility (Zak, 1991).

**Growth of Professionalism**

It is commonly held that managing a school requires a great deal of professionalism. The role of the headteacher has become more and more complicated over the years (Gavish, 1993, Gali, 1993). In the past, regular teachers and homeroom teachers were appointed to be headteachers. In the present, headteachers are not only required to have educational experience, but also managerial tools in the areas of economics, business administration and behavioral sciences (Friedman, 1992; Chen and Addi, 1995).

"...School management is not just some role that can be exercised by one person. It covers a number of functional areas, in which the individual will have natural qualifications and development potential within certain functional areas more than in others..."

(Dalin, 1998 p. 84)
The roles of the headteacher vary across a wide educational and academic spectrum, creating a learning environment, evaluation, setting the curriculum, etc., (Davies and Ellison, 1997; Whitaker, 1998; Law and Glover, 2000). These aspects are usually perceived as education-oriented, and the headteacher is expected to have these skills, as he or she were trained as teachers. The headteacher also needs to deal with staff management, staff development, budgeting, funds raising, acquisition and maintenance of equipment, connections with the community, connections with the parents, taking care of the school building, and preparing reports (Bush et al., 1995; Low and Glover, 2000).

Watson (1993, p. 197) concludes the role of the management of schools and argues that first of all it has to support rather than control. Moreover, it enables a critical approach to the development of shared values and provides access to all relevant information, which will allow stake-holders in the organization to make appropriate judgements.

Gunter (1997, p. 8) claims that educational management has failed when it has accepted changes in power relations between professionals (teachers) and managers (headteachers).

"...Goals and values inherent within professionalism, and which have always been evident within the teacher or lecturer, or the school or college, have been ridiculed and downgraded..." (Gunter, 1997, p. 8)

In addition, according to Cuthbert (1984, p. 39), the study of management in education is an eclectic pursuit.
"...Models have been borrowed from a wide range of disciplines and in a few cases developed specifically to explain unique features of educational institutions..."
(Cuthbert, 1984, p. 39)

Models and Theory of Educational Management

The theories and models of educational management tend to be normative and selective as they reflect beliefs about the nature of educational institutions and the behavior of individuals within them (Bush, 1995, pp.21-22). Both traditional and new models as well as theories have important roles to play in bringing about quality schooling, provided they are appropriately matched to situations of practice (Sergiovanni, 1991 p. 37). The Models focus on the Formal, Collegial, Political, Subjective, Ambiguity and Cultural theories. Each of them explains a part of the situation in schools and represents different ways of looking at educational institutions (Bush and Coleman, 2000; Bolman and Deal, 1984).

The description of the six models will focus on three criteria: the organizational structure, the aims of the organization and the external environment.

Formal Models:
The Formal Models stress the importance of hierarchical authority and the structure of the organization, especially during times of decisions-making. It is the consequence of the increasing size and complexity of schools (Bush, 1995). According to the Formal Models, the goals are determined at the institutional level by the leaders, and the relationship with the environment can be closed or open (Bush and Coleman, 2000 p. 41). According to Bush (1995, p. 29), five similar
approaches are included in the Formal Models: Structural Models, Systems Models, Bureaucratic Models, Rational Models and Hierarchical Models.

"'Formal model' is an umbrella term used to embrace a number of similar but not identical approaches. The title 'formal' is used because these theories emphasize the official and structural elements of organizations. There is a focus on pursuing institutional objectives through rational approaches..."

(Bush, 1995 p. 29)

The first approach, the Structural Models, includes formal relationships between the members of the organization. These relationships can be seen through roles, authority and positions within the organization. The Structural Models are created to distribute and co-ordinate the work of people in the pursuit of organizational goals and objectives (Bolman and Deal 1984, p. 10; Bush, 1995, p. 45; O'Neill, 1994, p. 109). Bolman and Deal (1984, pp.2-25) argue that the Structural Model is based on a set of assumptions that includes goal orientation, rationality, and reference to systems:

"...Organizations exist primarily to accomplish established goals...there is (for the organization) a structure appropriate to the goals, the environment, the technology and the participants...they work most effectively when environmental turbulence and the personal preferences of participants are constrained by norm of rationality...Organizational problems usually reflect an inappropriate structure and can be resolved through redesign and reorganization..."

(Bush, 1995, p. 31)

Systems Models are the second approach. They focus on the unity of the organization and the relationship with the external environment (Bush, 1995 p. 33).

"...Systems theories believe that it is useful to follow the common sense practice of attributing actions to
organizations themselves as well as to the members of organizations..."  (Silverman, 1970, p. 29)

Bush (1995, p. 34) claims that the model emphasizes that all the components and partners of the organization share and support the same goals and therefore develop policies in accordance with their goals. In order to carry out the policies, boundaries are essential to the definition of the system. As Latcham and Cuthbert (1983, p. 190) argue:

"...Drawing a boundary not only defines the extent of the system, it also defines that system's environment..."

Schools are usually recognized as an entire unity, both by its members, and by the external environment (Bolman and Deal, 1984). Another point of view is presented by Bush (1995, p. 35), who argues that the model may be inadequate to schools as they are complex organizations.

"...Schools are certainly not organizations consisting of carefully articulated parts functioning harmoniously in the pursuit of agreed objectives. They are characterised by conflict, malintegration and the pursuit of individual and group interests. Nevertheless a certain degree of systematic integration is necessary for their effective function..."

(Hoyle, 1981 p. 12)

On the whole, this model shares, with other Formal Models, the emphasis on agreed organizational goals.

The third approach is the Bureaucratic Models, which are aimed at achieving maximum efficiency through rational management approaches. They are effective in organizations, in which the conditions and situation are stable, and less effective during periods of change (Bush, 1994, p. 37). The main features of the Bureaucratic Models are a hierarchical authority structure, a goal
orientation of the organization and a division of labour. Ferguson (1980, p. 535) indicates that:

"...Bureaucracy has a common goal towards which members work under accepted leaders exercising legitimate authority..."

In the Bureaucratic Models, the headteachers, at the top of the pyramid, are accountable for different external bodies, whilst the teachers are the experts (Bush 1995, p. 36).

"...Schools and colleges, particularly if they are large, conform to a considerable degree to Weber's specification of bureaucracy, as judged by their division of work, their hierarchical structure, their rules and regulations, their impersonal procedures and their employment practices based on technical criteria..."

(Hughes 1985, p. 8)

Holmes and Wynne (1989, p. 64) indicate that often bureaucracy in schools becomes a major goal whilst schooling becomes secondary.

"...The notion of bureaucracy provides powerful insights into the managerial processes and ideology of large parts of the education service..."

(Osborne 1990, p. 10)

According to the Bureaucratic Models, schools are characterized as goal oriented (Bush, 1995). As for the goals, they are often vague, multiple and specific for different institutions and departments (Everard and Morris 1990, p. 149; Goldring and Pasternack 1994, p. 242).

"...One difficulty with a bureaucratic school system is that the bureaucracy and its survival become ends in themselves, and the goals of schooling become subsidiary..."

(Holmes and Wynne, 1989, p. 63)

Bush, (1995 p. 37) summarizes the approach by claiming that:
"...Schools and colleges have many bureaucratic features, including a hierarchical structure with the headteacher or principal at the apex. Teachers specialise on the basis of expertise in secondary schools...There are many rules for pupils and staff, whose working lives are largely dictated by the tyranny of the timetable. Heads and senior staff are accountable for the governing body ...for the activities of the school ...

The next approach is the Rational Models approach, which focuses on the process of decision making. The model assumes agreed organizational goals and a bureaucratic organizational structure (Bar-Hayim, 1997; Bush, 1995). Much of what is written about management and planning assumes that schools are rational organizations, where what is planned as actions will end in a set of pre-determined consequences, outcomes or the meeting of pre-determined success criteria (Terrell and Terrell 1999, p. 106).

"...Rational Models are taken here to include all ideas of management as a process involving the rational and systematic analysis of situations, leading to identification and evaluation of possible courses of action, choice of a preferred alternative, implementation and monitoring and review, in a cyclical, repetitive process. The management process is depicted as a matter of systematic, informed and rational decision making...."

(Cuthbert, 1984, p. 39)

The rational process is as follows: the first phase is the perception of a problem; the second one is the analysis of the problem and then its formulation of alternatives. The choice of solution is the next phase, whilst the fifth phase is implementation of the solution and is followed by the phase of evaluation of effectiveness (Bush, 1995, p. 39). West-Burnham (1994) argues that the Rational Models are the basis for the analysis of decision-making in education, especially in respect to strategic management.
Hierarchical Models are the last approach of the Structural Models and they focus on two dimensions: the relationship within the organization and accountability (Bush 1999, p. 39).

"...One of the basic properties of bureaucratic organization is the way in which occupational roles are graded in a vertical hierarchy. Authority to prescribe work passes from senior to junior roles, whilst accountability for the performance of work passes in the reverse direction for junior to senior. Authority and accountability are impersonal in that they are attached to roles, not to the personalities of the individuals who occupy the roles..."

(Packwood 1989, p. 10)

The Hierarchical Models stress the authority and the power of the organization at the top of a pyramid (Lortie 1969, p. 4). As a consequence of this, the information and the decisions-making, are passed top-down whilst difficulties are passed the other way up, to the level where they are solved (Bush 1995, p. 40). According to Lortie (1969 p. 4) and Bush (1995, p. 40), educational institutions often work according to the Hierarchical Models.

In summarizing all the above approaches:

"...Formal Models assume that organizations are hierarchical systems in which managers are rational means to pursue agreed goals. Heads possess authority legitimized by their formal positions within the organisation and are accountable to sponsoring bodies for the activities of their institutions..."

(Bush 1995, p. 29)

Collegial Models:

"...The notion of collegiality has become enshrined in the folklore of management as the most appropriate way to run schools and colleges in the 1990s...and is increasingly regarded as the official model of good practice."

(Wallace 1989, p. 182)
These models are considered to be more adequate for managing schools and colleges (Wallace, 1989; Bush, 1995). According to Bush (1995), the collegial theories are attractive since they encourage the participation of teachers in decision-making processes, thus increasing their sense of belonging and ownership, and encouraging innovations and improvements. The models focus on shared objectives and lateral relationships between those who possess authority of expertise. They emphasize the common values of the members of the organization, resulting in decisions reached through a process that leads to consensus. As a result, the staff has an equal right in participating in decision-making processes (Becher and Kogan, 1980, p. 67).

Brundrett (1998, p. 305) argues that collaboration and collegiality enable the implementation of curricular reforms, and at the same time, allow central guidelines to be adapted to the context of schools:

"...Collaboration and collegiality can be seen to bring together teacher development and curriculum change...Good curriculum management is seen as a process where all professional staff participate actively in negotiating an agreed curriculum and contribute jointly to planning, implementing and evaluating its delivery..."

(Brundrett 1998, p. 305)

The theory has a considerable respect for the expertise and suggests that the size of decision-making groups is an important element in collegiality. The components - normative in orientation, authority of expertise, a common set of values, consensus and size of decision-making groups - are central in the theory.

"...These five central features of collegiality appear to a greater or less extent in each of the main sectors of education..."

(Bush 1995, p. 55)
Though the models have many advantages, there are also disadvantages when implementing them in schools. First of all, interests in schools are divided according to the different subjects taught. This might lead to contradictory interests and conflicts rather than agreement. In addition, the collegial theories pose difficulties regarding the headteacher’s accountability (Bush, 1995).

"...Collegial models tend to be inadequate in explaining relationships with the environment. Policy is thought to be determined within a participatory framework which can make it difficult to locate responsibility for decisions. Heads may be held accountable for outcomes which do not enjoy their personal support, a position which is difficult to sustain for both the leader and the external group. Collegial approaches gloss over this difficulty to the unrealistic assumption that heads are always in agreement with decisions..."

(Bush and Coleman, 2000 p. 41)

It should be mentioned that this model of Collegiality that includes ownership involves some of the factors that influence the change in education (Fullan, 1982, p. 128). One way of coping with a change is to make the change everyone's business (Hopkins, et al., 1994, p. 14).

Collegiality plays an important role in generating changes. Still, it is important to mention that collegiality also has negative implications. For example, it is important to avoid contrived collegiality. Such collegiality, according to Hargreaves (1994, p. 196) which is administratively coerced, may create inflexibility in judgment. Contrived collegiality can also take place in the initial preparatory stages. Fullan and Hargreaves (1992, p. 64) also claimed that in many cases, time set aside for the whole staff to work together and encourage collegiality and collaboration was used by the teachers for planning the needs of their own classrooms.
"...It is this contrived form which is likely to result where organizations seek to implement a collegial system of governance, since the very construction of necessary policies and the formalization of the necessary procedures will inevitably destroy that spontaneity which is such a vital element of genuine collaboration..."

(Brundrett, 1998, p. 312)

Brundrett (1998, p. 313) concludes and argues that the Collegial Models of education management are the dominant paradigm of the management of educational institutions and is the official policy of many government agencies in many countries such as Britain and other western countries as well as developing countries.

**Political Models:**

These models perceive decision-making as a process of negotiating and bargaining, whilst conflicts are perceived as an endemic feature of the organization. The underlying assumption is that the members of the organization are involved in political activities, aimed solely at promoting their own personal or group interests. This approach perceives conflict as an endemic feature of the organization. Moreover, Political Models are characterized by focusing on group activities, rather than on the activities of the whole school as a unit.
As for the goals, Bush (1995) mentioned that the political theories emphasize the fact that the organization's goals are ambivalent, and are reached through a process of negotiation. Thus, the concept of power is an important element in the political theories.

"...Internal and external groups may form alliances to press for the adoption of certain policies. Interaction with the environment is seen as a central aspect of an essentially political decision process..."

(Bush and Coleman, 2000, p. 41)

There are a number of limitations, regarding the implementation of the political theories in schools. They might seem unattractive to many education professionals, mostly since they emphasize the influence of interest groups over decision-making, and so ignore the organizational interest. In addition, the theory over-emphasizes the conflicts that develop between the interest groups, whilst almost ignoring the cooperation that can lead to desired outcomes (Bar-Haym, 1997).

In spite of the criticism, the political approach can help in understanding the in-school dynamics, especially the effect that interest groups have over the decision-making processes and policy making.

In conclusion,

"...Political Models are not a substitute for the bureaucratic or collegial models of academic decision making. In a very real sense each of those addresses a separate set of problems and they often provide complementary interpretations..."

(Bush 1995 p. 91)
Subjective Models:

Subjective theories focus on the individuals in the organization or on the sub-units. Every individual has a unique perspective of the meaning and significance of situations, events and the organization itself (Bar-Haym, 1997; Keren, 1998). The theory stresses the primacy of the individual objectives instead of the organizational goals. The importance is the personal qualities rather than the position of the individual within the formal structure. These theories focus on the perceptions and beliefs of the individuals in the organization, rather than on the macro level of the organization. In the school context, the theory refers to the fact that the individual teachers, students and staff members have different values and personal aspirations that result from each person's own background and motivation. There is no doubt that the school is perceived differently by different staff members. In fact, the headteacher might describe the school in a way that is unfamiliar to the teachers and the staff. The headteacher has his or her own interpretation, whilst the teachers have a totally different one (Holy, 1981, p.45). It is important to mention that the subjective theories perceive the structure as the result of what people do. It is not, under any circumstances, forced upon them. In addition, the subjective theories emphasize the importance of the meaning of the individual's goals, and deny the existence of any organizational goals (Inbar, 1992).

"...Subjective Models differ from other approaches in that they stress the goals of individuals rather than the objectives of the institution or its subunits. Members of organizations are thought to have their own personal aims which they seek to achieve within the institution...."

(Bush, 1995, p.101)
It is important to mention that the subjective theories developed as a reaction to the downfalls of the bureaucratic theories. The focus on the individual's interpretation was a very important development. As in every theory, the subjective theories have a number of disadvantages. Whilst they acknowledge the existence of the organization, they do not attribute any significance to it (Inbar, 1992).

"...Subjective theories may be more interested in processes and relationships than in structure. While structure relates to the institutional level, Subjective Models focus on individuals and their interpretations of events and situations..."

(Hoyle, 1986, p. 14)

The theories over-emphasize the importance of the teacher's professional background, which in most cases is what leads to common interpretation and goals. Regarding the schools themselves, the subjective theories are unable to explain the similarities between schools. In addition, they do not provide any guidance for practical management, except for the acknowledgement and legitimacy of the personal meaning and interpretation (Greenfield, 1980).

"...The Subjective Model has introduced some important considerations into a debate on the nature of schools and colleges. The emphasis on the primacy of individual meanings is a valuable aid to our understanding of educational institutions..."

(Bush, 1995, p. 107)

Ambiguity Models:

This theory emphasizes the uncertainty and complexity of the organization, which leads to lack of stability and difficulties in forecasting and predicting. According to Cohen and March (1974), the ambiguity theory is common in educational institutions, in which the goals are complex and unclear. They are most valid in
institutions that operate through trial and error, learning from past experience, imitation, and improvisation. The theory is also found in schools, in which different members of the organization invest different amounts of time and effort. A good example for this can be seen in England and Wales during the 1980s and 1990s.

"...The rapid pace of curriculum change, and the vagaries of school and college funding, lead to multiple uncertainty which can be explained adequately only within the ambiguity framework..."

(Bush, 1995, p. 46)

The theory does have its downfalls, however. The members of the organization have an ongoing influence over the results of the discussions, and can move in and out of decision-making situations, but the policy framework stays intact. In addition, certain goals might not be unique, but the teaching staff usually understands and accepts the broad goals of education. Bush (1995) claimed that the theory exaggerates the inability to predict in education. Schools have a number of characteristics which clarify the teachers' areas of responsibility. In addition, it is important to mention that schools, in many cases, are quite stable and, thus, the theory does not apply to all schools.

"...The major contribution of the ambiguity theory is that it uncouples problems and choices rather than assuming a rational decision-process. The notion of unpredictability is an important concept that carries credibility in periods of turbulence ...

(Bush, 1995, p. 47)

Cultural Models:

This theory assumes that the informal aspects of the organization are important (Bush and Coleman, 2000, p. 42). It focuses on the values, beliefs and norms of the
individuals in the organization and emphasizes the meaning of sharing all the above components (Bush, 1995, p. 131). The Cultural Models aims and goals are determined in the organization and are based on collective values. The process of the decision-making is rational within the framework of values.

"...In Cultural Models goals are an expression of the culture of the organization. The statement of purposes, and their espousal in action, serve to reinforce the beliefs of the organization. The core value help to determine the vision for the school or college. This vision is expressed in a mission statement which in turn leads to specific goals..."

(Bush, 1995, p. 144)

To summarize all the perspectives of educational management, the dimensions of structure, goals and external environment, will provide a framework. As for the goals, Mintzberg (1989) claims that schools suffer from weak management, partly because of unclear goals and also goal shifts. Dalin's (1998, p. 29) point of view is that some organizations can be regarded as goal oriented systems and others cannot be regarded as goal oriented.

"...Bureaucratic Models claim that organizations pursue goals set by their leaders. Collegial Models emphasise shared objectives, while political theories assume that goals may be contested by interest groups. Subjective Models stress the primacy of individual aims and dent the validity of the concept of organizational goals. Ambiguity theories claim that goals are problematic and unclear..."

(Bush and Coleman, 2000 p. 40)

As for the structure:

"...Bureaucratic Models stress the importance of structure and emphasise hierarchical authority and 'top-down' decisions. Collegial theories prefer to focus on lateral relationships between professionals who all possess authority of expertise. In Political Models, the structure may become the battleground for competing factions. Subjective Models stress the personal qualities..."
of individuals rather than their position within the formal structure. Ambiguity theories emphasize the fluid nature of participation in committees and the unpredictability of outcomes..."

(Bush and Coleman, 2000 p. 40)

The third dimension is the environment:

"...Some of the formal approaches tend to regard schools as 'closed systems...others as 'open systems' responding to the needs of their communities... Collegial Models tend to be inadequate in explaining relationships with the environment...Political Models tend to portray instability...Ambiguity Models regard the environment as a source of the uncertainty which contributes to the unpredictability of organizations..."

(Bush and Coleman, 2000, p. 41)

Nevertheless, all the perspectives do not give a complete picture of educational institutions, but only a partial understanding of the organization's reality.

"...No one theory has been developed that can be said to encompass all aspects of all kinds of organizations that would thus tell us why organizations act the way they understand all the essential aspects of an organization..."

(Dalin, 1998, p.31)

As opposed to the bureaucratic theories, in which authority is determined by position or rank, the collegial theories emphasize the values shared by all the members of the organization. However, both theories emphasize the school level, unlike the political theories, which focus on the group level. In addition, the bureaucratic theories are very useful by offering a wide perspective of the organization, whilst the subjective theories focus only on interpersonal relationships.

"...Schools and colleges are arguably too complex to be capable of analysis through a single dimension..."

(Bush and Coleman, 2000 p. 40)

Davies and Morgan (1983) have presented an integrative model that links between four of the major theories. It proposes an initial period in which
ambiguity dominates as problems, as well as solutions and participants interact at appropriate choice opportunities. The result of the ambiguity is the political phase in which only few participants are involved in closed committees. The result of the latter is a number of solutions and agreements, and leads to the participation of the less active members, by persuading them. This is the collegial phase, according to Davies and Morgan.

**Summary:**

Educational management in the UK is regarded as a field of application that, in the 1990's, was focusing on managerialism. The role of the headteachers has become very complicated and there are several theories and models of educational management. Each of the theories explains part of the picture of the management in schools.

Management in general, and educational management in particular, play an important role in the life of an organization or school. But management is not the only component. Leadership and its implication for the management of schools, in times of rapid changes, are essential. According to Dimmock (2000), leadership and management are often regarded as equally important. Glatter (1999, p. 257) argues that there is a connection between leadership and management (both in theory and practice) that is seen outside and within education. Moreover, the connection between the two concepts has been an issue for debate from the beginning of educational management studies in the UK, as they are similar and different.

"...The relationship between management and leadership is a complex one since it is not always possible in a school to make a clear distinction between the communicating, co-ordinating, planning, evaluating and related activities"
Leadership

Introduction

"...Leadership is an ambiguous concept. The way in which leadership has been viewed in this century is closely related to prevailing views on humanity in general, theories of organization, and theories of change..."

(Dalin, 1998, p. 80)

The term "leadership" refers to the behavior of the individual, which directs the actions of a group towards achieving a common goal (Novotny and Tye, 1973; Lipham, 1964, p. 30; Yukl 1994; Popper, 1994). It is also a form of power distribution in groups, created by the shared perception of the group members, that one member has the authority to determine the other group members' behavioral patterns (Kouzes and Posner, 1996, p. 30; Bryman, 1996). Leadership can be seen as a form of an interpersonal process of suggestion, dependent on the situation and the in-group communication, aimed at achieving certain goals. Furthermore, leadership is an interpersonal interaction, through which one person presents information and convinces the others that if they behave according to the information presented, they will be
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able to achieve improved results (Bar-Haym, 1997; Roueche et al, 1989; Conger 1989).

"...Most definitions of leadership reflect the assumption that it involves a social influence process whereby intentional influence is exerted by one person (or group) over other people (or groups) to structure the activities and relationships in a group or organization..."

(Yukl, 1994, p. 3)

In defining the phenomenon of leadership in organizations, special attention should be given to the following factors: the leader - his or her abilities, personality and sources of power; the followers - their abilities, personalities, sources of power; and the situation in which the leader-follower relationship takes place, the unique circumstances, and the tasks or goals that the leader and the group face (Bar-Haim, 1997; Popper, 1994). In addition, influence is a necessary part of most conceptions of leadership (Leithwood, Jantzi and Steinbach, 1999, p. 6; Bryman Stephens and Campo, 1996; Kouzes and Posner, 1993). The meaning of this, according to the above researchers, is that most of the variation in leadership concepts can be accounted for by differences in who exerts influence, the nature of the influence, the purpose for the exercise of influence and its outcomes.

"...The definition of leadership is arbitrary and very subjective. Some definitions are more useful than others, but there is no 'correct' definition..."

(Yukl, 1994, pp. 4-5)

Popper (1994) claims that the differences between the definitions are significant, as they refer to different aspects of leadership. Thus, whilst one definition sees leadership as a general effect on the voluntary and spontaneous relationship in the group, another definition perceives it as a specific process of control, in which the
leader uses any means of compulsion in order for the subordinates to respond to his/her demands.

Another controversial part in the definition is the response to the leader’s demands. Popper (1994), Bar-Shlomo (1999), and Bar-Haim (1997), all claim that the phenomenon of leadership is unique to situations of voluntary consent by the led members. According to this view, blind obedience cannot be linked to the area of leadership, but to other areas, such as motivation or the personal tendencies of the group members to avoid being sanctioned (Sharan, 1995).

"...Leaders and followers reflect together, learn together and inquire together as they care together to construct a reality that helps them to navigate through a complex world. This process of reciprocal influence is guided by shared purposes and involves accepting roles that are connected to moral obligations..."

(Sergiovani, 1998, p. 41)

**Styles, Theories and Models of Leadership**

The consistent behavioral patterns that leaders use when they are working with and through other people is considered their style of leadership (Avi-Itzhak and Ben-Peretz, 1997, p. 36). These patterns emerge in people as they begin to respond in the same fashion under similar conditions, and also when they develop habits of action that become predictable to those who work with them (Avi-Itzhak and Ben-Peretz).
The styles of leadership have been examined by many researchers. One of the most basic concepts is that of Tannenbaum and Schmidt (1973) who analyzed leadership styles ranging between autocratic and democratic.

"...The Tannenbaum-Schmidt continuum indicates that there may be a range of styles between autocratic and democratic that are open to the choice of individual leader..."

(Coleman, 1994, p. 56)

The Ohio studies (Stogdill, 1953) distinguished between the "initiating structure" style, which focuses on the task and achieving the goals, and the "consideration" style, which examines the extent to which the leader's behavior is supportive and considerate, and the leaders themselves are democratic, friendly, and tend to explain their actions. It was found that the first type, the "task-oriented" leader, would tend to emphasize the goals of the group, criticize subordinates' work and monitor their performance. Such a leader would present his or her subordinates with a clear picture of the tasks, division of the work, timetables, etc. The second style of leadership, the "people orientated" leader would care for their subordinates' personal needs, and be interested in their welfare and satisfaction (Bar-Haym, 1997, p. 13). Analysis and classification on the range of consideration (people-oriented) to initiating structure (task-oriented) was made by Blake and Mouton (1964) who built, on the basis of the "two leadership styles", another model, called the "Managerial Grid". In this model, each of the style dimensions is divided into nine levels, creating an 81-rubric grid. Five typical styles, from the repertoire of possible leadership styles, were exemplified by Blake and Mouton (1964).
Coleman (1994, pp. 55-60) claims that leadership styles should be examined as a spectrum, rather than as bipolar behavioral patterns, as every leader has a repertoire of behaviors of both kinds. Furthermore, leaders in organizations can be at any point on the continuum. It is also possible to describe combinations of the two styles as different dimensions.

"...This two-dimensional grid allows the positioning of management styles along nine point axes labeled 'concern for people' and 'concern for production'. It is theoretically possible to identify 81 management styles, but the analysis generally places leaders into one of five main styles..."

Coleman (1994, p. 57)

The style, which expresses the behaviors "results rated high" and "relationships rated high", expresses the most interest by the leader, in both the output and the subordinates' welfare. Blake and Mouton (1964) called this style "team management".

"...The basic aim is to promote the conditions that integrate creativity, high productivity and high morale through concerted team action..."

(Blake and Mouton, 1964, p. 142)

Leaders with this style of leadership combine in their behavior and attitude different sources of power: expertise, authority, rewarding, and identification, in order to achieve the highest possible outcomes, whilst still being as attentive as possible to their employees and their needs. The common agreement between the leader and his or her subordinates regarding the goals of the organization, as well as the leader's sensitivity to personal needs, should lead to the development of trust and mutual respect (Bar-Haim, 1997).
At the other end of the spectrum of leadership styles, is the “impoverished” style. This style is characterized by “results rated low and relationships rated low”. A leader with such a leadership style would only live up to the minimum requirements of output and human needs in his or her organization (Bar-Haim, 1997).

"...This approach indicates a passive approach which may apply 'to those that have accepted defeat'..."
(Blake and Mouton, 1964, p. 85)

The “middle road” leadership style is defined as “results rated moderate and relationships rated moderate”.

"...This middle range approach means that 'satisfactory'...solutions are found through equilibrium or compromise processes..."
(Blake and Mouton, 1964, p. 110)

The two remaining styles are “results rated low/high and relationship related high/low”. According to Bar-Haim (1997), the style of leadership that is “results rated low and relationships rated high” expresses only a minor tendency towards achieving the organization’s goals, and on the other hand, a strong tendency towards fulfilling organizational needs and expectations. Such a leader would focus most of his or her attention on the employees, and would make every effort to please them. Blake and Mouton (1964) called this leadership style “country club management”. Leaders with this style of leadership would focus on creating a pleasant, friendly atmosphere in the workplace.

"... Leaders encourage their workers, 'the group', not the individual, is the key unit of the organization..."
(Blake and Mouton, 1964, p. 80)
The last main style is the "results rated high and relationships rated low". According to Bass (1985), this style of leadership shows a maximum tendency towards achieving the organization's goals, and minimum interest in tending to the human problems and needs of the organization. A leader with such a leadership style would demand obedience, and would focus on the achievement of the organization as the measure of the group's behavior. To this end, the leader would create the working conditions that would enable efficient work.

"...This type of leadership is identified as 'achievement oriented' and as personifying 'the entrepreneurial' spirit..."  

(Blake and Mouton, 1964, p. 18)

As Coleman (1994, p. 58) argues, the point of view that the researchers emphasized was that the leadership styles can change. Moreover, they are determined by a range of factors, meaning that they can be subject to modification through formal instruction or self-training.

Styles of leadership can explain only part of the notion of leadership. Theories and models will clarify the issue.

Theories of leadership can be categorized into theories that emphasize the leader's qualities and contingency theories, which emphasize the situational variables that interact with the leader (Coleman, 1994 p. 58; Day et al., 2000; Bar-Haym 1997).

"...This evolved into a third theory, according to which both the leader's characteristics and the situation should be taken into account..."  

Theories Concerning the Qualities of the Individual

"...The theories of leadership that are based on the qualities of one person omit any emphasis on situational factors, particularly the dynamic relationship between the leader and those who are led..."

(Coleman, 1994, p. 59)

At the basis of these theories is the assumption that leaders possess certain talents and qualities that make them great people. These special qualities, which make the person worthy of leadership are, according to these theories, inherent, although they require being developed (Shwartzwald, 1987). Bar-El and Neumeir (1996, p. 248) explain:

"...A person does not acquire the position of a leader... A person that was born to be a leader would become one under any circumstances, and would dictate the way things would be. Leaders are those who make history, not the other way around..."

Two good examples, among the theories concerning the qualities of the individual, are the “great man” theory and the theory of “personality traits”. At the basis of the “great man” theory there are two assumptions. The first is that the leader has personal qualities that distinguish him or her from the rest of the group, making the leader the best person. The second is that a person with leadership qualities stands out as a leader anywhere he or she is positioned (Shwartzwald, 1978; Popper, 1994; Bar-Haim, 1997; Bar-El and Neumeir, 1996). As for the “personality traits” theory, Coleman (1994, p. 58) claims that the basis of the theories that focus on personality traits is the assumption that personality traits determine success in leadership. According to Stogdill (1969, p. 127):
"...Leadership is not a matter of passive status, or of the mere possession of some combination of traits. It appears rather to be a working relationship among members of a group, in which the leader acquires status through active participation and demonstration of his capacity for carrying cooperative tasks through to completion. Significant aspects of this capacity appears to be intelligence, alertness to the needs and motives of others, and insight into situations, further reinforced by such habits as responsibility, initiative, persistence and self confidence..."

Bryman (1992, p. 2) claims that Stogdill failed in finding evidence that personal traits are the key to leadership. Bryman (1992) adds that, at best, Stogdill was able to conclude that the personal factors associated with leadership are substantially affected by the requirements of the situation from which the leader emerges.

Coleman (1994, p. 58) clarifies and claims that:

"...Stogdill found that some traits were common to successful leaders, but there has been difficulty in identifying them consistently. There are also difficulties in agreeing on definitions of traits as abstract as dependability and in measuring to what degree a leader may have such a trait..."

The professional literature in the area of leadership (Kirkpatrick et al., 1991; Zaccaro et al., 1991; Gibb, 1969; McGrath et al., 1968) mentions a number of personality traits related to leadership. One trait mentioned is intelligence (Gibb, 1969). In most groups, the leader is at least somewhat more intelligent than the rest of the members. In other words, there is a correlation between leadership and intelligence; however, it is low. One of the explanations for this is that when the leader is significantly more intelligent than the rest of the members in the group, he or she will not be able to communicate on
common grounds with them (Bar-El and Neumeir, 1996). The second trait that paves the individual's path to leadership is rhetoric skills. McGrath (1968) found that the most talkative person in the group is often perceived as the leader. It was found that leaders are usually more assertive, dominant, self-confident and sensitive in interpersonal relationships, they tend to avoid expressing feelings, and are more adaptive than the average group member (Schrag, 1954). Bar-El and Neumeir (1996) mentioned that the correlation in this case was even lower, even to the point of negative coefficients.

Zaccaro et al. (1991, p. 33) found that flexibility is another quality related to leadership. This refers to the leader's ability to adapt his or her leadership style or behavior to the needs of the group members or the specific situation.

"...The leader is the person in charge of the interpersonal relationship when needed, but is also able of caring for the outcome of the group in other situations...".

Other qualities have been identified by Kirkpatrick et al. (1991), who found that decisiveness, initiative, fairness, credibility and honesty contribute to the success of leaders.

According to Bar-Haym, (1997, p. 249), the main weakness of the traits theory lies in the question of whether the traits help the leader gain power, or whether the leader acquires these traits due to the fact that he or she is in a position of power.

"...Let's examine, for instance, the trait of self-confidence – does it help a person reach a position of leadership, or does a person already in the position of leadership acquire self-confidence as a result of being a leader..." (Bar-Haym, 1997, p. 249)
In addition, Bar-El (1997) and Bar-Shlomo (1999) argue that these theories have been discredited. Still, the rationale of the theories leads to the approach according to which both the character of the leader, and the situation, should be taken into consideration.

**Contingent Leadership**

The term "contingency" expresses the importance of the connection between the leader's personality and the situation in which he or she operates (Bar-El, 1997). Contingency theories explicitly draw attention to the notion that there are no universally appropriate styles of leadership. This means that particular styles have an impact on various outcomes in some situations but not in others. On the whole, the effectiveness of a leadership style is situationally contingent (Bryman, 1992, p. 11). According to the contingency model, the leadership style depends on the organizational and environmental situation, meaning that the leader's behaviour, and the effectiveness of his or her achievements, depends on the situation. Thus, the issue is compliant with the situation and environment, rather than forming them (Bar-Haym, 1997). Two theories, that of Fiedler (1967) and the theory of Hersey and Blanchard (1977), focus on the relationship between the leaders and their environment.

**Fiedler's (1967) Model of Leadership:** The model combined the leader's style, the situation in which the leader operates, and the relationship with the subordinates (Coleman, 1994, p. 60). Fiedler based his view on Bales' (1950) who claimed that there were two main styles of leadership.
Fiedler was mostly interested in the efficiency of the group in which the leader operates.

"...While the relationship oriented leader can lead the group all through its existence, the task-oriented leader has to be replaced according to the requirements of the position or the task...in other words, the task oriented leader's post is temporary, and expires after the task is completed..."

(Bar-El and Neumeir, 1996, p. 252).

Fiedler defined the "situation" as related to the characteristics of the group in the organization, under the assumption that the group is the organization's main means of achieving the leader's goals (Bar-Haim, 1997; Bar-El and Neumeir, 1996; Popper, 1994). Group situations were defined according to three parameters, each on a separate continuum. At one end of each continuum is a situation that is comfortable for the leader, i.e. enables him or her to easily assert influence on the group; at the other end is a situation that is the least comfortable (Coleman, 1994, p.60; Bar-Haim, 1997).

The three parameters are:

1. The personal relationship between the leader and the subordinates, on a continuum ranging "good" to "poor".

2. The structure of the group's task. On the "comfortable" end, there is "clarity" – clear, known tasks, that the group is experienced in performing; on the other pole, there is "non-clarity" – unclear tasks that the group has little or no experience in performing, and insufficient knowledge needed for the task (high-low).

3. The position and power of the leader in the group, on a continuum between "strong" to "weak".
Handy (1993, p. 118) has criticized Fiedler's (1967) work and argues that Fiedler "... Makes things too simple by restricting the problem to the nature of the task and the relationship between the leader and his subordinates...". It has also been criticized by Shakeshaft (1989) on the basis of using no women as subjects.

The Model of Hershey and Blanchard (1977): Like Fiedler, the basis of the theory of Hershey and Blanchard is that the styles of leadership (directive and supportive behaviour) are a function of the situation (Bar-Haym 1997).

"...The model developed by Hersey and Blanchard identifies both directive and supportive behaviour in a leader, which can be modified according to the level of development, experience and commitment of the subordinate..."

(Coleman, 1994, p. 59)

The subordinates themselves, as individuals or as a group, are characterized by different levels of maturity, which from the organizational point of view, refer to the level of independence, the ability to assume responsibility, and the achievement motivation of the individuals and the workgroup (Popper, 1994, pp. 47-48). The level of maturity, according to Bar-Haim (1997), is highly correlated with the employees' education, age, experience and other characteristics.

Coleman (1994, p. 60) describes the model in accordance with the different types of maturity of the staff:

"...1. For the most experienced and committed staff the style would be basically that of delegation, low on direction and support. The expectation is that such staff would need little direction because of their experience, and little support because of their commitment.

2. A young but keen subordinate would receive high direction because of lack of experience and low levels of support because of high motivation."
3. A more experienced worker with low commitment would be expected to benefit from the coaching style of high levels of both direction and support.
4. The experienced middle manager with varying levels of motivation and commitment would be expected to need high levels of support but little direction…"

According to Popper (1994), Bar-Haim (1997), and Bar-El (1997), if the leader in the organization wishes to be effective and make a real difference, he or she must not adopt a leadership style according to their personal tendencies. He or she must adapt behavior to the specific situation and circumstance. Bar-Haim (1997) claimed that the contribution of the approach to researching the area of leadership in organizations is by adding to the understanding of the phenomenon of leadership the element of the relationship between the organization and the environment. The approach also showed that it is necessary to adapt the leadership style according to different organizational variables, such as the nature of the task, the characteristics of the colleagues and the characteristics of the subordinates.

"...This approach assumes that what is important is how leaders respond to the unique organizational circumstances or problems that they face as a consequence, for example, of the nature and preferences of co-workers, conditions of work and tasks to be undertaken. This approach to leadership assumes, as well, that there are wide variations in the contexts for leadership and that to be effective, these contexts require different leadership responses. Also assumed by this approach to leadership is that individuals providing leadership, typically those in formal positions of authority, are capable of mastering a large repertoire of leadership practices. Their influence will depend, in large measure, on such mastery..."

(Leithwood et al., 1999, p. 15)

A variety of conceptual models of leadership have been generated over the last two decades of the 20th century. According to Day et al. (2000, p.14), the most
influential leadership concepts are those of James McGregor Burns (1978), who distinguished between transactional and transformational leadership.

**Transactional and Transformational Leadership**

The underlying assumption of transactional leadership models is the existence of exchange relationships between the leader and the followers:

"...The relations of most leaders and followers are transactional - leaders approach followers with an eye to exchanging one thing for another: jobs for votes, or subsidies for campaign contributions. Such transactions comprise the bulk of the relationships among leaders and followers especially in groups, legislatures and parties..."

(Burns, 1978. p. 4)

Bass (1985) defined transactional leadership in broader terms than Burns. His definition includes not only incentives, but also clarification of the work needed to obtain rewards. Bass (1985) describes the transactional leader as one that operates within the existing cultural system, prefers avoiding risks, is aware of limitations of time and efficiency, and prefers control to processes by means of well-defined procedures. Bass (1985) claims that such a leader would be more efficient also in a constant, predictable environment, in which past experience serves as the “anchor” in the organization’s strategy. Past experience would also show that the surest way of reaching achievements is conducting fair exchanges of rewards and human relations with the followers, and responding generously to their needs. Bass and Avolio, (1994, p. 3) conclude:

"...Transactional leadership emphasizes the transaction or exchange that takes place among leaders, colleagues and
followers. This exchange is based on the leader discussing with others what is required and specifying the conditions and rewards these others will receive if they fulfill those requirements..."

The second influential leadership concept is transformational leadership which is more complex and more potent.

"...The transforming leader recognizes and exploits an existing need or demand of a potential follower...The transforming leader looks for potential motives in followers, seeks to satisfy higher needs and engages the full person of the followers. The result is a relationship of mutual stimulation and elevation that converts followers into leaders...

(Burns, 1978, p. 4)

According to Yukl (1989, p. 271), transformational leadership is viewed as both micro-level influence process between individuals and a macro-level process of mobilizing power to change social systems and reform institutions. Popper's (1994) definition is that this type of leadership evokes emotions. The leader creates a strong emotional effect on his followers, directing them to perform beyond their self-expectations at the beginning of the situation. The willingness of the followers to perform "way beyond" their expectations is based on the faith that the transformational leader instills in them, regarding their own self-efficacy to perform certain tasks (Bandura, 1997). By boosting the followers sense of self-efficacy, the transformational leader can lead his or her followers through tasks that include change, innovation, great difficulties and even danger (Bar-Kol, 1997, p. 151). There are leaders that are only able not to adapt to different situations and be effective, but also to form other people's self-expectations, and create new expectations that did not exist at the beginning of the interaction with
the leader. Such leaders can excite people and stimulate them to make the effort and transcend beyond their perceived self-imposed limits.

"...Leadership over human beings is exercised when persons with certain motives and purposes mobilise, in competition or conflict with others, institutional, political, psychological and other resources so as to arouse, engage and satisfy the motives of followers... This is done in order to realize mutually held by leaders and followers..."

(Burns, 1978, p. 18)

According to Leithwood (1992, p. 69), a transformational leader is opposed to the transactional leader. The leader desires to change the situation and the direction of the system's development, and takes actions without always considering the followers' immediate gains from their response to his or her demands. The leader wishes to stir a new spirit in his followers, a spirit of motivation, willingness and high expectations for organizational achievements, beyond what is perceived possible in the organization. In other words, Burns (1978) describes transformational leadership as being concerned with exploring conventional relationships and organizational understandings through involvement and participation.

"...In the case of transforming leadership, the leader/followers raise one another to higher levels of motivation and morality..."

(Burns, 1978 p. 20)

The transformational leader seeks new working methods, whilst weighing new opportunities and risks. He or she is interested in effective solutions (that emphasize achieving the goal regardless of the price), not only efficient solutions (according to cost/utility analyses). Moreover, according to Bollington (1999, p. 171), transformational leadership is appropriate at a time of change.
Bass (1985) claims that to this end, the transformational leader would attempt to change the environmental limitations, rather than accept its limitations and cling to the status-quo. Bar-Haym (1997, p. 45) argues that transformational leaders often use transactional techniques; however, they tend more towards using symbolic means, metaphors and visions in order to evoke willingness to make an extra effort in their people. The leaders, according to Bar-Haym, do this on both the intellectual level, by emphasizing the future utility and advantages of the goals they set, for the individuals and for the organization – long-term goals that set especially high standards; and on the emotional level, by creating objects of identification, and by boosting the followers’ self-esteem and their desire to take part in the collective experience.

"...Transformational leadership is discussed as a philosophy and approach for a leader to employ for developing followers, transforming these followers into leaders and fostering the performance of followers that transcends expected or established standards..."

(Yammarino, 1994, p.26)

Bass and Avolio (1994, pp. 4-8) claim that transactional and transformational leadership are one theory that has two factors. The transactional leadership occurs when the leader intends to maintain the organization and ensure that the daily course of events runs smoothly. As for the second factor, the transformational leadership, occurs when the leader behaves in one or more of the following ways: Idealized influence, Inspirational motivation, Intellectual stimulation and Individualized consideration. Bass and Avolio (1994, pp. 3-4) refer to transformational leadership as the four I's. The meaning of “idealized influence” is that those transformative leaders serve as role models for their followers, and gain the followers’ appreciation, trust
and even admiration. Moreover, the followers are interested in resembling the leaders. All of this is the result of:

"...The leader shares risks with followers and is consistent rather than arbitrary. He or she can be counted on to do the right thing, demonstrating high standards of ethical and moral conduct. He or she avoids using power for personal gain and only when needed..."
(Bass and Avolio, 1994, p. 3)

Inspirational motivation is achieved by providing followers with meaning and challenges, and creating a sense of esprit de corps, enthusiasm and optimism. In addition, the leader should convey clear expectations and commitment to the goals and the vision. The leader should also challenge the followers intellectually using means of intellectual stimulation — examining paradigms, asking questions, and finding new ways to tackle problems.

"...New ideas and creative problem solutions are solicited from followers, who are included in the process of addressing problems and finding solutions. Followers are encouraged to try new approaches and their ideas are not criticized because they differ from the leaders' ideas..."
(Bass and Avolio, 1994, p. 3)

The forth “I” is the Individualized consideration. The leader should tend and refer to each of the followers’ own needs and achievements. Opportunities for new learning should be made possible only in a supportive environment. Moreover, the relationships between the leader and the followers are personal, and the exchanges between the leader and the followers are both on the personal and in the professional levels.

In concluding the transformational and transactional types of leadership, Bass (1985), unlike Burns, perceived the two types of leaders as complementary, not contradictory. In fact, he perceived them as two leadership skills that are essential for effective
leadership — to set goals based on an exciting future vision on the one hand, and to manage a day-to-day, practical organization on the other. The ideal leader, according to Bass (1985), has to have both qualities — be both a transactional and a transformational leader.

Bass's approach reflects that of Blake and Mouton (1964), regarding the combination of two leadership styles, “concern for people” and “concern for production” (Bar-Haim, 1997).

"...Many research studies...show that transformational leaders,...were more effective and satisfying as leaders than transactional leaders, although the best of leaders frequently do some of the latter but more of the former..."

(Bass and Avolio, 1994, p. 6)

Allix (2000, p. 7) sums up and argues that power and leadership are seen as relationships set in a context of human motives and physical constraints. Moreover, according to Allix (2000), Burns emphasized the educative nature of the relationship between leaders and followers, "...Which he believed was also consistent with contemporary democratic norms...".

Kuhnert and Lewis (1987, p. 651) have expanded on Burns and Bass's work by developing three distinct leadership models within the transactional and transformational paradigm. The transactional operator is the first model in which the leader has a personal agenda that is pursued without true concern for the welfare of others. The followers are seen as instrumental to the accomplishment of the leader's goals but they may feel that they have been treated fairly as long as there are enough rewards.
"...Model 1 individuals may be highly task-oriented, as well as self-interested, and thus can be reasonably effective leaders..."

(Kuhnert, 1994, p. 10)

The second type is the type of the team player. The outcomes and consequences are important for the team player as they reveal information about working relationships and what they contribute to the group's sentiments and feelings. According to Kuhnert and Lewis (1987), the relationship and feelings within the team are critical for the team leader. Moreover, the team player is controlled by the members' views and therefore, he or she is unlikely to delegate problems that may entail a loss of respect.

"...The team player is transactional to the extent that his or her efforts are stimulated mainly by his other need for affection from others; he or she can be seen as transformational to the degree that team outcomes take center stage. Yet what others think of the team player dominates this leader's actions..."

(Kuhnert, 1994, p. 16)

The third model, the transformational "self-defining" leader, is not an alternative to the first two models, rather it transcends them. This leader has strong internalized values and ideas. If necessary, he or she risks loss of respect and affection to pursue actions that he or she is convinced are right.

"...Such transformational, self-defining leaders are able to energize followers to take actions that support higher purposes rather than their own self-interest and they are able to create an environment in which people are encouraged to address problems and opportunities with creativity and personal commitment..."

(Kuhnert, 1994, p. 18)

The perspectives and theories of leadership are the basis for educational leadership and underpin this kind of leadership which is an important key factor of changes in schools. Bollington's (1999, p. 153) point of view is that outstanding leadership is important for outstanding schools.
Educational Leadership

The term "educational leadership" refers to both the areas of teaching and learning as well as expertise in human resources, budget management, etc. Educational leadership is not restricted to dealing only with education, but rather concerns all of the aspects the school deals with (Coleman and Bush, 2000).

The traditional theories of leadership are normative, focusing on the formal aspect of organizational life and on authority, and fail to provide insight into how schools are run in everyday life (Ball, 1987; Eden 1998).

Educational leadership is all about professionalism, educational values, and vision (Coleman, 1994; Bush and Coleman, 2000, pp. 24-25; Leithwood, 1993; Fuchs and Hertz-Lazarowitz, 1992; Friedman, 1995). The essence of educational leadership is based on the transformational leadership as its role is to encourage and to empower the teachers and all those involved in the educational work. (Bush and Coleman, 2000; Ron and Shlayfer, 1995; Duignan and Macpherson, 1992).

"...Educative leaders should therefore, take responsible leadership actions to create organizational cultures that enhance the growth and development of all involved in teaching and learning..."

(Duignan and Macpherson, 1992, p. 83)

Rallis et al. (1993), and Avi-itzhak et al. (1997), describe the role of the headteacher as a leader that coordinates between the internal elements in the school, as well as the external elements outside the school. Moreover, the headteachers are described
as professionals who have the ability to evaluate the school’s performance and activities using clear, professional criteria, acquired through the headteachers’ formal academic studies and through their practical experience as leaders.

Sergiovanni (1991, p. 86) claims that educational leadership exhibits the headteacher as a strong instructional leader which is appropriate for new or doubtful teachers whilst at other times he/she appears on an equal basis of teaching and learning with the teachers. This latter appearance of the headteacher’s leadership is appropriate for more matured teachers.

Chen and Addi (1995) argue that, due to the social-political character of the education system, the headteacher’s role is perceived as a social mission, especially in an education system as politically inclined as the Israeli education system. They claim that the perception of the headteacher as a leader indicates the fact that the headteacher is perceived as the “bridge” to social change.

"...The concept of instructional leadership as encompassing actions which focuses on setting school goals, defining the purpose of schooling, providing the resources needed for learning to occur, supervising and evaluating teachers, and creating collegial relationships with and among teachers..."

(Avi-itzhak and Ben-Peretz, 1997, p. 2)

The same notion was described by Leithwood (1993), Kula and Globman (1994), and Ron and Shlayfer (1995). The researchers claimed that the meaning of the term “leadership”, in the educational context, is the forming of an educational vision, the bringing of educational goals to the awareness of the educational staff, and setting the clear of objectives for the educational staff and the social environment in which the school operates. Since there is always a gap between the reality and
the vision, the headteacher requires change and improvement strategies that help him or her in their effort to expand the teachers boundaries of perception, to make them see the full picture of the school as a social system, not only satisfy the immediate needs of each individual subject (Bush and Coleman, 2000; Parker, 1990). All the above agree both with the perception of the headteacher as a social leader, leading towards change (Chen and Addi, 1995), and with that of the headteacher as the bridge between the school and the environment (Goldring and Rallis, 1993).

Goldring and Rallis (1993) claimed that the leader -the headteacher - does not only create an educational change by him/herself, but rather builds a whole organization around him/her to make the change. In addition, the leader also bridges between the educational administration’s demands and the needs of the school, the students, the parents, and the regional political leadership.

"...Leadership is defined as the ability to set goals, direct the individuals and the groups in the organization towards achieving them, help in developing a shared strategic vision, and formalize and implement changes in the school. All this should be done in collaboration with the teaching staff, in order to set priorities for the school, taking into account the needs of the community, the national needs and the needs of the teachers and the students. The headteacher, then, is the education leader of these changes..."

(Sharan, 1995, p. 58)

The American National Education Policy Examination Committee defined the “headteacher-leader” as:"...The crucial force that determines the school’s climate and the teachers’ and the students’ attitudes towards the learning process..." (Drake and Roe, 1986, p. 11). The headteacher’s leadership may be described in terms of designing the school’s learning climate, promoting educational changes, leading the school’s
educational staff, and routing the school's unique educational methods (Drake and Roe, 1986; Blase, 1991; Goldring et al., 1993; Fridman, 1995). Bar El (1997) claimed that the way in which the headteacher leads the school personnel, his or her methods of operation and points of focus, greatly affect the processes that take place in the school, and the students' academic achievements.

"...Schools that succeed in instilling change, adapting it and developing it over time, are led by headteachers with deep insight, with high levels of commitment and involvement in the change process ..." (Fuchs and Herz-Lazarowitz, 1992, p. 41)

Two more variables that are a part of the concept of leadership in general, and educational leadership in particular, are distributed leadership and vision. The former derives from a democratic point of view whilst the latter, the vision of the leader, encourages the ownership of all the teachers.

**Distributed Leadership**

A broader concept of the educational leadership in the school includes all those involved in the educational activity - the headteacher, the vice headteacher, homeroom teacher, subject coordinators and the teaching staff.

"...Educational leadership, referring to the building of capacity among teachers, parents and students by 'nurturing a learning community'..." (Day et al., 2000 p. 18)

Traditional leadership emphasizes hierarchy, rules and is based on bureaucratic linkages which connect people to work by forcing them to respond as subordinates (Sergiovanni, 1995 p. 151). Distributed leadership, which encourages a democratic
participative culture, is the style that educational leadership should aim for (Bottney, 1992; Sharan, 1995: Sergiovani, 1998).

"...Democratic heads will want to involve staff and pupils in the school's running... They will want to provide opportunities for others to discuss matters of policy and implementation... to provide school members with the opportunity to develop themselves and their community..."

(Bottery, 1992, p. 190)

Sharan and Shachar (1990) claim that the new concept of leadership combines the leadership of the headteacher and the staff. Such a leadership has its own value: it cultivates leadership among the staff, empowers responsibilities and encourages initiatives of the teachers. This creates a situation whereby the leadership is not dependent only on the presence of the headteacher. Caspi (1995) adds that distributed leadership is important especially in secondary schools, for in such schools there are many teaching subjects and therefore some aspects of the pedagogical leadership are given to the teachers. According to Eden (1998), headteachers distribute power among others in an effort to get more power in return. They know that it is not power over people that counts but power over the likelihood that shared goals and purposes will be realized.

"...Striving to make the school a community of leaders is a good idea that doesn't need much justification. After all, most will agree the more that leadership is cultivated in a school, the more likely it is that everyone will get a chance to use their talents fully and the more committed everyone is likely to be..."

(Sergiovanni, 1999 p. 130)

Sergiovanni (1999, p. 134) summarizes that the best empowerment strategy is not to focus on teachers but to empower the entire school site. On the same issue, Donaldson (2001) claims that effective school leadership mobilizes for moral purposes by fostering openness, trust and mutual purposes as well as a
shared belief. Leithwood et al. (2000, p. 105), share the same conception and claim that school leaders concentrate and develop collaborative culture among subgroups of teachers, and at the same time, they support teachers and promote their development. The headteachers of the 21st century will probably encounter a more turbulent and uncertain environment (Toffler, 1992; Peter, 1992), and will be required to act as transformational leaders. They are likely to have to act in two important areas – the first, forming the school’s vision, and the second, motivating their subordinates towards the vision. Moreover, headteachers must have a vision or mission for their school and provide educational vision and direction (Bolam et al., 1993; Foreman, 1998).

Vision

The organizational vision, in this sense, is a clear and realistic picture of the future situation towards which the leader wishes to lead his or her followers. Such a vision has to offer the organization a situation that is better than the current one (Sashkin, 1993; Bennis and Nanus, 1985), and also offers a solution for present problems (Conger and Kanugo, 1989). The organizational vision has an element of a dream, and it gives the followers the sense of direction, in a reality in which going astray is very easy (Morgan, 1989). The vision can be realized only if the leader succeeds in instilling it among his or her followers, making them follow his or her lead. Following the leader’s vision can be demanding, however. It obliges the followers to overcome the fear of change, exert efforts in re-learning, and often, assume risks.
"...Here is where the leader's persona, as a trustworthy, identifiable and charismatic figure, with the ability to excite and make people trust him and identify with him, is put to a test. The leader's figure has to be one, for which the followers would be willing to do beyond what he would do for anybody else..."

(Bar-Kol, 1997, p. 153)

According to Coleman (1994) and Forman (1998), headteachers must have a vision or mission for their school. Moreover, the headteachers must provide educational vision and direction (Bolam et al. 1993; Forman, 1998). Sharan (1995), and Inbar et al. (1999), indicate that headteachers consider themselves as a source of vision for their schools, as vision is not a general idea, or a statement that can be shared by all schools. Vision is something that should be developed by each school according to its needs.

"...Vision refers to a desirable future state of the organization. It relates to the intended purposes of the school or college, expressed in terms of values and clarifying the direction to be taken by the institution. It should be inspirational so that organizational members are motivated to work towards it with pride and enthusiasm..."

(Bush and Coleman, 2000 p. 10)

The school vision has to be shared by the whole teaching staff, and should be created in cooperation, according to the staff's values, attitudes and preferences. The vision must not be thought up and created by the headteacher. Furthermore, the headteacher cannot enforce his or her vision on the teachers (Fullan, 1992, p.121; Bush and Coleman, 2000; Foreman 1998, p. 24 ; Blum and Butler, 1989, p. 19).

The importance of vision to the teachers' work is of great value (Bennis and Nanus, 1985, p.102):
"...Without some sense of direction which captures both minds and hearts, teachers will indeed be working in a vacuum..."

(Schlechty, 1990, p. 137)

Summary

The concept of leadership may be considered as the most important and most relevant of all behavioural science concepts (Yukl, 1989; Bar-El 1997, p. 233; Inbar, 1995 p. 8). Whitaker (1998, p. 147) sums up leadership, and claims that:

"...Leadership might have as much to do with making helpful suggestions as to do with issuing strategic directives, as much about listening to other people's ideas as about expounding your own and as much about gentleness as about toughness..."

Models and theories of leadership include the trait analysis of Stogdill (1948) and his followers, the situational view of Hershey and Blanchard (1988), and the transactional and transformational leaders. According to Wright (2001, p. 275), strong leadership helps schools to improve. Moreover, in the field of education, headteachers are faced with the major issues of leadership on a day-to-day basis, such as responsibility and authority, delegation, target setting, control, performance evaluation, team building and the management of conflicts (Caspi, 1995; Goldring and Chen, 1993). In fact, leadership is central to education. It can be seen as the engine of educational changes.

Educational leadership is not restricted to dealing only with education, but rather concerns all the aspects that the organization, namely the school, deals
with. It depends on creating a culture, in which the teaching and learning activities thrive (Coleman and Bush, 2000).

"...It requires a new form of leadership predicated on openness, collaboration and power sharing where flexibility, creativity, imagination and responsiveness can flourish..."

(Bell, 1998, p. 459)

The educational leader should have the ability to set the goals and direction for the people in the school, as individuals and as groups. The headteacher is seen as forming the school’s culture, and helping the teachers develop a strategic vision that guides them in their work.

"...The educational leader is responsible for helping the teaching staff plan changes and set priorities for the school, in order to achieve, while taking into account the unique needs of the teachers, the goals of the students and the community. The headteacher of today, as the leader of change, is a crucial model in defining his role..."

(Sharan, 1995, p. 59)

Change, Management and Leadership in Operation

According to Dimmock (1999, p. 455), little is known about the leadership and management of curricular changes, especially in Asia. Despite this fact, evidence that changes in education in general, and in the curriculum in particular, is based on good leadership and good management and can be found in a range of empirical studies.

Studies conducted on curriculum leadership have mainly focused more on elementary schools and less on secondary schools (Fidler, 1997, p. 23). Nevertheless, Little and Bird (1987) identified in secondary schools in the
U.S., three mechanisms for curriculum leadership. The first one deals with inviting external curriculum advisors to work with the teachers. The second one consists of directly working with individual teachers or groups of teachers, and the third mechanism encourages collaboration with heads of departments. In a case study conducted in a secondary school in Australia, Dimmock and Wildy (1995) report that curriculum leadership was mainly achieved by working with, and through, heads of departments and partly by the headteachers' influence on students and teachers.

In a study of 12 schools in the UK, Harris et al. (2001) found that although the headteachers were at different stages in their careers and were working in very different situations, they had similar sets of leadership characteristics. Moreover, the perspectives and the vision of the headteachers were underpinned by respect for the individuals, fairness, equality, concern for the well-being and development of students and staff, as well as integrity and honesty.

"...The most important aspect of leadership for all heads concerned was working successfully with people. Being a head was not a 'desk job'..." (Harris et al., 2001, p. 33)

The heads were transactional and transformational leaders at the same time and they operated from a collaborative form of leadership. Furthermore, they used their personal power to obtain change and rarely used their authority.

In another study of curriculum leadership and management, in two secondary schools in Hong Kong, Lee and Dimmock (1999) found that the headteachers did not play an important role in curriculum monitoring and innovation. Their involvement was indirect and both of them employed bureaucratic and cultural linkages to influence curriculum and instruction. The findings suggest that leadership and management of the curriculum are subject based and lack the
perspective of the whole school, but tend to be fragmented and easily disjointed. Furthermore, whilst the headteachers and deputies exert strong indirect influence on quality of teaching and learning, they are not predominantly curriculum leaders or managers.

As for the Israeli headteachers' style of leadership, Eden (1998, p. 259) claims that:

"...School principals in Israel are faced with the paradox of leadership in modern bureaucracies. On the one hand, they work in a highly routinized and rigid bureaucratic system. On the other hand, they are required to assume leadership and to transform the system by changing the relations between leaders and led, teachers' work patterns and setting new goals..."

Eden (1998) claims that the headteachers resolve this paradox by mobilizing the teachers' cognition and behaviour into a reality that they shape by themselves – to the extent that teachers identify with the leaders' interpretation of reality, which further transforms the teachers' needs and expectations.

Ben Peretz and Avi Itzhak (1997) conducted a study of the headteachers' leadership and management style as change facilitators in curricular-related activities.

The researchers found three styles of management that are related to the promotion of curricular changes: the "Initial" style, the "Responder" style and the "Manager" style. The headteachers with the "Initial" style have strong beliefs as to the characteristics of good schools and good teaching, seek change and act in the framework of long range policies and goals. Their source of knowledge of curricular materials tends to be of an autodidactive nature. Moreover, they tend to include less cognitive goals when utilizing curriculum
materials in staff development. They are most likely to be found in older and more established schools. The "Responders" focus on traditional administrative tasks and emphasize personal relationships with teachers and their decisions tend to be made in terms of immediate circumstances and not in terms of long range goals. Moreover, they include cognitive goals as part of their policy for utilizing curriculum material in staff development. The "Responders" headteachers tend to be less interested in understanding principles and more interested in understanding practical implications of curriculum implications and manifest an out-of-school feedback orientation. The third type, the "Managers", display both responsive behaviour and initiation of change. These headteachers provide basic support to facilitate teachers' use of innovation, but typically do not initiate attempts to move beyond what is externally imposed on the school. They are oriented towards out-of-school feedback and having professional managerial training. They seem to include evaluative oriented goals in utilizing curriculum materials in staff development. Furthermore, their source of professional knowledge of curriculum material does not tend to be of an autodidactic nature.

The researchers indicate that headteachers, who are characterized by any one of the three leadership styles, tend to adhere to the same style even whilst involved in curriculum innovations and not only whilst acting as administrative leaders.

In a study of Arab schools in Israel, conducted by Anabi (1989), a direct connection was found between the headteacher's leadership style and the teachers' perceived sense of autonomy. The study showed that the headteacher's support of the teachers, as well as making the teachers part of the decision-making and policy setting processes, contributed to the teachers'
feeling of freedom and initiative. An open, democratic leadership style led to a better feeling among the teachers, in terms of job satisfaction and higher self-esteem.

Abu Hassin (1998) conducted a study of Arabic secondary schools in Israel and found that headteachers with a more moral set of values would be more people-oriented than those with a pragmatic set of values. The latter type would tend to be more task-oriented than the former type.

In short,

"...The principal's role has become ...more complex, and more meaningful for those who learn to lead change..."

(Fullan, 2001, p.150)

**Conclusions and Summary of the Literature Review:**

Change can be defined in many ways. Six perspectives (the technological, the cultural, the micro-political, the biographical, the structural and the socio-historical) represent it. Together, they are adequate explanations. The Chaos Theory helps to understand social and educational processes. New lessons which are the result of living on the edge of chaos were also discussed.

Change is a dynamic, non-linear process which takes place in stages. Four stages characterize the change process: initiation, implementation, continuation and outcomes. Moreover, there are factors that influence changes in education. Some factors are characteristic of the change itself, some are related to the school, and some are external factors. It is also important to take into consideration that external and internal factors and forces are constantly

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applied to the education system, forcing it to change. People's reactions to change vary in accordance with their perceptions of the change, and therefore, the analysis of the personal dimension is central to the discussions of the change as an organizational matter. People are concerned about different aspects of a change, such as information, motivation, management, collaboration, ownership etc. The personal dimension of change also assumes opposition that is regarded as an opportunity and not as a difficulty (Keren, 1998; Levi, 1997; Inbar and Pereg, 1999). Fullan (2001) also focuses on changes in education from the point of view of the students. He argues that the ultimate purpose of reform is to benefit all the students both at the micro and the macro level. The meaning of the first level - the micro one - shows reforms that make differences in the life chances of the students, whilst the second level - the macro one - shows the level of changes in the societal development and democracy. Johnson's (1993, p. 58-64) point of view, regarding the change process, is that change is a continuous process, which evolves from and demonstrates, continuity with the past and present situations. Another perspective (Harvey-Jones, 1988, p. 249) focuses on the people in the organization, their involvement and development.

"...Change is inescapably and intensely personal, because it requires people to do something different to think something different and to feel something different..."

(Duck, 1993, p. 109)

Attention has also been paid to the fact that educational change in general, and curriculum change in particular is not a single entity. It is multi-dimensional (Morrison, 1998; Fullan 2001). As Fullan (2001, p. 39) argues, the three common
dimensions of the change process, during the implementation, are new materials, new teaching approaches and an alteration of beliefs.

"...All three aspects of change are necessary because together they represent the means of achieving a particular educational goal or set of goals..."  
(Fullan, 2001, p. 39)

The meanings of the above aspects are firstly, instructional resources, such as curriculum materials; secondly, new teaching strategies or activities, and finally, the pedagogical assumptions and theories underlying particular new policies or programmes.

According to Terrell et al. (1999, p. 97), at a time of change, the ability to manage and lead staff is the key to managing changes in order to bring about higher standards of education. Managing the curriculum, as well as teaching, is based on two components: managing and leading. Managing involves coordination of the work of the teachers and the making of school-level decisions (pupil grouping, time allocations for subjects, etc.). In this literature review, models and theories of educational management were reviewed, as well as the issue of managerialism. The essence of managerialism, that better management should lead to a better world (from the social and economical point of view), has also been discussed. When schools are in focus, it is commonly held that such management requires professionalism. Headteachers are required to have managerial tools, as well as educational experience.

As for the second component, leadership, it should be remembered that leaders need vision to provide development (Fidler, 1997, p. 23) and growth of all involved in teaching and learning (Bush and Coleman, 2000, p. 24). Lee and
Dimmock (1999, p. 456) claim that few research projects have been conducted concerning the issue of the complexities of curriculum leadership and management in schools.

In reviewing the literature, concerning management and leadership of changes in the educational system, it appears that the quality of a school depends on the quality of its leadership (Bollington, 1999, p. 153), and the quality of leadership makes the difference between the success and failure of a school (Millet, 1998, p. 1).

"...Schools these days need headteachers who have succeeded to transcend beyond the behaviour patterns and the views that characterized traditional management, taking upon themselves the role of educational leader..."

(Sharan, 1995 p. 59)

Watson (1993, p. 192) summarizes the above by claiming that without effective management and appropriate leadership, changes are unlikely to be realized.

It is widely agreed, as shown in most studies, that the dominant variable affecting the quality and success of a school is the headteacher's leadership and management. Since the headteacher is the leader of the school's staff, his or her leadership style is of extreme importance. The leadership style has a crucial effect on various aspects of the school – the atmosphere, the teachers' satisfaction, behaviour in the classroom, the students' response to the requirements, and the climate in the school (Shechtman et al., 1992; Eden, 1998).

"...The roles of the school's headteacher are so many, that it is impossible to define them... He is navigating the teacher's educational initiatives, mediating between the parents and the education system, serving as a buffer between the school, the students and the teachers, and
between different social, political and establishment groups... He is responsible for navigating this ship called school...”

(Bar-El, 1996, p. 6)

The Research Questions

The research questions were derived from the over-arching question: What are the perceptions of curriculum change of Israeli secondary headteachers: leading and managing the pilot of “Bagrut 2000”? The questions are related to the main themes of the literature review (Changes in Education, Management and Leadership). It is important to note that these questions emerged in detail as part of conducting the literature review itself.

The four research questions are:

1. What are the headteachers’ beliefs in relation to implementing a curriculum change in the education system?
2. What motivated the headteachers to implement the change?
3. What were the common or different stages of the implementation of the pilot of “Bagrut 2000” in the 22 schools?
4. What was the headteachers’ contribution to the implementation of the change?

As was mentioned in the literature review, headteachers are expected to have managerial expertise and initiate educational leadership that will lead towards changes (Caspi, 1994). Fuchs and Herz-Lazarowitz (1992) maintain that curriculum changes signal the need for fundamental re-thinking of leadership and management. Equally, it is a central contention of the thesis that the successful implementation of educational change can only take place if there is leadership
and management. The three main concepts (changes in education, management and leadership) form the basis for the research questions.

The first question addresses the headteachers' beliefs in relation to the implementation of a curricular change in the education system. According to Sashkin (1993), beliefs are part of the vision which is central to the idea of leadership. As was indicated in the literature review, beliefs help to define and intensify the headteachers' ability to support and empower teachers. Moreover, a headteacher who succeeds in instilling belief in the change, as well as the vision, in teachers is a leader whose subordinates are more likely to follow wherever he or she wishes to go (Bar-Kol, 1997).

Management in education is regarded as a field of application whilst leadership refers, in general, to the headteacher's behavior which directs the school's staff towards a common goal (Bar-El, 1997). Nonetheless, leadership and management are equally important in times of changes (Dimmock, 2000). The topic of management comes into play both in the analysis of the initial stages of the change (question No. 3) and the contribution of the headteachers to a successful implementation of a change (question No. 4). Management is concerned with ensuring that work gets done as well as monitoring outcomes and results (Whitaker, 1998, p.22; Bush and Coleman, 2000). Headteachers are required to have educational experience together with appropriate managerial tools (Friedman, 1995; Chen and Addi, 1995).

The second research question addresses the motivation of the headteachers. This question refers to all the three themes of the literature review. The motivation to enter the change process can be both internal and external as mentioned by Ido and
Bashan (1994, p.61). Furthermore, Sharan and Shachar (1990, p.227) claimed that headteachers could encourage the motive for a curricular change.

To conclude, the main topic, the headteachers' perceptions of curriculum change, thus serves as a common thread throughout all of the research questions. The headteachers' perceptions of leadership and management are also part of their perceptions of change, as, at a time of educational changes, the headteachers' ability to manage and lead the staff are the key to changes and higher standards of education (Terrell et al., 1999).

The relevance of this will be seen later in the thesis during the analysis and the conclusions.

The next chapter offers a defence of the research design and methodology adopted in this study.
Chapter 3: The Research Design

Introduction

The introduction of the thesis has clarified that this paper will examine and analyse, mainly by creating a typology, the perceptions of change of Israeli secondary headteachers as leaders and managers of a curriculum change. It is important and interesting to learn about the decision-making process on the route to change, as well as about the headteachers’ modes of operation and the different stages in the implementation of the change. In addition, the examination and analysis will enable to learn from the headteachers’ experience and perceptions about the variables that are the most important, and that have the most contribution to a change process in the education system.

The objective of the study, as said before, is to examine and analyse the perceptions of change in general, and curriculum change in particular, of Israeli secondary headteachers of the schools that participated in the pilot of “Bagrut 2000”. From this objective derives the need and the relevance to examine and analyse the headteachers’ beliefs in relation to implementing a curriculum change in the education system, as well as to examine and analyse their motivation and contribution to the implementation of the change. The study will also examine the common or different stages of the implementation of the pilot of “Bagrut 2000” in the 22 schools. The methodology of the interpretive paradigm especially complies
with the over-arching question of this research that focuses on the headteachers’ perceptions. Since the qualitative research examines the subjects, and since the starting point of the interpretive paradigm is understanding phenomena through the eyes of the subjects, this paradigm indeed was found most suitable. Moreover, the current research included many references and quotations of the headteachers who expressed their subjective viewpoints. The interpretive paradigm indeed asserts that the world is socially constructed and also subjective. In addition, the sample in the research was relatively small (19 headteachers), as indeed is required in qualitative research.

In the present study, a pilot took the form of five in-depth interviews. The pilot was carried out in order to develop an interview schedule and to give some experience of conducting research interviews. The aim was to conduct the pilot’s interviews with five headteachers from different regions and sectors. However, it proved unsuccessful, as it was later realized that one of the headteachers intended to move to Mexico. It was decided to interview her whilst remaining in the form of five pilot interviews, with two interviews from the Tel-Aviv district.

The Research Design

The research design adopts many of the recommendations offered by Robson (1993) but also integrates contributions from other theoreticians in the field, most notably Cohen and Manion (1989), Johnson (1994), Sabar Ben-Yehoshua (1995), etc.
The present research's method is mainly according to the interpretive paradigm and only general information about the schools and the headteachers is presented quantitatively. The information was collected mainly from in-depth interviews of the headteachers of the schools that took part in the pilot “Bagrut 2000”, from an in-depth interview with the project’s director and partly from printed materials with general information about the schools, social activities, school’s population, the school’s aims and vision, etc. These materials were given by the headteachers during the visit to the school for the interview. Creswell (1994, p. 177) argues that it is advantageous for a researcher to combine methods in order to better understand a concept that is being tested. In his words (p. 177):

"...In the dominant-less, dominant design the researcher presents the study within a single, dominant paradigm with one small component of the overall study drawn from the alternative paradigm..."

Sabar Ben-Yehoshua (1995, p. 19) claimed that the research approach is a comprehensive concept, which has roots that are deeper than the simple questions, which determine the research methods. The choice of the research approach is determined according to the characteristics of the study and its goals. Sometimes it is possible to make use of two approaches simultaneously, whilst being aware of the difficulties that might arise. Within the social sciences there are two main paradigms of research: the positivist, and the interpretive or the relativist. There is a connection between the gathering of quantitative data and a positivist approach and qualitative data and an interpretive approach.

"...Quantitative (or positivist) research followed the scientific mode, aiming at objectivity, standard procedures and replicability. Qualitative (or relativist) research, on the other hand, took the view that all human life is experienced and indeed constructed from..."
a subjective point of view, and that social research should seek to elicit the meaning of events and phenomena from the point of view of participants...”

(Johnson, 1994, p.7)

Robson’s (1993, p. 303) point of view is that the two paradigms can be seen as a fundamental dichotomy in social science research. The researchers Cohen and Manion (1994), Johnson (1994), Sabar Ben-Yehoshua (1995), Bayth-Marom (1996), and Scott and Usher (1996, pp.12-13), claim that the features of the positivist approach are that the world is external and objective and therefore science is value free. In such a world the observer is independent to focus on facts and search for causality whilst generalizing from the specific. In addition the research’s scale is large. However, the features of the interpretive approach are that the world is socially constructed and subjective; out of it derives the fact that science is driven by human interests. In such a case, the observer is part of what is observed and tries to understand what is happening. As a result, the research looks at the totality of the situation. Unlike the positivist approach, the samples used in the interpretive approach are small but are looked at in depth or over time (SabarBen-Yehoshua, 1995).

Research methods, whether qualitative or quantitative, represent a set of underlying assumptions that are interconnected. These assumptions are philosophical and ideological in nature. According to Sabar Ben-Yehoshua (1995, p. 18), these assumptions include much more than the actual information gathering, analysis and presentation techniques used. Thus, the choice of research methods is a theoretical procedure, and the different research methods represent different operative strategies. As was mentioned earlier, this research method is interpretative, except for the general information about the schools and the headteachers. This general information serves as a basis and background for the analysis of the headteachers’ perceptions. Johnson (1994, p. 6) describes positivism as a research that is “...Interested in
aggregating data, most of which are assigned numerical values...”. Bryman and Carmer (1990, p. 1) clarify their opinion on the quantitative research and suggest that it is:

"...The understanding and analysis of data rather than on the precise nature of the statistical techniques themselves..."

As for the qualitative method, Easterby Smith (1994, p. 78) claims that:

"...The task of the social scientist should not be to gather facts and measure how often certain patterns occur, but to appreciate the different constructions and meanings that people place upon their experience...

Qualitative research has a number of methodological characteristics. Bogdan and Biklen (1982) mention five main characteristics:

1. The qualitative research derives the data from the natural setting, and the researcher is the main research tool.

2. The qualitative research is descriptive. The data are gathered usually in words, and sometimes in photos. The presentation of the results includes descriptive quotations in the form of reports, such as transcripts of interviews, certificates and documents. Because of the characteristics of the qualitative research, the reports often have a story-like nature.

3. The qualitative research is interested more in the processes than in the results or outcomes. Qualitative researchers examine different processes during their occurrence.

4. Qualitative researchers tend to analyze the data inductively. The researchers do not wish to confirm or reject hypotheses that were set at the beginning of the research. The researchers' perceptions are formed as the data are gathered, and the theories are formed layer upon layer, based on the findings and information
gathered, as part of a dynamic process of forming grounded theories (according to Glaser and Strauss, 1967).

5. The qualitative research attributes importance to the meaning of things in the eyes of the subjects. The qualitative researchers are interested in what the people, who the research is focused on, think. By exposing the perceptions of the subjects, the researcher can understand underlying processes.

The researched reality is perceived, then, as a set of interactions. In this sense, the research is phenomenological, as it covers a whole phenomenon and attempts to interpret it through reconstructing the reality from the point of view of the people that took part in it.

Indeed, the characteristics of the current study comply with the methodological characteristics mentioned by Bogdan and Biklen (1982). The data for the current research were derived from in-depth interviews with the headteachers during the implementation of the “Bagrut 2000” curricular change. The headteachers described in detail their perceptions as to change in general, and to “Bagrut 2000” in particular. In addition, each of the interviews includes a detailed description of the different stages in implementing the change, as well as the headteacher’s motivations and contributions to introducing the change. The presentation of the findings and the analysis include many quotes from the interviews. The headteachers’ reports often have a story-like nature. Moreover, the focus of the current research is less on the results of the change, but rather on the headteachers’ perception and the process they led in introducing the change and implementing it. As mentioned, the collection of the data through
interviewing the headteachers was done in real-time, during the implementation of the curricular change. Bogdan and Biklen (1982) mentioned that in qualitative researches, the real meaning of the data is in the subjects' subjective point of view. This enables the understanding of the desired processes. In the present study, too, the exposure of the perceptions of headteachers who took part in the research enabled the understanding of the process of introducing and implementing curricular changes in secondary schools by the schools' headteachers.

According to Sabar Ben-Yehoshua (1995, p. 24), the main differences between the qualitative and the quantitative research methods refer to the goals, the research layout, the data, the sample, the methods and the tools.

Table No. 1 shows the differences between the qualitative and the quantitative paradigms.
Table no.1: The differences between the qualitative and the quantitative research*

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<th>Qualitative Research</th>
<th>Quantitative Research</th>
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<td>Developing awareness and understanding terms. Describing different aspects of the reality. Grounded Theory – the theory is based on the reality, and is gradually formed according to comparisons and juxtapositions of the data gathered from the field.</td>
<td>Examining theories and finding relationships between the variables. Presenting facts, confirming or rejecting hypotheses.</td>
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| The Research Layout | Flexible and general, indicates directions of progress. | Structured and detailed. Dictates from the start how the research will be conducted. |

| Data | Descriptive, personal wording, documents, manuscripts, field ledgers, photos and recordings. The analysis is based on data analysis. | Quantitative, variables that can be operated and measured. The researched variable is isolated. The analysis is statistical. |

| Sample | Small, non-representative and even unique, no separation according to variables. | Large and defined, control groups, random and representative. The variables are isolated, controlled and monitored. |

| Methods | Comprehensive and open-ended. | Experimental techniques: quantitative observations over the manipulation and treatments. |

| Tools and Apparatuses | Document analysis, the researcher himself, photography and recommendation equipment, open observations, open-ended interviews. | Surveys, structured interviews, questionnaire, scaled scores. |

*(after Sabar Ben-Yehoshua, 1995, p. 24)*
As Creswell (1994, p. 15) claims:

"...These differences are the nature of reality...the relationship of the researcher to that being researched...the role of values...the use of language and words and the overall research study (the methodological assumptions)..."

The above table indicates that indeed, referring to the present study, it was conducted based on an interpretive approach. The analysis is, to the most part, descriptive, and is based on the open-ended interviews with the headteachers and on document analysis. Furthermore, the present study did not employ the method of confirming or rejecting hypotheses, or statistical analyses. In addition, the study did not make an attempt to isolate the different variables or measure the headteachers' perceptions in a quantifiable manner. The analysis and the findings in the present study refer only to the "Bagrut 2000" headteachers' population. No control group was used, and the data were not analyzed using scale scores. In short, the study did not include any quantitative research characteristics.

In concluding, the present study is interpretive. It examines the perceptions and actions of the headteachers as leaders and managers of the curriculum change "Bagrut 2000" and its phases. It is clear that this study does not seek objectivity and that the point of view is that the world is not value free. It is obvious that the perception and point of view of the headteachers – of change, "Bagrut 2000", their schools and the teachers – fits the approach that the world is socially constructed and subjective. Moreover, this study was less interested in numerical values (except for the general data about the headteachers and the schools themselves) and more
interested in the perceptions and meanings that the headteachers gave to the implementation of the change. The present study was interested in the headteachers’ perceptions, interpretations of their experience in the change, as well as to the contribution of the change to the school. In other words, it was the process itself which was interesting. The interpretive stance was appropriate in this study also because the data were analysed inductively. Furthermore, it didn’t wish to confirm or reject hypotheses that were set at the beginning of the research. Last but not least, this interpretive approach was appropriate for this study as it examines the interpretation and the perceptions of the headteachers — whom the research focused on — which is one of the main characteristics of the qualitative paradigm.

Johnson (1994, p. 7) claims that such a research is:

"...Interested in the complexities of human decision-making and behavior..." and that "...Social research should seek to elicit 'meaning' of events and phenomena from the point of view of participants..."

To sum up, the choice of the research approach has been determined according to the characteristics of the research and its goals.

**Research Methods**

Research Methods have been classified in many different ways. Robson (1993, p. 40) distinguishes three main strategies: experiments, surveys and case study.

"...The experiment is measuring the effects of manipulating one variable on another variable...The survey is a collection of information in standardized form groups of people...Case study is a development of detailed, intensive knowledge about a single 'case' or of a small number of related 'cases'..."

Prior to presenting the rationale for the research method used in this study, it should be mentioned that two out of the three main strategies, namely the
experiments and the 'case study' approach, were found inappropriate for this research. Yin (1989) claimed that case study is in fact an empirical research that attempts to examine a phenomenon within the fabric of day-to-day life. Case study in practice means observing human activities at a certain time and place (Stake, 2000, p. 442). Robson (1993) stressed that the main characteristic of this form of research is its focusing on a certain case. The case can be a person, an organization, or any other analysis unit defined as such by the researcher.

As for the second strategy, the experiment, it was found, that by definition, the analysis and examination of the perceptions of curriculum change of Israeli headteachers cannot be located within this strategy. This study looks closely at the perceptions of change and the experiences of the headteachers that introduced and implemented the curricular change of "Bagrut 2000". According to this fact, it can be regarded as if a survey approach was chosen for the investigation. This approach was found as the most relevant research design because the information from the semi-structured in-depth interviews was a collection of standardized issues collected from 19 headteachers. Although this study uses in-depth interviews, they are used as a survey of quite a large number of schools, and it will enable generalization about them since the entire population of the pilot schools for "Bagrut 2000" is 22 secondary schools.

A very important note regarding this is that whilst the survey indeed consists of a method that characterizes the positivist approach, in this study the survey is referred to in the literal sense. This is because the survey covered most of the headteacher population (19 of the 22). Moreover, since the research was based on
semi structured in-depth interviews of the headteachers and the analysis of their perceptions using an interpretive approach, which is fundamental in qualitative research, it can be safely determined that the research is indeed interpretive.

According to Bell (1987) and Johnson (1994, pp. 13-15), the aim of a survey is to obtain information. The information can be analysed and patterns extracted and comparisons made. As mentioned earlier, this study was conducted as a survey of the schools' headteachers. The goal was to closely examine the whole population of headteachers whose schools participated in the pilot of “Bagrut 2000”, 22 headteachers in all. The reality was different. In the course of the research, it turned out that two headteachers in religious schools did not agree to participate in the research, and it was chosen not to approach another headteacher, from an Arab village, due to the difficult political situation in Israel. The interviews were held in the schools, in the environment in which the headteachers operate. The interviews were scheduled ahead of time with the interviewees (app. No.1).

As Miles and Huberman (1994, p. 27) argue:

"...Qualitative researchers usually work with small samples of people, nested in their context and studied in depth..."

According to Cohen and Manion (1994, p. 83), a survey is very popular in educational studies because it is a descriptive method. The above researchers claim that:

"...Three prerequisites to the design of any survey are the specification of the exact purpose of the enquiry; the population on which it is to focus; and the resources that are available..."
The exact purpose of the study, meaning the perceptions of curriculum change of the headteachers is clear.

Since the study deals with the perceptions of the headteachers as to the curricular change in “Bagrut 2000”, as expressed in the interviews of the headteachers whose schools went through the actual change process (the schools chosen for the pilot project), the research population is indeed defined and focused. Furthermore, as mentioned, nineteen of the twenty two headteachers indeed took part in the current research.

Robson’s (1993, p. 124) opinion is that:

"...The typical survey is passive in that it seeks to describe and/or analyzes, even in some cases to explore, some aspects of the world out there as it is. This often includes or even focuses totally on what the individuals surveyed think or feel about the topic...."

(Robson, 1993, p.124)

Undoubtedly, the present study aimed at analyzing, exposing, and discovering the headteachers' perceptions. This group of headteachers makes up a world in its own, and so an attempt was made in this study to focus solely on the headteachers' perceptions, thoughts and actions, as to the subject of curricular changes in Israeli secondary schools.

The advantages in surveying the perceptions of change of the headteachers are that they provide a relatively simple and straightforward approach to the study of attitudes, beliefs and motives.
The Research Tools

Johnson (1994, p. 37), Bayth-Marom (1996, p. 29), Robson (1993, p. 187), and others claim that the four main tools for social research are the questionnaire, interview, observation and documents. There are some fundamental differences between them. According to Johnson (1994, p. 37):

"...The essence of a questionnaire, as a research tool, is that it is in the hands of the respondent, and is completed by him or her..."

Whilst interviews:

"...Are initiated by the interviewer, with a view to gathering certain information from the person interviewed..."

(Johnson, 1994, p. 43)

Questionnaire empowers the respondent and gives him or her the possibility to think whether or not to complete the relevant data. The interview gives the power to the interviewer.

As for observation, Robson (1993, p. 190) describes it:

"...As the actions and behaviour of people are a central aspect in virtually any inquiry, a natural and obvious technique is to watch what they do, to record this in some way and then to describe, analyse and interpret what we have observed..."

In general, observation can take a variety of forms. It is commonly used in an exploratory phase and seeks to find out what is going on. Whilst the researcher is involved to a great extent in an observation, in the fourth main tool – in document analysis - the researcher is not involved at all. In other words, the degree to which the researcher is involved is the most fundamental difference between observation and document analysis.
In the present study, the main research tool was a semi-structured interview (App.No.2). This study also used document analysis. Prior to justifying the choice of these research tools, it should be noted that questionnaires and observations were ruled out from the start. Since the process of implementing “Bagrut 2000” took place over a period of three years, simultaneously, in all of the 22 schools that took part in the pilot, it was clear that examining the headteachers’ perceptions using observations would be impractical and impossible. In addition, observations are usually used in order to discover phenomena by recording the events that take place. In the present study the focus is not on the change per se, but rather on the headteachers’ perceptions regarding “Bagrut 2000” change, thus ruling out the use of observations. As to using questionnaires, since the research question focused on the headteachers’ perceptions regarding curricular changes, taking into consideration their managerial and leadership perceptions and styles, it was necessary that any research tool used would provide ample room for the headteachers to present their perceptions. In questionnaire-based studies the researcher in effect hands the control over to the subject – the subject can choose not to answer a question if he/she does not want to, and the researcher does not have the ability to rephrase or re-ask a question. Questionnaires also limit the subjects’ responses, whilst in this type of research one of the prerequisites is allowing the headteachers to express themselves extensively.

In the present study, the use of in-depth interviews is justified by the facts that the aim was to seek the headteachers’ perceptions, interpretations and points of view about implementing curricular changes.
Burgess et al. (1994, p. 135) offer three reasons for choosing interviews as the principal method of data collection:

"...First, interviews can allow the researcher access to past events. Second, they can allow access to situations at which the researcher is not able to be present. Third, they can allow access to situations where permission is refused for the researcher to be present..."

(Scott and Usher, 1996, p. 65)

In this study, the first and second possibilities were taken into consideration. Choosing the interview as the research tool was backed up also by Wellington's (1996, p. 21) opinion that:

"...One of the most rewarding and potentially informative ways of carrying out small scale research is the interview..."

The document analysis was used in this study only to collect general information about the schools, such as the structure of the schools, number of teachers, years of existence of the schools, the educational stream, the school's population, etc.

The Interview

Johnson (1994, p. 43) describes the distinctive features of interviews and claims that:

"...Any interview is a social encounter between two people, but any social encounter is not an interview. Interview has a particular focus and purpose. They are initiated by the interviewer, with a view to gathering certain information from the person interviewed..."

Robson, (1993, p. 228) argues that:

"...Interview appears to be a quite straightforward and non problematic way of finding things out...."
The interview is a research tool, according to which the researcher gathers the information using direct questions, usually during a face-to-face conversation (Bayth-Marom, 1996, p. 33). The formal interview is candid, and requires the interviewee’s cooperation. Sabar Ben-Yehoshua (1995, p. 63) claimed that interviews have three main forms: ethnographic interviews, standard structured interviews which are timed, and guided-controlled interviews which are not timed. The open-ended ethnographic interview is, in essence, a linguistic exchange, resembling a friendly conversation (Spradly, 1979). The latter type combines two processes that complement each other: the first, the process of creating a linkage between the interviewer and the interviewee - the researcher encourages the subject to speak, and attempts to create a sense of faith that would enable the free flow of information. The second form of interview is the standard structured interview. In such an interview, the wording of the questions, the general structure and the order are preset, and the interviewer does not add anything. The third form is the guided-focused interview. The interview is conducted usually according to written guidelines which specify the topics related to the goals of the research, though the wording of the questions or their order is not pre-determined. The interviewee’s responses are not limited, and the researcher can react to new points that the subject raises. Usually, the interviewer does not initiate bringing up new points (Sabar Ben-Yehoshua, 1995).

Since the present study examined the headteacher’s perceptions in a wide array of areas (change, contribution of the headteacher, motivation, methods of implementation, learning from other headteachers, advantages of the change, oppositions, etc.), the most appropriate tool was found to be the semi-structured interview. As mentioned before, the interviews in this study were conducted only after trust was established between the interviewer-
researcher and the subjects (this will be further explained in the 'ethics' section), which contributed to the free flow of information.

In this study, interviews were held with the headteachers. Since “Bagrut 2000” is the most innovative and talked about curriculum change in the educational community, and is given much attention, the teachers, students and coordinators are tired of filling questionnaires and being interviewed. In addition, the decision to interview only the headteachers was due to several facts. First, the issue of this research is the headteachers. Second, the fact that whilst “Bagrut 2000” was researched extensively, no one had yet researched the perceptions of change of the headteachers, as well as the process of instilling curriculum change in the context of the headteacher as the leader and manager of the change. This study interviewed most of the headteachers in their schools, except for two headteachers: the first, from a religious school in Beer-Sheva (a city in the south of Israel) who requested to be interviewed in Tel-Aviv, and the second headteacher from a school in a little town in the north of Israel, who started managing a school in Haifa (a big city in the north of Israel). All of the interviews were held in the headteachers' offices, during a face-to-face conversation.

There are several distinctions of the types and styles of interviews. Moser and Kalton (1971, p. 16) see the alternative types as ranging somewhere on what they call “a continuum of formality”. At one extreme is the completely formalized interview whereby the interviewer behaves as much like a machine as possible. At the other end, is the completely informal interview, in which the shape is determined by individual respondents. The more standardized the interview, the easier it is to aggregate and quantify the results. According to Bell (1987), most interviews carried out in the main data-collecting stage of the research will come somewhere between the completely structured and the completely unstructured point on the continuum.
The advantage of a focused interview is that a framework is established beforehand and so analysis is generally simplified. This is important for any research, but particularly for limited-time studies...

(Bell, 1987, p. 94)

According to Bell (1987, pp. 92-93), a structured interview can take the form of a questionnaire or checklist that is completed by the interviewer rather than by the respondent. Johnson’s (1994, p. 45) idea about the structured interview is that:

"...The prime aim of a structured interview is to get equivalent information from a number of interviewees, information which is uncontaminated by subtle differences in the way in which it is asked for..."

A more flexible interview is the semi-structured interview. Usually it is used to collect equivalent information. Bayth-Marom (1996, p. 17) argues that the content of the interview can be prepared in advance and consists of a set of items. These items may be subject to change during the course of a semi-structured interview. The items are usually questions, mostly open ended.

"...The interviewer has worked out a set of questions in advance, but is free to modify their order based upon..."
the perception of what seems most appropriate in the context of the 'conversation'...

(Robson, 1994, p. 231)

Johnson (1994, p. 45) thinks that both structured and semi-structured interviews have similar aims of collecting equivalent information from a number of people. But, she claims that in the semi-structured interview:

"...A more flexible style is used, adapted to the personality and circumstances of the person being interviewed..."

As was mentioned before, the other end is the unstructured interview that is used in exploring an area in preliminary research, or at a later stage: "...The interviewer has a general area of interest and concern, but lets the conversation develop within this area..."

The interviews in the present study were semi-structured. Although the topics the headteachers were supposed to refer to were pre-determined, there was flexibility in the order of questions and topics presented during the interviews. Thus, the interviews could be navigated according to the course the conversation took, the special circumstances and the subject's personality. It should be mentioned that despite all this, all of the questions were asked in all of the interviews, without exception.

Cohen and Manion (1994, p. 272) agree with the distinction between the structured and unstructured interviews, but add to them the non-directive interview, as well as the focused one.

"...There are four kinds of interviews that may be used specifically as research tools: the structured interview; the unstructured interview; the non-directive interview; and the focused interview..."
The above researchers claim that the structured interview is suited to the conduct of a large number of interviews. Moreover, the principle underlying a structured interview is consistency, used throughout the application of a standardized stimulus to the respondent, with the interviewer measuring and recording the responses. They claim that in the non-directive interview, derived from the therapeutic interview, freedom is given to the respondent to express his/her feelings. In a focused interview, the person interviewed is known to have been involved in a particular situation. The actual interview is focused on the subjective views of the people who have been exposed to the situation.

Powney and Watts (1987, p. 18) prefer a different distinction. They distinguish between respondent and informant interviews. Whilst in the respondent interview the interviewer remains in control throughout the whole process, in an informant interview, the interviewee’s perception, within a particular situation or context, is at the center. It is clear that correspondingly, both fully and semi-structured interviews are typically respondent interviews. On the other hand, from the point of view of the interviewer, an informant interview inevitably appears unstructured. In both interviews:

"...It is the interviewer who constructs the agenda which, at some later stage will be used to direct the analysis, the interpretation of data and possibly the reporting..."

(Powney and Watts, 1987, p. 19)

The kind of interview that was chosen for this study is the semi-structured one. The justification for its use is that it is a straightforward way to generate data, and it is the most meaningful way to seek the headteachers’ perceptions, knowledge, interpretation and understanding the implementation of a change in general, and
“Bagrut 2000” in particular. Moreover, the semi-structured interview allowed for the collection of more information that otherwise would have been dispersed. It should be mentioned that in some interviews, some aspects of the unstructured interviews took place. In some cases, the headteachers expanded on particular subjects and issues that were relevant elsewhere in the interview.

According to Robson (1993, p. 234), the conventional sequence of the interview is as follows:

"...Introduction- interviewer introduces him/herself, explains purpose of the interview, assures of confidentiality, asks permission to tape/or make notes...Warm-up-easy, non-threatening questions at the beginning to settle down both...Main body of interview-covering the main purpose of the interview in what the interviewer considers to be a logical progression. In semi-structured interviewing, this order can be varied...Cool off-usually a few straightforward questions at the end to defuse any tension that might have built up... Closure-thank you and goodbye..."

The Issues Relating to the Interview

In the present study, the issues of the interviews were derived from the literature review and included the following subjects: general background of the school and the headteacher, the motives, purposes and reasons for entering “Bagrut 2000”, the different stages in implementing the change in school, difficulties in the implementation process, and the good points in the process. Some more issues dealt with the most important element in the implementation that would help in introducing changes in the future, the headteacher’s contribution to the change process, oppositions to the change process and the headteacher’s top three list for implementing a change. It was important to know if the headteacher liked to learn
from the experience of other headteachers, as well as the contribution of the change process to the school's day to day operation in general, and the contribution of “Bagrut 2000” to the implementation of other changes in the school, in particular. The last issue that was discussed was the relationship with the project's administration.

As noted earlier, the content of the issues was influenced by the literature review. The topic of change serves as a common thread throughout all of the issues of the interviews. In particular, the issues that emphasized the topic of change dealt with: the different stages in implementing “Bagrut 2000”, the oppositions to the change process; and the difficulties in the implementation process. The issues that elaborated the headteachers' perceptions of management focused on the difficulties in the implementation process, the contribution of the change process to the school’s day to day operation, the learning from the experience of other headteachers and the most important element in the implementation that would help the introduction of changes in the future. The issue that focused on the headteachers’ top three list (for implementing a change) gave a very good picture of their perceptions of leadership which is appropriate to a change situation. Furthermore, the perceptions of leadership and management were also discussed in relation to the issues focusing on the headteachers’ contribution to change process and the good points in the process.

The above issues represent the four format questions according to Cohen and Manion (1994): the direct and indirect questions, specific and non-specific, inviting factual answers or opinions and statements or questions. Most of the issues of the
interview were direct and specific. Some were inviting factual answers and inviting opinion whilst only a few were issues of statements.

In carrying out the interviews a trial had been made to follow the advice offered by Robson (1993, pp. 232-233) and to:

"...Listen more than you speak...Put questions in a straightforward, clear and non-threatening way...Enjoy it...and take a full record of the interview..."

The Procedures of the Interviews

Each interview started by calling the school in order to set a date and time for interviewing the headteacher. Prior to each interview, a fax was sent to the headteacher confirming these details and specifying the purpose of the study and the topics of the interview (App. No.1). At the beginning of each interview, the subject of the thesis and the purpose of the interview were explained, and it was also mentioned that the interviewer is the Social Studies' staff coordinator in the “Bagrut 2000” project at “Harishonim” secondary school. The process of the interviews was that they were recorded (with the interviewee’s permission) and at the same time notes were taken. Three weeks later, the full transcript of what was recorded was sent to the headteachers and their approval for the interview was required (App.No. 3). The approval came back about 2 to 4 weeks after the script was sent. Only in 3 cases was it necessary to call and remind the headteacher about the approval. The last stage was the translation of the interviews into English. The translation captured the spirit of the spoken language, rather than translating the interviewees’ words literally.

It is important to add that in the course of the interviews not many issues were mentioned before the headteachers began to ‘flow’ in response to questioning. The
impression gained by the interviewer was that the interviewees really wanted to talk. The writer would contend that the reason for this is the fact that whilst "Bagrut 2000" is the most talked about curriculum change in the educational community and was researched extensively, at the time of the interviews, no systematic research had been undertaken into the perceptions of the headteachers. As the key of leadership and management figures in the introduction of change, the issues of leadership and management became a major part of the data generated although they were not specially identified in the interview schedule.

The Specialized Interview:

Johnson (1994, p. 47) adds another type of interview, the specialized one. This interview is individually tailored for particular role-holders or individuals. The aim of such an interview is likely to be the acquisition of complementary data. The interview with the head of "Bagrut 2000", Dr. Ben Eliyahu, qualifies as an 'expert interview'. The interview, which was also semi-structured, was 'custom-tailored' for the subject. The topics included issues about the acceptance of the different schools to the pilot of "Bagrut 2000", the expectations from the headteachers, the issue of accountability, the advantages of the project, as well as other issues that completed and complemented the information derived from the interviews with the headteachers.

Document analysis

Another tool for information and the analysis of this study was documents. Sabar Ben-Yehoshua (2001, p. 107) claims that schools are known for publishing
great amounts of reports, circulars, directives and other documents that provide information about the schools. These documents are usually accessible to researchers, and can be used for broadening the researchers’ knowledge about the school. Johnson (1994, pp. 58-59) explained that such documents should be seen as available content rather than as a research tool specially prepared for any specific research. Indeed, the school documents used in the present study were existing documents used by the schools for publicity and advertising. The derived information analyzed included background and general information only.

**The Sample of the Schools**

According to Dr. Ben-Eliyahu, the head of “Bagrut 2000”, 50 headteachers showed interest in the project.

“...We summoned them together with the chairman of the pedagogical secretariat. We gave them more information and we elaborated about ‘Bagrut 2000’. From the 50 headteachers only 22 applied for the project...”

Table No. 2 presents the distribution of the schools that were involved in the pilot of “Bagrut 2000”.

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Table No. 2: The distribution of the schools according to regions and sectors:

<table>
<thead>
<tr>
<th>Region</th>
<th>General</th>
<th>Religious</th>
<th>Arab</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerusalem</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Tel-Aviv</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Central Region South</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>South</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Settlemental Education</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>North</td>
<td>2</td>
<td>-</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>5</td>
<td>3</td>
<td>22</td>
</tr>
</tbody>
</table>

The head of “Bagrut 2000” explains:

"...I have stated that there were 22 headteachers out of the 50 that applied for the project, but we paid a lot of attention to the representation of the different sectors. And so we have 14 general education schools, 5 religious schools, 3 Arab schools... We emphasized the issue of true representation..."

Although the intention of this study was to examine and analyze the whole population of the above headteachers, it turned out that only 19 headteachers agreed to participate in this study. Two headteachers from religious secondary schools did not agree to take part in the study. The security situation in Israel made it impracticable to visit one additional school and thus interviews with that headteacher were considered inappropriate because of such practical considerations. As a result, although the schools did not constitute a strictly representative sample, they did represent a range of all the sectors of state schooling in Israel.

Table No. 3 presents the distribution of the schools that are the population of this study.
Table No. 3: The distribution of the schools that participated in the present study according to regions and sectors:

<table>
<thead>
<tr>
<th>Region</th>
<th>General</th>
<th>Religious</th>
<th>Arab</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerusalem</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Tel-Aviv</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Central Region</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>South</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Settlemental Education</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>North</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>3</td>
<td>2</td>
<td>19</td>
</tr>
</tbody>
</table>

As can be seen, the schools are from all the education sectors and regions of the country.

**Ethics**

The right to research, on the one hand, and the right of the participants to privacy, on the other hand, are the key issues and the general ethical dilemma in social studies (Frankfort and Nachmias, 1992, p. 218).

The field of social sciences has been accomplished by a growing awareness of moral issues. According to Cohen and Manion (1994, p. 348), ethical issues derive from the kinds of problems that are investigated in social sciences.

"...Ethics say that while truth is good, respect for human dignity is better, even if, in the extreme case, the respect of human nature leaves one ignorant of human nature..."

(Cavan, 1977, p. 810)

Researchers confront a wide range of ethical issues, such as access to the research site or research subjects, problems such as privacy, deception, anonymity, etc. (Nachmias and
Nachmias, 1998, p. 73). The basis for research (from the ethical point of view), according to Cohen and Manion (1994, p. 350), is the issue of informed consent. It includes competence, making correct decisions (maturity) after giving relevant information, voluntarism – individuals freely choosing to take part in the research - as well as comprehension that derives from full information about the research.

The first ethical stage in conducting a study is the official permission to carry it out. The second stage is the stage in which the accesses to the schools and headteachers are obtained (Cohen and Manion, 1994, p. 356).

The present study began by requesting the permission for conducting it (on the 10th of November 1999). On the 16th of January 2000, the permission was granted by the Ministry of Education Chief Scientist. As was mentioned earlier in this chapter, the first stage of the study was calling the school and sending a fax with all the details. Before the interview started, the purpose of the study had been presented once again, as well as its method and how it would be published (as a Ph.D. thesis in the Educational Management Development Unit of the University of Leicester). Permission to record the interview, as well as to take notes had been requested. Out of the nineteen headteachers interviewed, only one did not agree to have it tape-recorded. It should be noted that the mentioned headteacher approved the transcript of the interview sent to her, without adding a word. Needless to say that all the headteachers, who participated in the study, knew, understood and were a part of the curriculum change of “Bagrut 2000”.

Although the research was conducted by the Social Studies staff coordinator of “Harishonim” secondary school - (which is one of the subjects included in “Bagrut 2000”) – no problem was encountered. It should be mentioned that “Harishonim” secondary school was the only one (out of three secondary schools) where all the
subjects of Social Studies (namely, Psychology, Sociology, Economics and Political Science) were included. The remaining two schools have made this curriculum change only in the studies of Sociology.

Another ethical problem the writer had to deal with in the course of the study was also related to my role as Social Studies coordinator at "Harishonim" secondary school. I had doubts about conducting an interview with the headteacher for the research. Since the headteacher knew I was doing the study, I presented the problem to him, and asked him to decide whether or not he would be interested in taking part in the study. Furthermore, I informed him that the study analyzes the perceptions of most of the headteachers in the "Bagrut 2000" pilot project, and so his negative decision wouldn't affect the quality of the study. I also decided that, in any case, if he did agree to be interviewed, it would be the last in the series. In the end, when the headteacher told me that he would be glad to grant me an interview, the process was the same as with all of the other headteachers – a date was set and the topics were given to the headteacher beforehand for approval. It should be mentioned that this interview, like all the others, took place in the headteacher's office. The only difference was that this one took place during the afternoon.

**Trustworthiness**

As the main paradigm of this study is the interpretive one, validity, reliability and generalization are less important whilst trustworthiness is the correct concept for such a study.
Yossifon (2001, pp. 278-279) claimed that qualitative studies are not required to have predictive validity since they are not intended for predicting the behaviour examined, only for understanding and interpreting it. Rather than predictive validity, qualitative studies are required to have structural validity (Yin, 1989; Huberman, 1994). Miles and Huberman (1994) stress the distinction between internal and external validity. The internal validity is the trustworthiness of the study, whilst the external validity is the transferability of the findings.

According to Miles and Huberman (1994), internal validity is achieved when the researcher's interpretation is confirmed by the subjects, and the response of the people in the field confirms the pattern discovered. The internal validity is derived from descriptive content, and is presented as such to the subjects. The external validity depends on the compliance of the findings with the theoretical literature. Both types of validity were achieved in the present study.

According to Sabar Ben-Yehoshua (1995), the validity of qualitative research is not predictive, but rather structural: the internal validity, the external validity and the correlation between the two. The internal validity refers to the extent to which the explanation of the observed activity has been proven as true in the researched context, and to the question to what extent the criteria chosen indeed represent the phenomenon. The structural validity refers to the extent of compliance between the criteria chosen to represent the phenomenon and the terms to which the criteria refer (Evans, 1983). The question of external validity refers to the extent to which the abstract structures and underlying research assumption are applicable also under other circumstances. External validity is usually the result of the compliance between the results of the study and the theoretical literature. Such a compliance enables generalization and abstraction of the
findings, leading to conceptualization through an analysis of the findings. According to Sabar Ben-Yehoshua (1995, p. 101), the strength of qualitative research is in its internal validity, whilst the quantitative research's strong point is its generalizability, i.e. its external validity.

The internal validity of the present study was explained in this chapter. It should be noted that the headteachers' responses to the interview topics indeed provided a clear picture of their perceptions regarding curricular change, leadership and school management. It should also be noted that every interview started with an explanation about the purpose of the interview and with clear information about the fact that the researcher was a Social Studies staff coordinator in one of the schools that had decided to participate in the pilot of “Bagrut 2000”. The researcher explained to the headteachers that her school was the only institution within which all the complex of Social Studies (Sociology, Psychology, Economics and Political Sciences) was part of the project. In addition, the researcher explained to the headteachers that any information supplied was completely confidential and that the respondents could and should be as honest and direct in their comments as possible. Consequently, the interviewees appeared relaxed and the researcher felt that the respondents had indeed been open and honest in their responses. Furthermore, since the headteachers knew that the researcher had been involved in “Bagrut 2000”, they may have been more willing to share information with someone who understood the process and its implications for the schools. As to external validity, the generalization was made about the pilot schools but not about all secondary schools in Israel.
Summary

This study mainly applies the interpretative approach for answering the overarching question: what are the perceptions of curriculum change of Israeli secondary school headteachers: leading and managing the implementation of "Bagrut 2000"? When it comes to perceptions, (in this study, the headteachers’ perceptions), the starting point is the subject, and the goal is to analyze the headteachers’ subjective perceptions from their own private experiences. I had no interest whatsoever in analyzing the results of the project – my focus was solely on the headteachers and their thoughts and perceptions regarding all that has to do with change, management and the leading of curricular changes. The research is inductive, without making an attempt to confirm any hypotheses. The research analyzes the perceptions of 19 of the 22 headteachers. In the current research, this makes up most of the research population. It should be mentioned that qualitative research uses relatively small sample groups, as opposed to quantitative research, in which the samples are much larger.

The in-depth interviews of the headteachers gave much detail and richness which provided good data for the analysis. The 19 semi-structured in-depth interviews of headteachers from 19 schools out of 22 allowed me to describe and understand the meanings of the perceptions of change of these headteachers. The choice of the in-depth semi-structured interview as the main research tool was due to the importance of allowing the headteachers to express their perceptions without losing any important information.
As a result, it allowed for making a typology about the perceptions of curriculum change in particular, as well as perceptions of management and leadership during the implementation of "Bagrut 2000" in these secondary schools, in general. Typologies are meant, essentially, to provide structure to researched phenomena. They can also be used, however, to analyze and classify the data collected, and to establish their frequency and probability within a certain system. They can be very useful in determining categories that reflect the researched reality (Sabar Ben-Yehoshua, 1995, p. 86).

The analysis and the conclusions drawn from this methodology will shed light and help in the understanding of the perceptions and actions of the headteachers who participated "Bagrut 2000".
Chapter 4: Presentation of the findings and Analysis

Setting the Scene

The presentation of the findings and the analysis of the headteachers' perceptions as to the subject of curricular change, as well as the headteachers' perceptions about the other two accompanying topics, leadership and management, will naturally be done in consistency with the over-arching question (page 23) and the research questions (page 142). This has been explained on page 142 in light of the relevant literature review. This chapter opens with the presentation and analysis of three general topics that make up, in essence, the background and foundation for the headteachers' perceptions as to the "Bagrut 2000" change. The first general topic examines the essence and type of the current change. Afterwards, the analysis will refer to the schools' adjustment to the change in conditions of uncertainty, focusing on the analysis of the headteachers' perceptions as to the "Bagrut 2000" change, according to the Chaos Theory in general and, particularly, according to the 'butterfly effect' and the 'knowledge creation' approach. These topics are common to the perceptions of all of the headteacher population examined in this study. It can be safely said that the analysis of these general topics sheds light on, and helps in the understanding of, the detailed analysis and the headteachers' typologies, as analyzed later in the chapter.

This chapter of the analysis also presents general information about the schools and the headteachers. The analysis of the perceptions of the headteachers will be done...
by creating a typology according to the different decision-making processes. It will include, for example, issues such as the headteachers' perceptions and behaviours in each stage of the change, analysis of issues such as the differences in the perceptions of the heads regarding oppositions and difficulties in implementing "Bagrut 2000", and the beliefs, contributions and motivation of the headteachers as well. At the end of the chapter, a diagram that summarizes the analysis will be presented.

The presentation of the findings and the analysis were carried out through continuously reading and re-reading the interviews. This continuous reading focused on examining the text and finding references to the research questions. Over the course of reading the interviews, the statements that clearly reflected the headteachers' actions, views and opinions (regarding the change as well as all the other issues of the interview) were marked with different colours (App. No.4). After marking all the statements and categorizing them, the identical statements and the statements that were similar in content were combined into one statement, without changing their underlying meanings.

For example, statements that focused on the headteachers' motivation in relation to implementing "Bagrut 2000" were:

"...My faith in the project's ability to change the learning process in the school..."

(Head No. 16)

Or:

"...I believed that "Bagrut 2000" is the right thing to do in the new millennium. It is the best way to change the old fashioned frontal teaching..."

(Head No. 11)
Or:

"...The ability to change the learning process
...We believed that the project would be able to 'shake up' the system from that point of view..."

(Head No. 4)

Or:

"...My assumption was that if we, the school, would be responsible for preparing the matriculation exams, we would be able to bring change of teaching, learning and evaluation methods..."

(Head No. 1)

These statements were combined into one statement: The desire to change teaching, learning and evaluation methods. It should be mentioned that these are only examples of statements relating to the implementation of “Bagrut 2000”. Furthermore, these statements relate to the teaching and learning implications of implementing “Bagrut 2000”.

**Introduction**

The headteacher is a primary figure in introducing educational changes (Inbar and Pereg, 1999). The success of the change depends on the headteacher’s involvement, support and practical assistance. All of these derive from the headteacher’s perceptions of instilling change (Fuchs and Hertz-Lazarowitz, 1992). This study will examine the different perceptions of curriculum change of 19 headteachers who were the leaders and managers of the pilot of “Bagrut 2000”.

An attempt will be made to characterize a typology of the headteachers’ perceptions, as well as to analyse and compare the perceptions of the headteachers...
in each of the types. The starting point for the typology and analysis of the
headteachers' perceptions will be the sorting and analyzing of the preliminary
decision-making process of each of the headteachers in entering the project
(entering the change, appointing a coordinator for implementing the change and
choosing the subjects that would be included in “Bagrut 2000”). According to
Bolam et al. (1993, p. 47), the process of decision-making is important and has an
impact upon the quality of the work produced. This issue was found suitable for
determining the typology since these preliminary decisions, in each of the schools,
were the actual starting point for introducing “Bagrut 2000”, or in other words, the
beginning of the initiation stage. During the preparatory initiation stage, the
headteachers were highly involved in the project, and in fact were the first to
receive information about the change. Their perceptions of the different aspects of
the change came into action from this stage on, from the moment the decision was
made to the actual implementation of “Bagrut 2000”. Three basic decision-making
patterns were found. The first, the headteacher alone decides to enter the project
(nine headteachers). The second, the headteacher reaches the decision together
with the vice headteacher or the school board members (eight headteachers). The
third type can be categorized as entering the change not following a decision-
making process – either the decision was made by the school’s supervisor (school
no. 15), or, in the case of headteacher no. 5, the teachers in the school changed the
teaching and evaluation methods prior to the Ministry of Education director’s
circular regarding “Bagrut 2000”.

As was explained in the introduction to the chapter of the literature review, the
headteachers’ perceptions of change were influenced by, and involved, leadership as
well as management issues. Since the over-arching question deals with the
perceptions of curriculum change among the headteachers, who are the leaders and managers of “Bagrut 2000”, an analysis and comparison of their perceptions concerning leadership and management styles will also be presented. Furthermore, the study will analyse the headteachers’ beliefs, motivation and contribution to a curriculum change in general, and “Bagrut 2000” in particular. In addition, the analysis will conclude the common or different stages of the implementation of the pilot of “Bagrut 2000” in the 22 schools (according to the perceptions of the headteachers).

1. General Issues:

As a basis and background for analyzing the headteachers’ perceptions of change (as expressed in the interviews), three general areas will be analyzed. First, the type of change, then, the headteachers’ perceptions about applying the principles of “Bagrut 2000” to the whole school and the third issue is the ‘knowledge creation’, resulting from changing teaching and evaluation methods. These three areas are paramount, and definitely have an impact on the headteachers’ perceptions. Moreover, these issues were found to be shared by the headteachers in the study, regardless of the types.

1.1 The Type of Change

“Bagrut 2000” is a change that takes place in an era characterized by rapid changes. Its type of change is important from all the aspects and points of view of the analysis, such as the implementation, the management and the leadership of the change. As mentioned in the literature review, change can be imposed or voluntary. According
to Fullan (1991, p. 47), change can occur as a result of events in the school or in its environment, or it can be imposed on the school by external bodies. Earl and Lee (1999) claimed that instilling change would succeed only when it was both imposed and voluntary, i.e. external stimuli and support from the school. This is the case of “Bagrut 2000”.

The combination of the change of “Bagrut 2000” is the result of an external stimulation, which is the implementation of the Ben-Peretz Committee resolutions by the Israeli Ministry of Education, as well as an application to the headteachers to take part in the pilot project. The second component of the combination, the voluntary part, is the decision to make the choice and be part of the change, as well as the desire, support and involvement in the change process of all of the participating partners (headteachers, teachers and students).

“...The change came from the outside, with a lot of enthusiasm from the inside...It was as if the change took place in a greenhouse...”

(Head No. 17)

Another characteristic of the type of change shows that “Bagrut 2000” is an educational change that has the three dimensions as are indicated in the literature (Fullan 2001, p. 39; Almore, 1990). It has new materials, new teaching approaches and pedagogical assumptions as well as new policies or programmes. “Bagrut 2000” represents an approach to reforming education according to two sets of considerations: the pedagogical aspects of the Bagrut examination structure, and the social aspects, meaning the gap between different sectors in the population. Moreover, the Revised Version (1996) of the Ben-Peretz report states that in-school alternative teaching and evaluation methods will be developed.

The essence of the change of “Bagrut 2000” is:
"...There is an apparent social need to increase the percentage of students eligible for the matriculation diploma... The committee members believe that a situation in which over half of the individuals in each age group are not eligible for the matriculation diploma is intolerable..."

(Ministry of Education, 1995, (20) p.10)

The goals of the change in “Bagrut 2000”, as defined by the Ben-Peretz Committee, and as presented in detail in the introduction to this thesis, adequately serve the moral purpose. According to Fullan (1999, p. 11), in the post-modern society, a sincere commitment to the role of the moral purpose is a necessity. However, due to chaotic phenomena, and since we operate in a world in which the path to success cannot be predicted beforehand, it is very hard to commit and execute the moral purpose. As shown by Fullan (1999, p. 1), the moral purpose plays a significant role at both the macro and the micro levels. In the micro aspect, in general, this refers to re-visiting the perceived probability of the students’ success.

In the case of “Bagrut 2000”, the assumption underlying the recommendations is that there is a strong interdependency between the achievement evaluation methods and those of teaching and learning. The committee’s recommendations are basically intended to create a pedagogical and organizational framework to enable the development of a process that will enlarge the number of students eligible for the Bagrut diploma. Moreover, the main starting point that guided the committee’s considerations in making its recommendations is that complete school education, over twelve years, should be given to all students, every year. A full 100 per cent rate of success in the Bagrut exams should be aimed for.
The second dimension of the moral purpose – the macro-level - deals with the social and democratic developments.

Indeed, according to Ben-Peretz (1998), the existing gaps between different sectors in the population, in terms of eligibility for the Bagrut diploma, have a significant adverse effect on the principles of social equality and the rights of every individual for equal opportunities in education. Furthermore, the committee’s point of view is that such a situation leads to tensions and poses great danger of polarity and social division based on social status.

The second issue that will be analyzed as background to the typology of the perceptions of the headteachers is “Bagrut 2000” as a change in times of instability.

The professional literature stipulates that changes in conditions of uncertainty, as well as openness to innovations in times of instability, are necessities (Stacey, 1991; Morrison, 1998). Indeed, the education system and the schools currently operate in a time of uncertainty and turbulence, as claimed by O’Neill (1994).

Below are two examples of these perceptions of the headteachers:

“...By definition, change processes are dynamic and full of surprises that cannot be predicted...”

(Head No. 19)

And also:

“... I think that the girls live in an extremely complex world. I think there is no single formula or ‘wonder drug’, and there are no preferences. It's a struggle...”

(Head No. 12)

However, a close examination would reveal that the schools operate “on the edge of chaos”, as mentioned by Fullan (1999). The edge of chaos has both structure and open-endedness. This was the situation at the beginning of the
change process of “Bagrut 2000”. Uncertainty was accompanied by lack of information. The headteacher of school No. 16 explains it well:

“...When you start off with such a project, you don't know exactly everything about it...”

This was acknowledged by the head of “Bagrut 2000” as well as by the headteachers. They acknowledged the need to start working, take a “leap of faith”, find solutions, and form future tools and procedures whilst instilling the change, after the initial breakthrough. The head of “Bagrut 2000”, Dr. Ben-Eliyahu described his experience on this issue:

“...The whole project, including myself— we all learned about it on the job... The whole issue is quite new in Israel and in secondary education. So to the most part, we learned about it during the process...”

One of the headteachers perceives this well by comparing the change situation to the “non educational environment”:

“...Hi-Tech products...they are rather examined in the process. The same should apply to changes in education...”

(Head No. 3)

The headteachers did not only rely on a rational process, but also on intuition. They did not know exactly what to expect, and in spite of the change being an uncharted territory, they did not hesitate and acted spontaneously.

“...The system has to feel in the gut that it needs change...”

(Head No. 2)

In general, the headteachers’ perceptions and descriptions of the change process indicate a chaotic process, even if they themselves were not necessarily aware of it.
Stacey (1991) used the Chaos Theory to illustrate the successful achievements of companies by using instability to innovate. Fullan (1999, p. 23) is more precise and focuses on operation on the edge of chaos as a key to effective change, as adaptation is most effective in systems that are partially connected. The reason for this effectiveness is that, on the one hand, too much structure creates gridlock, and on the other hand, little structure creates chaos.

The change was described by the headteachers (ten of them) as “a way of life”, or as an end in its own.

"...Change is a concept that has to be an integral part in the school's managerial culture and day-to-day operation..."

(Head No. 1)

Five of them think that the change is a progressing front:

"...You have to have an 'arrowhead' on the school, which would sweep the whole school..."

(Head No. 11)

There was a sense of necessity and a desire to innovate in making it:

"...I take changes as a challenge. Change leads to regeneration, you can call it breaking the old paradigms, looking at things differently...

(Head No. 9)

In conclusion, regarding the headteachers' perceptions of the change, elements characteristic of the change paradigm attributed to the Chaos Theory, and to living on the edge of chaos, were indeed found. As mentioned above, as well as in the literature review, the headteachers’ perceptions of
change characterize times and conditions defined as “on the edge of chaos”. Their perceptions focus on change at a time of uncertainty, planning “as you go along”, change as a way of life, and change being an opportunity and a challenge.

1.2 The Adjustment of the Schools to the Principles of “Bagrut 2000”

According to Fuchs and Herz-Lazarowitz (1992, p. 11), the system gradually adjusts itself to the change.

"... The change reached the rest of the school. All of the junior high school changed its performance assessment methods to alternative assessment. New teaching methods were introduced...”

(Head No. 10)

As mentioned, the pilot of “Bagrut 2000” is a change, which is in part imposed and in part initiated. The guidelines for implementing the change are aimed at integrating the teaching and assessing methods in all of the subjects and disciplines. For this reason, the findings and analysis, regarding the adaptation of the methods, will refer mostly to the subjects initially chosen for the project and the change, but also to the implementing of the “Bagrut 2000” teaching and evaluation methods in the rest of the school.

The adjustment of the rest of the subjects to the change of “Bagrut 2000” is one of the key concepts in the Chaos Theory – the ‘butterfly effect’. The lesson for teachers, according to Gunter (1997, p. 100) is “... To tap into and encourage the whole skills base of colleagues...”

Although each school had the right to choose up to three subjects to be included in the change of “Bagrut 2000”, the headteachers mentioned that the ‘butterfly effect’ indeed existed.
"...The project made waves in the school. Some teams began imitating the project’s team, especially in evaluation..."  
(Head No. 2)

In certain cases, the ‘butterfly effect’ was system-wide:

"...The whole school was in a frenzy of activity. All of the teachers started using alternative evaluation methods...The effects were both horizontal and vertical..."  
(Head No. 1)

Whilst in other schools it was only partial:

"...The project changed something in the atmosphere...It caused the rest of the teachers to re-think their willingness to adapt some of the project’s methods..."  
(Head No. 7)

However, the butterfly effect was always perceived as desired, and as one of the better outcomes of the change.

"...The change is not just good, it’s excellent. The project really made a difference. It changed the school; it changed our whole evaluation culture..."  
(Head No. 4)

The headteachers perceived the ‘butterfly effect’ as essential. In their perceptions it was very important that the whole system would progress, with new skills and patterns of teaching and learning. They emphasized the importance they attributed to preventing “BAGRUT 2000” from becoming an isolated “island” within the organization.

"...I didn’t want to create an ‘island’ in the teachers’ lounge...I wanted the whole teachers’ lounge to speak in one, new language..."  
(Head No. 2)
Gunter (1997, p. 100) adds and argues that when instability threatens existing patterns of behaviour, organizations are helpless. On the one hand, the old skills are redundant whilst on the other hand, the new skills and methods of teaching and learning are still in a processing design – they represent the ‘knowledge creation’.

The last general issue that is analysed is knowledge creation

1.3 Knowledge Creation

Fullan’s (1999, p. 15) point of view is that ‘knowledge creation’ is the ability to generate and learn new ideas during times of change, on the edge of chaos.

“...These teachers learned a lot...The project offered endless possibilities for learning...The teachers were given the opportunity to ask essential questions about the goals and the values...”

(Head No. 8)

Wheatley (1994, p. 117) suggests that new knowledge derives from relationships and networks resulting in intellectual capital which is an essential resource for all of the participants. Thus, ‘knowledge creation’ is a complex change. Fullan (1999) claimed that it is impossible to understand the forces of change without finding a way to incorporate new ideas.

The headteacher of school No. 19 clarifies it:

“...You could definitely identify a slow penetration of new thinking patterns and willingness to renew professionally...”

Indeed, the headteachers report that in the background of the change there were only general guidelines that came from the project’s management.

“...What was that all about?... I didn’t know exactly what was going to happen...”

(Head No. 10)
The implementation and the contents, however, were unique in each school.
The different teams formed by themselves the methodologies and methods of
operation, creating the specific knowledge.

"...What the teams did was not just making adjustment to an
existing curriculum. What they did was re-think the
curriculum, in terms of the objectives, the rational, the focus
and the process – the teaching process, development skills
and tools, etc..."

(Head No. 9)

Or as another headteacher describes it:

"...The teams turned into learning groups...One of the
good things in the project is that it is a constant learning
process..."

(Head No. 2)

A unique example of the specific knowledge was found in the description of the
headteacher of school No. 13:

"...For instance, when the subject of the country's 50th
anniversary came up, the different teams ... created
learning materials made by components that characterize
alternative teaching, teamwork and creative work..."

It should be mentioned that all of the headteachers perceived the change as a
'lever' for creating new teaching and assessing methods.

After analyzing the three general topics, an attempt will now be made to
describe the typology of the headteachers' perceptions regarding change in
general, and introducing "Bagrut 2000" in particular.
2. The Typology:

Bolam et al. (1993), Fuchs (1995), and Fullan (2001) agree that the change process starts when the decision to adopt and proceed with the change has been made. Fullan (2001, p. 67) claims that any change process is based on two conditions. The first is the existence of a situation, in which it is widely accepted that the basic change idea is a good one. The second is that the change is accompanied by empowerment and grants freedom of choice throughout the developing process.

As to the first condition, all the headteachers (except Head No.3) of all of the types perceived “Bagrut 2000” as an important change, though for different reasons. The development of the analysis of this topic will be done by examining the motivation of the headteachers to enter “Bagrut 2000”. The second condition, the empowerment of the teachers, will be examined as part of examining the leadership characteristics of the headteachers.

In the present study, as was mentioned in the introduction to this chapter, three basic types of headteachers were found, regarding the process of the decision making on entering “Bagrut 2000”.

Type 1 includes the 9 headteachers of the following schools: 1, 2, 3, 7, 9, 12, 14, 16, 18. These headteachers decided alone to participate in the change of “Bagrut 2000”.

“...Entering the project was my decision... Sometimes a decision has to be made and only afterwards presented...”

(Head No. 3)
Type 2 headteachers includes those from the following schools: 4,6,8,10,11,13,17,19. These headteachers applied a participatory strategy in making the preliminary decisions concerning entering "Bagrut 2000".

"...I perceived the teachers as my partners to the change..."
(Head No. 11)

Type 3, the typology created by the researcher, includes two headteachers from schools No. 5 and 15. In these schools changes in the teaching, learning and evaluation methods were carried out prior to "Bagrut 2000". In school No. 5, the changes of teaching, learning and evaluation methods were done in most of the subjects (except for Mathematics and Physics) a few years before the initiation of "Bagrut 2000":

"...I'd like to emphasize the fact that "Bagrut 2000" was similar to what we were already doing in the school..."
(Head No. 5)

In fact, in this school, entering "Bagrut 2000" did not mean changing much in the teachers' perceptions. "...We searched for different ways to evaluate the achievements of students who were taught using alternative teaching methods...".

In the second school (No. 15), two subjects, Biology and Art, were at that time in the midst of changing the teaching, learning and evaluation methods whilst the History's staff was looking for different methods.

"...The school invests great efforts in providing the students with supplemental courses in the area of developing learning skills....The learning itself is done in a variety of methods..."
The perceptions of these two headteachers contributed and strengthened the analysis of the perceptions of the entire group of headteachers whose schools initiated the pilot of “Bagrut 2000”. The comparison between the Type 3 headteachers and the headteachers of the first two types assisted in the clarification of the headteachers’ perceptions by providing an additional and very helpful perspective. For example, the perceptions of the heads, regarding oppositions to the change show differences between the first two types but perceptions of Type 3 supported the perceptions of Type 2 headteachers. In other words, when the change is a result of mutual decision and collaboration, the rate of opposition is small. Moreover, the isolation of these two headteachers as a type in itself contributed to the conclusions of this study. For example, the headteachers perceive their contribution to the success of the implementation of the change in accordance with the initial decisions. This conclusion is based on the contrast between Type 1 and 3 and the similarity between Type 2 and Type 3. In other words, collaboration and collegiality are typical to Type 2 and Type 3 and as a result, the heads do not perceive their contribution the same as that of Type 1 headteachers who did not reflect collaboration and collegiality.

2.1 Type 1: The Headteacher Decides Alone to Enter “Bagrut 2000”

As mentioned, this group of headteachers decided on their own to enter the change. It seems that a gap exists between their actual decision-making practice in this case, (the headteacher decided alone to enter “Bagrut 2000”), and their basic views as to how changes should be introduced into the school. This gap indicates differences in the perceptions and interpretations of change
of these headteachers, as well as the way they perceive their leadership and management styles.

For example, the decision of headteacher No. 14 to join “Bagrut 2000”, as well as the decision about the subjects that will be included in the change, belong solely to the headteacher. Nevertheless, his perception is different:

"...If the change is a private whim of the headteacher it won’t work... I mean, that if you don’t have the cooperation from the start, you don’t stand a chance... If you feel that it is only you, that you have to constantly push, and it doesn’t come out of a genuine belief in the need for that change, it won’t work...”

(Headteacher No. 14)

In some cases, there was awareness of the gap between the action and the theory. In other words, some headteachers knew that their decision-making regarding the change of “Bagrut 2000” was not in accordance with their perception.

"...In ‘Bagrut 2000’ I decided to go for it. That wasn’t right...”

(Head No. 2)

But, they have explanations:

"...I decided to go for it, it was my decision. How should it be done? That was for the teachers to decide...”

(Head No. 3)

Or, another explanation, which is not less important:

"...I decided alone. I don’t know if it is good or bad, but that’s the way it is... We are a people without a tradition or democracy...”

(Head No. 7)

Another two headteachers (12,14), expressed their satisfaction with the decision-making process:

"...I think I would have done it the same. That’s the way decisions are made. It works for us and we’re OK with it...”

(Head No. 12)
"...I'd like to say that what I did was right, and I would have done the same all over again..."

(Head No.14)

Whilst the decision to introduce "Bagrut 2000" was an extremely important one, the first stage in the process included reaching other important decisions, such as appointing a "Bagrut 2000" coordinator, as well as which subjects would be included. The results show that in the Type 1 category, five headteachers (1, 2, 3, 9 and 18) made the decision about the project coordinators by themselves, whilst three others (7, 12 and 16) assumed the role of project coordinator. Only headteacher No.14 decided together with the board members who the project coordinator would be.

The last decision made at this stage was choosing the teams that would be included in the change. All of the headteachers, with the exception of headteacher No.7, decided alone which teams would be included in "Bagrut 2000".

Table No. 4 presents the above data:
Table No. 4: Type 1 - The process of decision-making:

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<td>The headteacher decides alone to enter “Bagrut 2000”</td>
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<td>The headteacher with the school board appoint the coordinator</td>
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</tr>
<tr>
<td>The headteacher decides which team will be included in “Bagrut 2000”</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The headteacher allows the different teams to submit requests to be included in “Bagrut 2000”</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The findings indicate that the nine headteachers made all of the major preliminary decisions regarding “Bagrut 2000” by themselves. They decided alone whether or not to enter the project, they appointed a project coordinator (in three out of the nine cases the headteachers themselves served as project coordinators), as well as which teams would be included in the project. Nevertheless, the headteachers’ perceptions of this issue involved collegiality.

"...I thought that I would choose the teams, and together with them set the criteria that would be shared by all of the teachers..."

(Head No. 2)

Furthermore, cooperation and collaboration were important as well:

"...I made the decision. I am a teamwork person. So even though I made the decision, it was clear right from the start that we are
going to choose two teams that we knew in advance would cooperate..."  
(Head No. 18)

"...Sometimes a decision has to be made and only afterwards presented to the teachers, to the teams...My idea of being a headteacher is initiating ideas and letting other people take it from there..."  
(Head No. 3)

There were other perceptions also. As mentioned, three headteachers (7, 12 and 16) also serve as project coordinators. Two of them (12 and 16), typical of Type 1 headteachers, also made the decision regarding which subjects would be included in the project on their own. These headteachers’ perceptions of their being project coordinators as well as choosing the learning subjects for the project by themselves, could reflect their authoritative and centralist management styles.

"...We forced them. Maybe it was different in other schools, but we had to force them..."  
(Head No. 16)

"...It was natural that I become the project coordinator...I took over the position naturally...It was important to me...I think that if I weren’t so stubborn, it wouldn’t have worked...I had latitude, total freedom..."  
(Head No. 12)

Only headteacher No. 7 allowed the different teams to submit requests, and indeed chose the teams that did:

"...When I told the teachers about the Ministry of Education’s offer, and my decision to enter the project, the History and the English teams asked to be included in the project, and I agreed. They volunteered for the project..."  

And he has explanations:

"...My nature is not to interfere until it is imperative that I do so..."
The remaining headteacher in this category (No.14.) reached the decisions to enter the project and which subjects would be included in it by himself. However, the project coordinator was appointed by the school board. This should not be seen as a different decision-making pattern since the project coordinator is a member of the school board. It was important for the headteacher that the project coordinator be from one of the teams that were chosen for the project. He “tailored” her appointment so that it would fit this approach. The decision was kept as an in-management decision that was directed by the headteacher.

"...The project coordinator was also the grammar coordinator. She was on the school board and really got into the project..."

(Head No.14)

The findings and the above analysis clearly indicate, then, that eight out of the nine headteachers in the Type 1 category indeed were directly responsible for all three major decisions in the preliminary stage of the change. Only headteacher No.7 granted the different teams in the school the freedom of choice whether or not to be part of the project. Still, it should be noted that this headteacher also served as project coordinator.

A different way of decision-making belongs to the headteachers of Type 2. Following is the sorting and analysis of this issue.

2.2 Type 2: The Headteachers Reach the Decisions in Cooperation

Every change begins with decision-making. As mentioned, entering “Bagrut 2000” required three preliminary decisions: entering the change process itself,
appointing a project coordinator and choosing the subjects/teams that would implement the change. These three decisions marked the beginning of the initiation stage, and in fact determined whether or not the change would actually take place.

The analysis of the way these three decisions were made will be done for each of the three separately and in the same manner as in the Type 1 analysis.

The first decision to be analyzed will be the one that was chronologically the first: whether or not to be part of the pilot of “Bagrut 2000”.

The analysis of the decision-making patterns of the Type 2 headteachers shows that the most common pattern was sharing the information and, as a result, the decision itself with the whole school board. Five headteachers (4, 8, 13, 17, 19) applied this decision-making pattern.

“...I presented it to the school management, and it was decided that we would go for it. The decision, then, was mine together with the school management...”
(Head No. 17)

A more precise description of the process was given by the headteacher of school No. 19:

“...I raised the subject of 'Bagrut 2000' before the school's management not before distributing copies of the Ben-Peretz report and not before I received comments. The school's management decision was to submit candidacy to participate in the project...”

The rest of the headteachers (6, 10, 11) reached the decision about entering the project by discussing it with different position-holders (head No. 6), or the whole faculty, during the pedagogical council assembly (heads No. 10, 11).
"...I talked to people on the staff, some were more enthusiastic about the idea, and some less...I consulted the Yeshiva manager, and he was apt for it. The English coordinator was enthusiastic about the idea. So was the History coordinator. The Talmud staff was more conservative..."

(Head No. 6)

As to choosing the teams, the Type 2 headteachers, without exception, reached this decision together with other people or bodies. Four headteachers (4, 8, 10, 17) made the decision together with the school management.

"...The decision was finalized in the limited management team, and brought directly to the subject teams..."

(Head No. 4)

Three other headteachers (6, 11, 13) recommended certain teams to enter the change, but emphasized during the interviews that there was no coercion whatsoever.

"...We brought the idea to the subject coordinators in both subjects, and asked their opinion, whether they would want to go for it..."

(Head No. 13)

Or:

"...I proposed History, but if the teams wouldn't have shown interest, I wouldn't force them..."

(Head No. 11)

Only one headteacher (19) announced the decision to enter the project during the pedagogical council assembly, and asked the staff coordinators to convene the teams and make a decision.

"...After a briefing, every subject teaching team discussed 'Bagrut 2000'...At the end of the evening nine workgroups submitted their candidacy..."

The findings show that the third decision, appointing a project coordinator, was made in five schools (6, 11, 13, 17, 19) in a non-collegial manner, i.e. either the
headteacher himself was the project coordinator (head No.6), or the headteacher appointed the coordinator without consulting others.

"...I appointed the Bible coordinator to be project coordinator..."
(Head No. 13)

According to Sarason (1982), the success of a change depends on the headteacher's ability to combine a good relationship with the staff together with authority. Moreover, it should be mentioned that these findings come as no surprise, since in Israel, the secondary school teachers' union regulations indicate that the headteacher has the sole prerogative to appoint all of the position holders (with the exception of the vice headteacher) with whom he or she has to work. It seems that these headteachers were used to this method of operation. Furthermore, it seems that in reaching this decision there is similarity between the Type-1 and the Type-2 headteachers. However, since the Type 2 headteachers, by definition, involved their staff more, they did not always feel comfortable when the decision was solely their own, and was reached without consulting or taking the needs of others into consideration.

Headteacher No. 11 mentioned in the interview that this did not work:

"...I appointed the History coordinator as coordinator for 'Bagrut 2000' but it didn't work..."

Still, three other headteachers (4, 8, 10) made the decision of appointing the project coordinator together with the whole school board.

"...At that early stage I and the management team asked the literature coordinator to become the project coordinator..."
(Head No.10)
Following is a summative table presenting the preliminary decision-making processes of the Type 2 headteachers:

Table No. 5: Type 2 – The process of decision-making:

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>The headteacher together with the school board make the decision to participate in “Bagrut 2000”</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The headteacher together with different position-holders or all the teachers decide during the pedagogical council assembly</td>
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<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School board or school management choose teams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>The headteacher recommends certain teams to be included in “Bagrut 2000” without coercion</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The headteacher presents final decision to staff coordinators/pedagogical council, each team decides independently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School board appoints coordinator</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The headteacher appoints coordinator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>The headteacher is the coordinator</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

In conclusion, it seems that all the headteachers reached the decisions whether to enter the project and which teams would be included, in a cooperative and non-coercive manner. Appointing the project coordinator was not always done in the same way, though an explanation for it has been given. The overall decision-making process indicated the beginning of collegiality and collaboration.

2.3 Type 3: The Headteachers Begin the Changes Prior to “Bagrut 2000”

As mentioned in the introduction to this chapter of the analysis, Type 3 includes 2 schools. In the first case (school No. 5), the teachers of the school changed the teaching, learning and evaluation methods prior to the Ministry of Education director’s circular regarding “Bagrut 2000”.
"...'Bagrut 2000' was similar to what we were already doing in the school... We were there before the project started..."

(Head No. 5)

In this school, up to the 11th grade, the teaching and evaluating methods were in accordance with the principles of "Bagrut 2000":

"...In our school the pedagogical change took place at the time in all learning subjects except for Mathematics and Physics... We already started to experiment with alternative evaluation even before we knew it was called a portfolio... We didn't need to change much in the teachers' perceptions..."

In the second case (school No. 15), three study subjects were already in the midst of change processes. Biology and Art were already taught according to the principles of "Bagrut 2000", whilst the History teachers searched for changes.

"...Biology was already taught in the spirit of the project and so was the Art team with a creative coordinator that was constantly changing and busy with renewal... The History team kept mentioning that a change should be made. All six teachers on the team were seeking a change in the teaching and evaluating methods..."

It is important to mention that School No. 15 is located in the West Bank territories. The geopolitical situation and the political unrest affected the progression of the headteacher, the teams and the students. The principles of "Bagrut 2000" were not altogether unknown to the teachers in this school.

The in-depth interviews indicate that the two headteachers doubled also as project coordinators, though for different reasons. Headteacher No. 5 didn't see herself as project coordinator per se. She simply assumed the
responsibility over the implementation of “Bagrut 2000” and the communication with the project’s administration. Since her school already operated in the spirit of the project, it was only natural that the role of coordinator be reduced to the managerial and technical aspects:

“...My staff is not one that just receives orders. I assumed the responsibility for setting the boundaries where I felt the Ministry of Education exaggerated...”

On the other hand, headteacher No.15 perceived her role as coordinator as one of leadership:

“...I coordinated the process. I sat with the teachers, I explained the processes and I absorbed everything...I was definitely the leader...”

The third decision, prior to actually beginning the change, as to which teams would be included in “Bagrut 2000”, was also reached differently from the way it was made by the Type-1 and Type-2 headteachers. Headteacher No.5 was interested in entering “Bagrut 2000” with all of the school’s study subjects. The way she saw it, the guideline that restricted the number of subjects in “Bagrut 2000” to three, meant that each student was entitled to study three subjects included in the project. Since this was not authorized, subjects with difficulties were those that were eventually included. Only two subjects were defined as such:

“...It was important that English and History would be included in the project because of their difficulties. English and History teams thanked me for paying them money for work they would have done anyway...I had to explain to the other teams why they weren’t included...”
As for headteacher No.15, (as mentioned) three teams – Biology, Arts and History – were already skilled in the principles of the change. However, only two of the three were included. According to the headteacher's decision, the biology coordinator was not up for the job:

"...She wasn't the right person, she couldn't cope with limitation from the project administration. For these things she was not open...."

In conclusion, the process of all of the three decisions made, as described above, derives from the reality, in which the changing of teaching, learning and evaluating methods had been done prior to "Bagrut 2000".

3. General Information:

General information about each of the different types will be compared to the other two in order to find the unique items that differentiate each type from the other two, or the common items that unite the headteachers that have participated in the pilot of "Bagrut 2000".

The following table demonstrates the distribution of the different types according to general data about the schools, such as the structure of the schools, the educational stream, years of existence of the schools and the number of teachers and students. The distribution of the schools is from Be'er Sheba, which is in the south of Israel, up to M'rar in the north of the country. There is also one school that is in the West Bank territories.
Table No. 6: Distribution of the types according to general data about the schools:

<table>
<thead>
<tr>
<th></th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The structure of the schools (in years):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 years</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>4 years</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3 years</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>The educational stream:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Arab</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Years of existence of the schools:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 10</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>10-20</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>40-50</td>
<td></td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>50-55</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Number of students:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400-490</td>
<td>2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>500-690</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>700-800</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1200-1500</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1700-2000</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>More than 2000</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Number of teachers:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-75</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>76-100</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>130-140</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>160-180</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 2000</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
The table shows that the schools (in the first two types) are from all the various educational sectors, and their structure contains all the possible structures of secondary schools in Israel. The number of teachers and students in the schools goes in accordance with the structure. The distribution of the schools almost shows similarity. As for the datum about the years of existence of the school, Type 1 includes one school that exists less than 10 years and both types have schools that are more than 40 years old. Type 1 has three such schools, whilst the second type has four schools. The Type 3 data show equality in the data about the structure of the schools, the educational stream and the years of existence. The data of all the schools that are the pilot of “Bagrut 2000” (as well as those of the two types) represent the picture of secondary schools in Israel. This was the aim of the “Bagrut 2000” management. As the head of the project, Dr. Ben-Eliyahu states:

"...We paid a lot of attention to the representation of the different sectors...and we also made sure that there would be a representation for schools with a diverse student population...”

The next table will present personal data about the headteachers as distributed into the different types. The data include information about gender, schooling, tenure in the education system and tenure as headteachers. It should be mentioned that all the headteachers (of all types) are graduates of a headteachers’ managerial course.
Table No. 7: Distribution of the headteachers’ personal data according to the different types:

<table>
<thead>
<tr>
<th></th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Schooling:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.A.</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>M.A.</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Tenure in the education system:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-20</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21-29</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Tenure as headteacher:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 10</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>11-20</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>20-30</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

The figures for the different schools and headteachers, according to these two tables, show that there are no significant differences between the types. As to credentials, tenure in the education system and tenure as headteachers, the figures show that the Type 1 and Type 2 headteachers are distributed quite equally. In both types, seven headteachers have a post-graduate or higher degree, and four have over eleven years of tenure as headteachers. Six Type 1 and seven Type 2 headteachers have over 20 years of tenure in the education system. The Type 3 headteachers (two of them) have practically identical characteristics – both are women who have a post-graduate degree and have over 20 years of tenure in the education system. The only difference is in their tenure as headteacher – one has less than ten years (6) and the other has over ten years (11).
In conclusion, for all types, no significant differences were found in both the schools' characteristics and the headteachers' characteristics. Therefore, these characteristics cannot be used to explain the different types. It should be mentioned that the number of schools chosen for the pilot of "Bagrut 2000" was small, 22 schools in all.

The headteachers' perceptions will now be examined with regards to the other characteristics of this stage.

4. The Types According to the Differences in the Perceptions of the Stages of the Change:

4.1 Stage 1: The Initiation

According to the literature (Fuchs and Hertz-Lazarowitz, 1992; Sarason, 1982; Fullan, 2001), the first three decisions incorporate examining the goals and include discussions, planning and preparations for the change. Moreover, at this stage, the evaluation of the change is done through consulting all of the involved partners. In addition, planning, organization, field trips, guest lectures and everything else that can enlighten and clarify the meaning and the objectives of the change, are also very important (Kula and Globman, 1994, p. 120).

Following is the analysis of the perceptions, declarations, behaviour and actions of the headteachers that belong to Type 1, regarding the above characteristics of the first stage of the change. As Fullan (2001, p. 83) claims, the headteachers
would provide support and backing only after they learned and gained a better understanding of the change processes.

The next table (No. 8) presents the Type 1 headteachers during the first stage. Some of the headteachers support Fullan's (2001) argument about the support of the headteachers, whilst others oppose it.

Table No.8: Type 1 – The first stage (after the three decisions):

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>The headteacher is involved and assumes an important part in the preparation</td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>The headteacher is involved only in headteachers’ conferences and conventions</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After reaching the first three decisions, the headteacher is no longer involved</td>
<td>*</td>
<td>*</td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

As shown in table No.8, five of the Type 1 headteachers (2, 7, 12, 14, 16) were involved and took part in all of the discussions and preparations at the initiation stage. These five headteachers were consistent in their involvement throughout the stage and in their process of decision-making. In other words, their perceptions and actions during the decision-making process were in accordance with their involvement at the first stage of the change. In the two cases their involvement was high. The data show that headteacher No.2 made all the decisions by himself, whilst headteachers 12 and 16 (who are also the project coordinators) made the decision to enter the project and choose the subjects by themselves. Headteacher No.7 is also the project coordinator, but gave the teams autonomy to decide whether or not to enter the project. Headteacher No.14 made the decisions to enter the project and with which
teams, but appointed the coordinator together with the school board. As mentioned, this should not be seen as a different decision-making pattern since appointing the project coordinator, whilst done together with the school board, was nevertheless kept as an in-management decision. In all, these headteachers demonstrated a high level of involvement at the initiation stage, just as reviewed in the chapter of the literature review (Fuchs and Herz-Lazarowitz, 1992; Sarason, 1982; Kula and Globman, 1994; Fullan, 2001).

On the other end of the spectrum are three headteachers (1, 3 and 18) that were not involved at all.

"...My involvement was especially at the beginning. I didn’t become smarter when I was appointed to be headteacher. That’s why I gave the staff the freedom of operation...”

(Head No. 1)

Headteacher No.3 explained the rationale for not being involved, and her view of the headteacher’s involvement in educational changes:

"...Once Sociology represented ‘Bagrut 2000’ I stopped being involved in the details...I stepped aside; my idea of being headteacher is initiating ideas, and letting other people take it from there...”

The third headteacher (No.18) attributed his non-involvement to the importance of staff-independence:

"...We gave the teams autonomy and leverage. That’s what was unique in the project. A large degree of autonomy... ”

The mid-way approach is represented by the remaining headteacher (No. 9) who was involved only in the headteachers’ conferences.

"...These are very enlightening meetings. Definitely a lot can be learned from these meetings... “
The summary of the headteachers’ actions at the first stage of the change is presented herein:

Table No. 9: Summary of the first stage according to Type 1:

<table>
<thead>
<tr>
<th>Type of Involvement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>The headteacher is fully or partially involved throughout the stage</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The headteacher was not involved at all at the first stage</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Just like the perceptions and acts of the Type 1 headteachers, the analysis of Type 2 headteachers shows that all of them were very involved during the initiation stage. Following is the analysis.

**Type 2:**

Fullan (2001, p. 66) claims that the question of consensus is central at this stage, since at this stage the necessity of the change is evaluated (Fuchs, 1995). Thus, the approval reflects a proper presentation of the stage, which is the result of intensive discussions, lectures and learning the subject. All of these indeed took place, and led to making the decisions. The decision-making pattern, then, also indicates that the involvement of the teams, as well as their self-involvement was significant to those headteachers at the first stage of the change, in the discussions, the presentation of the change and the instructional activities.

The headteachers’ perceptions of their self-involvement indeed confirm this:

"...I participated in all of the sessions, which I feel also says a lot..."
(Head No. 10)

Or:

"...I was a full partner all along the process..."
(Head No. 11)
Support of this could be found in the acts and perceptions of all Type 2 headteachers. Headteacher No.19 even mentioned his involvement as one of the three most important elements in introducing changes:

"...Be involved in the preliminary planning stages and make it evident that it is important to you..."

The summary of the perceptions and behaviour of the Type 2 headteachers during the first stage (including the process of the decision-making) is presented below:

Table No. 10: Summary of the first stage – Headteachers of Type 2:

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>The headteacher is fully involved throughout the stage</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

In conclusion, it seems that collegiality and collaboration characterize the Type 2 headteachers' operation patterns right from the start of the process. As mentioned by Brundrett (1998, p. 305), this mode of operation allows implementing curricular innovations, as well as the professional development of the teachers. This subject will be analyzed in detail later on in the examination and analysis of the headteachers' leadership and in the comparison of the different types.

**Type 3:**
None of the characteristics of the first stage, as presented in the literature review and as shown in the views of the Type 1 and the Type 2 headteachers, were found in the interviews with these two headteachers. These headteachers
thought that the preparatory activities were unnecessary since the ideas of the change were not new to the school. The challenges of changing the teaching and evaluation methods were dealt with earlier. Their schools were “already there”.

After the preparations, comes the second stage, the implementation stage, which makes up the first actual experience with the project’s ideas and programs. Fullan (2001, p. 69) described it as “...The stage in which the action is...”

4.2 The Second Stage: The Implementation

The literature review (Sharan and Hertz-Lazarowitz, 1997; Fuchs, 1995; Fullan, 2001) indicates that this stage makes up the beginning of the implementation of the change. The implementation is accompanied by activities intended to clarify and instill the change, which lead to the gradual adaptation of the change.

“...So you can see that what the staff did was not just making adjustments to an existing curriculum...”

(Head No. 9)

At this stage, the system adjusts itself to the change, and at the same time, the change adjusts itself to the school. The teachers are those who bear most of the burden, and not the headteachers or the management team (Kula and Globman, 1994, p. 83). They are required to actually act upon the clarification and the implementation.
"...Nothing was improvised...the project required a long process of instilling the methods and ideas..."  
(Head No. 14)

It should be mentioned that according to the recommendations of the Ben-Peretz Committee and the “Bagrut 2000” administration, each team in each school held a weekly meeting, during dedicated periods in the timetable, for deliberating the change and the methods used to implement it. All of the clarification and the implementation issues were naturally discussed during these meetings.

**Type 1:**

The Type 1 headteachers’ perceptions and their involvement as leaders and managers will be extracted from their own claims and descriptions of the stage and their involvement in it. Table No. 11 presents this.

*Table No. 11: Type 1 – The headteachers’ perceptions of the characteristics of the second stage and their involvement in it:*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>The headteacher describes the characteristics of the stage: clarification, developing, understanding the change and adopting it</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>The headteacher is involved and takes part in the meetings</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>The headteacher supports and assists whenever needed</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Indeed, the analysis of the findings shows that six of the nine headteachers referred to the characteristics of the stage in their in-depth interviews. When the
ideas of the change were discussed, deliberated and developed, it became clearer, just as mentioned in the literature.

"...The teams met and discussed the working and evaluation methods... The process became clearer as we went along..."

(Head No. 16)

Though the headteachers perceived the characteristics of the stage and the importance of it as the first experience with the ideas of "Bagrut 2000", only three of them (2, 9, 16) took part in the meetings.

"...I always thought of myself as a field person – I get into the small details..." (16)

Or:

"...I made it my business to attend the meetings because I am the one that dictates the policy..." (2)

It should be noted, though, that all the Type 1 headteachers perceived their involvement in instilling the change as limited to supporting, backing and consulting. As mentioned in the analysis of the first stage, these headteachers participated in workshops and meetings, and so this perception (their support and backing) agrees with Fullan's claim (2001, p. 83) that support and backing are made possible after learning. According to Fuchs (1995), the sharing is crucial at this stage. From this point of view, the Type 1 headteachers contradict Fuchs' argument. On the other hand, Hopkins et al. (1994, p. 75) argue that this is the stage during which skills and understanding are being acquired. This can be, in a way, the explanation of the fact that only the minority of Type 1 headteachers were involved in the second stage. It can be explained by the mere fact that these headteachers preferred not to be a part and in such a way to interfere when skills were required.
Headteachers 3, 7 and 12 did not even mention this stage. These headteachers were aware of their non-involvement in instilling the change process and explain their views:

"...I'm not one of those headteachers who supervises every project. I try not to get too involved...I stepped aside. You need to move on...When you have good people, they do the work, and you have to come up with the ideas...It is important that I am attentive and supporting..."

(Head No. 3)

Or:

"...My nature is not to interfere until it is imperative that I do so..."

(Head No. 7)

Another explanation is:

"...I don't really share, I don't really tell...I do support and help when it is needed..."

(Head No. 12)

These three headteachers perceived their involvement and support in the most minimalist manner. They weren't interested or involved, and did not assist until they were asked to. Their perceptions however, comply with their actions.

The rest of Type-1 headteachers (1, 2, 9, 14, 16, 18) expressed a different perception towards support:

"... A headteacher has to undergo a personal change himself, and realize what it's all about...It gives the others confidence..."

(Head No. 2)

"...I'm involved all the time, although I don't participate in their meetings. I am more in the background..."

(Head No. 14)

"...A teacher has to feel that he is not alone, that he can turn to you with problems..."

(Head No. 18)
In conclusion, the headteachers become less involved in instilling the change as early as at the second stage, although six of them mentioned the characteristics of the implementation stage. In other words, they are in the midst of instilling the change, they are aware of the importance of the actual practical experiencing and the clarification of the ideas, but they leave them to the teachers. They perceive their supporting and backing as being part of the change process. Although this group of headteachers made the preliminary decisions to enter the project by themselves, without consulting anyone, it could have been expected that they would be interested in being over-involved and tending to the smallest details. The findings, on the other hand, showed that most believed that their role was limited to supporting and consulting. As mentioned in the literature (Fuchs and Hertz-Lazarowitz, 1991; Inbar and Pereg, 1999), the headteacher’s support and backing are extremely important at all stages of instilling change.

Different descriptions and perceptions that are based more on the involvement and less on the characteristics of the second stage of the change, belong to the Type 2 headteachers.

Type 2:

The chances of a change to succeed and become an integral part of the system depend on the success of the second stage of the change, the actual implementation (Fullan, 2001, p. 69). Seven out of the eight Type 2 headteachers (4, 6, 8, 10, 11, 13, 17) indeed perceived as such the change’s chances to succeed. To this end, their personal involvement was very important to them.

"...I was deeply involved in 'Bagrut 2000' at first ..."

(Head No.8)
This perception, of high involvement only at this stage, was not unique to this headteacher:

"...I felt very much involved especially at the beginning...A good headteacher has to leave some space for the others..."

(Head No. 13)

When the headteacher's involvement was high, even if he/she did not mention all the characteristics of the implementation stage, it can be assumed that the importance of the clarification, the development and understanding of the change were known to him/her. Still, four headteachers (4, 6, 10, 13) of the seven mentioned the characteristics of the stage:

"...The teachers examined the basic issues of the goals of teaching, their role as teachers and educators, as well as their relationship with the students..."

(Head No. 13)

The description of headteacher No. 6 focuses on the importance of the clarification and understanding of the change:

"...In the first half year it was very tough...they believed that giving lectures was their 'alternative assessment'...We held meetings about what they were supposed to do and we developed methods that could work..."

The remaining headteacher (19) perceived his involvement differently, and justified it as follows:

"...My involvement is especially important at the preliminary stage...I count on others. If I didn't count on the others, I would not have agreed to any change..."
It is only natural, taking into consideration the headteacher's perception, that this headteacher did not mention the characteristics of the implementation stage, because they were already there.

Following is table No.12 which summarizes the Type 2 headteachers' perceptions at the second stage of implementing the change.

Table No.12: Type 2 – The headteachers' perceptions at the second stage of the implementation and their involvement in it

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>The headteacher is involved and takes part in the discussions</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The headteacher is not involved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The characteristics of the stage are mentioned by the headteacher</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In conclusion, the headteachers' perceptions indicate that it was important to the Type 2 headteachers to be involved in the process of the second stage of the installation of the change. They believed that their involvement was important at the beginning of the change, but it was no less important to provide all of those involved (the teachers in the different staffs) with room for action, progress and experience with the new methods. The starting point of the Type 2 headteachers was reaching the preliminary decisions through sharing and open discussions. It is not surprising, then, that these headteachers, who did not hold a top-down approach, were content with their involvement in the process.
**Type 3:**

Regarding the pre-acquaintance of the teams with the ideas of "Bagrut 2000", as a derivative of the Type 3 headteachers' views and perceptions as to entering the change processes, it comes as no surprise that at this stage, too (the stage during which the new activities and ideas are implemented), the perceptions of these headteachers would be different from those of the rest of the headteachers that participated in "Bagrut 2000".

It should be mentioned, regarding the analysis of the headteachers' views, that the implementation stage takes place in the first two years. However, in this case the first actual experience with the ideas of the project was done prior to the decision to circulate the resolutions of the Ben-Peretz Committee. In school No.5, the process was already in full motion.

"...In our school, the pedagogical change took place at the time in all subjects except for Mathematics and Physics... We shifted the focus to guiding the students and in our school every teacher had to choose for himself the points in the curriculum he wanted to focus on..."

Whilst in school No.15, there were only first signs of experiencing alternative teaching and evaluating methods. Headteacher No.15 claimed:

"...Since our geographical location (in the West Bank territories) makes things more complicated, for several years now we have been cooperating with the 'Ariel' College. It's not that our students attend lectures there that have nothing to do with their studies in the school. The History teachers designed a curriculum that combines much of what they learn in the college, in the sense of evaluating the students. The teaching methods are also different. There are fewer lectures, since they get that in the college, and much more hands-on experience..."
To sum up, the degree of involvement of the headteachers of all types, (according to their reports in the in-depth interviews), was affected by the knowledge that later on, at the third stage, during the establishment of the change, the change would become a routine and integral part of the system (Sergiovanni, 1997).

Fullan (2001, p. 52) claims that the transition from the second to the third stage is often quite unclear. The examination and analysis of the third stage of instilling the change, the continuation of the change, will shed light upon the different involvement and points of view of all the headteachers that participated in this study.

4.3 The Third Stage: Continuation

The literature review reports (Sergiovanni, 1997; Fullan, 2001; Huberman and Miles, 1984) that the third stage is the stage in which the change becomes an ongoing part of the system. This happens when the responsibility is transferred to inside agents. The meaning of it has been perceived differently by the heads of the three types.

Type 1:
All the headteachers perceive the change at this stage as an ongoing part of the system. As for responsibility, the analysis of Type 1 headteachers' perceptions shows that the fact that they believed their role was limited to supporting and consulting led to the passing of the rest of the responsibilities to the teachers or the coordinators. Six of the headteachers (1, 2, 3, 9, 14, 18) perceive the teachers/coordinators as those that have the responsibility.

"...The teachers felt they were given responsibilities. They were given a mandate to change the curriculums and come up with
new plans. For the first time study programmes made their way from the teachers to the supervision instead of being imposed on the teachers by the supervision..."

(Head No. 2)

"...The responsibility of the teachers turned out to be more meaningful in terms of the objectives, the rationale, the focus and the teaching process, development skills and tools etc...."

(Head No. 9)

Focusing on the teachers, (or coordinators in the case of “Bagrut 2000”) the headteachers’ perceptions and point of view, as quoted above, are in line with Sergiovanni (1995, p. 280), who argues that the teachers are those who make the decisions and therefore cannot be ignored. Three more headteachers (7, 12, 16) do not mention delegating responsibilities since they are also the coordinators and therefore the responsibility is theirs.

Table No. 13 summarizes the above.

Table No.13: Type 1 — Stage No. 3:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>The change is an ongoing part of the system</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>The responsibility is transferred to inside agents</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td>*</td>
</tr>
</tbody>
</table>

Similar perceptions about the change and different ones about the responsibility, as characteristics of stage no. 3, belong to the headteachers of Type 2.
Type 2:

Table No. 14 shows the perceptions of the headteachers regarding the change as an ongoing part of the system, as well as their perceptions about the transfer of the responsibility as stemming from the fact that "Bagrut 2000" is part of the education system of the schools.

Table No. 14: Type 2 – Stage No. 3:

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>The change is an ongoing part of the system</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>The responsibility is transferred to inside agents</td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The responsibility remains with the headteacher</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table shows that all of the headteachers perceived the change at this stage as part of the system.

"...Last year it officially became a school policy...we made it part of our declared policy..."

(Head No. 4)

Moreover, the change became the pride of the school:

"...The project became the flagship project in our school..."

(Head No. 17)

It was clear to all that:

"...It is clear that all of the working patterns were changed, all across the board..."

(Head No. 19)

As mentioned, the analysis of the headteachers’ perceptions at the second stage of instilling the change indicated that only one headteacher (19) delegated the responsibility for the change to the teachers and the coordinators as early as the second stage. Furthermore, the rest of the headteachers perceived their
involvement as important only in the installation stage, and mentioned that after the change was instilled, those responsible (for its operation) should have been given autonomy alongside the responsibility. This perception was applied in practice only by three of the headteachers (8, 10, 13).

"...No change can be done by one person...It depends on the teachers, their professionalism and their responsibility..."

(Head No. 10)

Four other headteachers (4, 6, 11, 17) perceived the management of the change this way, but more in theory than in practice.

"...I am a very strict headteacher...I intervene massively...I supervise all the time..."

(Head No. 6)

A "softer" perception of the headteacher's responsibility in the course of the change, which well explains the nature of the headteacher's responsibility, was expressed by headteacher No.4:

"...It has to be inquired in every issue...otherwise, there will be no change. It's not only about control, it's about accompanying the change..."

In short:

"...I am constantly involved...

(Head No. 17)

To conclude, the Type 2 headteachers do not feel free to transfer the responsibilities to the teachers/coordinators. The Type 2 headteachers perceive it in a very limited way. They inquire and intervene to different degrees according to their perceptions regarding the responsibility of the teams.
Type 3:

In both cases, the change has become an integral part of the system. Both headteachers in both schools mentioned the fact that “Bagrut 2000” was an integral part of the schools’ academic operation. As mentioned, in school No.5 the teachers and the students knew the principles of the change, and the teaching and evaluation were done in the spirit of the project. The whole system operated in this way, and the establishment of the methods was done prior to “Bagrut 2000”.

“...We have a school-wide evaluation policy, and there isn’t a subject that doesn’t include an element of alternative evaluation...”

(Head No. 5)

This indicates that delegating the responsibility for executing the change to the teachers went without saying. The different teachers and subject coordinators assumed responsibility for the change long before “Bagrut 2000”.

“...We didn’t need to make a dramatic change ...the only change was that the school was paid for this and the school paid the teachers for the meetings...”

(Head No. 5)

In school No.15, only a small number of subjects (three) were taught in the spirit of “Bagrut 2000” principles, prior to the change. Two subjects were included in “Bagrut 2000”. There is no doubt that teachers who were interested in and operated new teaching and evaluation methods, even prior to the “Bagrut 2000” project, were those who were delegated responsibility and were trusted by the headteacher.
After making the change an integral part of the system, comes the fourth stage – the “outcomes” stages.

4.4 The Fourth Stage: The Outcome

The fourth stage is the one that deals with the outcome. This stage is an integral part of “Bagrut 2000” and is described in detail in the “Bagrut 2000” guidelines. Moreover, all of the teams received two periods each week, to examine, among other things, the outcomes of the project. In addition, at the end of each school year, each team sent outcomes and teaching methods to the Open University, which serves as an external agent for this matter. To this end, all the headteachers’ attitudes and perceptions towards this stage should not be perceived as a separate/distinct insight or view. In other words, the contents of this stage are actually part of “Bagrut 2000” administration guidelines. All that was needed to be done was to follow the guidelines.

Following the analysis of the headteachers’ perceptions as to the different stages of instilling the change, their perceptions about general issues associated with the implementation of the change will be examined. Issues, such as the opposition to the change, the difficulties in implementing the change and the advantage of “Bagrut 2000” will be presented and examined below in order to better understand the headteachers’ perceptions and point of view.
5. General Perceptions of the Headteachers, Regarding the Implementation of a Change:

The analysis of the headteachers' different perceptions regarding the different stages of introducing changes in general, and specifically in the case of "Bagrut 2000", is not limited to their perceptions as to the characterization of the different stages of the change. Every change process involves difficulties and oppositions, which make up an integral part of the change process. The headteachers' perceptions will be examined also regarding all of the above mentioned factors, as well as regarding the advantages of the change, their motivation to adopt the change and the headteacher's contribution. To complete the picture and provide a better, holistic understanding of the headteachers' perceptions of the subject of change, their beliefs as to the change process will also be examined.

5.1 The Perceptions of the Heads, Regarding Oppositions to the Change

Oppositions to the change process have a role in building the change. There are no changes that are not accompanied by opposition (Morrison, 1998; Fuchs, 1995), since every change means ending something which exists and starting something new (Ba'bad, quoted in Kula and Globman, 1994).

"...The process was difficult...we had to create a different perception, a path which the whole school must follow..."

(Head No. 2)
As described in the literature review, the reasons for opposing change vary, including fear of the unknown, a threat to one’s status and professional skills, as well as fear of failure (Plant, 1987, p. 18). All these will be analysed according to the different types.

Type 1:
All the Type 1 headteachers were indeed aware of the opposition they faced. It is important to note that the headteachers mentioned two main areas of opposition. The first was evident at the early stages of the change, and the second was opposition to change as appeared in the literature review and as mentioned above (seven headteachers: 1, 3, 9, 12, 14, 16, 18).

For example, opposing the very idea of change:

"...The opposition was by teachers who opposed the idea itself. They thought that the students, at this stage of their lives, should listen only to what the teachers have to say...Not all the teachers are compatible in the views with the 21st century..."

(Head No. 3)

Fear of the unknown:

"...When you start off with such a project, you don’t know exactly everything about it..."

(Head No. 16)

Lack of information:

"...The lack of focus on certain alternative evaluation and teaching methods...

(Head No. 9)

Misinformation:

"...They were not clear at the time...The process became clearer as we went along...They didn’t know if it was really possible that we could use the project as a substitute for the Bagrut exam...

(Head No. 16)
And competence to status and power:

"...Most of the oppositions came from teams that asked why they weren’t chosen for the projects, whilst others were..."

(Head No. 9)

The second issue was the excessive workload caused by the extensive reporting required (five headteachers: 1, 7, 9, 12, 14).

"...The reports, the forms, the bureaucracy...the teachers complained...

(Head No. 12)

"...There was opposition...everything had to be documented and everything that was done was scrutinized. It wasn’t easy...

(Head No. 9)

Lumby (1998, p. 197) claims that opposition of this kind is understandable.

It should be mentioned that three headteachers (1, 2, 7) also referred to opposition by the students.

"...Opposition came also from the students, who realized that they had to start studying seriously from the 10th grade on...

(Head No. 1)

A full explanation has been given by headteacher No. 7:

"...Our students are not used to self-learning. They are used to study for exams. They thought the project meant that they wouldn’t have to study...

Following is a table that summarizes the headteachers’ perceptions regarding opposition.
Table No. 15: Type 1 – Opposition to the change process:

<table>
<thead>
<tr>
<th>Opposition as described in the literature review</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opposition to the reporting workload and bureaucracy</td>
<td>*</td>
<td>*</td>
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</tr>
<tr>
<td>Opposition by the students</td>
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</tbody>
</table>

In conclusion, the perceptions of the Type 1 headteachers, regarding opposition to change, focus on four issues: values, power, psychological and practical aspects. This is also the point of view of Dalin et al. (1993), Clarke (1994), and Fox (1998). There are many reasons for opposition to change. Morrison (1999, p. 123) claimed that when those involved in the execution of the change feel that they are part of the decision-making process, the opposition subsides. On the whole, all the Type 1 headteachers perceived opposition as an integral part of the “game”.

As for Type 2 headteachers, they were characterized by making those involved in the change process part of the decision to enter the process. It would be expected, then, that expressions of opposition from the teachers and the coordinators due to fear of the unknown, the change itself and disagreement, would be scarce. The analysis of Type 2 examines this.

**Type 2:**

According to the headteachers, there were only a few expressions of opposition.

"...There was little opposition, and it was usually implicit... We never forced anybody to do anything..."

(Head No. 8)
Two headteachers (6, 10) give explanations:

"...There was little opposition by the History team. The History staff decided to go for it together. They were ready for it. The History teachers also have the motivation to implement 'Bagrut 2000'..."

(Head No. 6)

"...I wouldn't call it opposition. I would call it 'skeptical people fed up with false promises'. The opposition, then was mostly by those who didn't believe in changes..."

(Head No. 10)

Still, two headteachers (4, 13) mentioned incidents of opposition associated with the change itself:

"...There was no opposition by the History team. In the Biology staff there was one teacher who opposed the idea..."

(Head No. 4)

As to opposition to the workload, the reporting requirements and the bureaucracy, four headteachers (4, 6, 17, 19) indeed mentioned incidents of opposition:

"...The opposition began after they realized how much work is involved..."

(Head No. 17)

The work includes paperwork and it is a problem:

"...The major opposition was and still is the need to document everything. It is hours of work and the teachers complained about it..."

(Head No. 19)

Headteachers 4 and 11 face opposition to the change also by the students:

"...Opposition also came from the students. They complained about the workload..."

(Head No. 4)
Table No.16 sums up the Type 2 headteachers' perceptions of opposition:

Table No.16: Type 2 headteachers’ perceptions of the opposition to “Bagrut 2000”:

<table>
<thead>
<tr>
<th>Opposition linked to the change itself</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oppositions associated with reports and bureaucracy</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Opposition by the students</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
</tbody>
</table>

Concluding the perceptions of Type 2 headteachers, regarding the issue of opposition, indeed when collegiality is presented and the change is made through consensus and cooperation, in agreement with and considering the opinions of those involved in the change, the opposition will be smaller and even non-existent. This is from the point of view of the change itself.

**Type 3:**

When a change is made voluntarily, without coercion, as a result of the inner need and desire of the people implementing it, little opposition should be expected. Still, incidents of opposition do occur. The perception of the opposition in each school was different, but in any case it came as no surprise. When the entire system undergoes a process of changing its teaching and evaluation methods (school No. 5), it is clear that there will be many cases of opposition.

"...There's constant opposition, especially by those who tend not to do. It's a tough group to deal with, because you don't know who they are ...There's a constant dilemma of how to deal with the oppositions..."
On the other hand, when a limited number of teams decide to make a change, there will be little opposition. Indeed, this is how headteacher No.15 perceived the cases of opposition in the teams:

"...At the beginning there was no opposition. Later on new teachers arrived who weren't interested in joining the project. We tried to explain, convince and work with them but it was hard... Those who were convinced joined us, and those who were not, didn't join the school's teaching staff..."

To sum up, as was indicated in the chapter of the literature review, the perceptions of the headteachers regarding opposition, correlate with the depth and significance of the implementation of the change process. In other words, these perceptions support the argument of Ba'bad (quoted in Kula and Globman (1995), that the rate of opposition to a change depends on its depth and significance.

Just as the expressions of opposition, whether few or many, are part of the change process, so are the difficulties. They build the change and help in paving its way (Fullan, 1999, p. 22).

5.2 The Perceptions of the Heads Regarding Difficulties in Implementing "Bagrut 2000"

Difficulties are a part of the change process and together with oppositions and conflicts, serve as a breakthrough under complex conditions (Fullan, 1999).

Following are the perceptions of the headteachers of all types, regarding this issue.

Type 1:
The headteachers’ perceptions of the difficulties in implementing “Bagrut 2000” focus on three areas. The first is about the essence of the change (five headteachers), such as changing the teaching and learning methods and non-focused alternatives. The second issues deal with management (four headteachers), such as accountability and unprofessional instructors. The third issue (one headteacher) is about leadership and cohesiveness of the teams. The headteachers’ perceptions regarding the difficulties, then, include the three main themes of this thesis – change, leadership and management. It is interesting and important to indicate that O’Neill (1994, pp. 112-114) argues that during times of uncertainty and turbulence, bureaucratic structures are required to cope with accountability.

It should be noted that among the Type 1 headteachers there are differences in the issues they perceive as difficulties and there is no common issue that is perceived by most of them.

The analysis of the difficulties that focus on the change itself indicates two main issues. Four headteachers (1, 2, 3, 7) mentioned the teachers’ teaching methods and the change in the students learning methods.

"...It might sound very easy, but it was not simple to transform the teachers to a different place. The same goes for the students, who were used to a certain pattern, that suddenly changed..."

(Head No. 2)

Or as headteacher No. 1 expresses it:

"...It is very difficult to change the old habits of the teachers, who became used to working in a certain ‘standard’ way..."
Only one headteacher (school No.9) attributed part of the difficulties associated with changing the teaching and learning methods to the non-focused alternatives. In other words, a variety of methods was suggested, and there was a difficulty in mastering so many teaching and learning strategies. The lack of focus caused difficulties for both the students and the teachers. This headteacher (No.9) pointed out another difficulty, regarding the managerial-supporting aspect. More professional instructors could have helped to clarify the issue of alternatives and direct the teachers in focusing on the most optimal ones.

"...I can think of two: one is the lack of focus on certain alternative evaluation and teaching methods and using too many alternatives simultaneously. The second was the instructors lack of professionalism..."

(Head No. 9)

As part of operating “Bagrut 2000”, the teachers were required to report about the teaching and evaluating methods. These reports burdened the teachers a great deal, although only four of the Type 1 headteachers (1, 12, 14, 18) brought this point up.

"...The teachers complained about the amount of paperwork they had to fill, because of the control over the project..."

(Head No. 14)

Headteacher No.18 explained another aspect of the difficulty:

"...It caused problems since the teachers often felt their efforts were directed towards the things that were not the most important in education...the bureaucracy of reporting was difficult..."

The issue of bureaucracy, supervision and accountability, will be discussed in detail in the analysis of the headteachers’ perceptions regarding
management issues. In brief, it supports Gunter's (1997) criticism about management in general and managerialism in particular.

The cohesiveness of the teams was an issue that only one headteacher referred to:

"...The greatest difficulty was the over-cohesiveness of the team. It has a boomerang effect. It's a big problem...They feel that they are not alone, and don't take any personal responsibility..."

(Head No.16)

The difficulties, as expressed by the Type 1 headteachers, are presented in table No.17.

Table No. 17: Type 1 - Headteachers's perceptions of the difficulties of

"Bagrut 2000":

<table>
<thead>
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<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing the teaching and learning methods</td>
<td>*</td>
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<td>*</td>
<td>*</td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Non-focused alternatives</td>
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<tr>
<td>Unprofessional instructors</td>
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</tr>
<tr>
<td>Control over the teaching and evaluation methods</td>
<td>*</td>
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<td>*</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohesiveness of the teams</td>
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</tbody>
</table>

Difficulties regarding change processes, indicate awareness to the process, understanding of its principles and an attempt to implement the change as successfully as possible. Difficulties that indicate dealing with the goals of the change are focused on the change itself, tackling the core of the matter.
Dealing with the difficulties caused by the change itself in the case of “Bagrut 2000”, means dealing with the goals of the change, i.e. changing the teaching, evaluation and learning methods used. When the change is clear and is voluntarily and willingly executed by the participants involved, there is a high probability that the difficulties will indeed be those concerning the goals of the change. The perceptions of the Type 2 headteachers indeed reflect this.

**Type 2:**

Seven of the eight Type 2 headteachers (4, 6, 8, 10, 11, 13, 19) mentioned that the main difficulty was changing the teaching and evaluation methods, as well as the students’ learning methods. This difficulty is one of the objectives of “Bagrut 2000” and as such is essential to the change process.

"...It's not always easy to apply alternative teaching methods...We felt at the time that the teachers needed to organize the students' work more efficiently...

(Head No. 4)

The difficulty in changing the teaching methods, as explained by headteacher No.10, led to an additional difficulty – changing the role perception of the teacher:

"...The greatest difficulty was in the teachers' self-perception of their role. They found it hard to realize that their roles had changed...

It should be mentioned that two headteachers (8, 13) perceived the change in the role as an advantage. This will be further discussed in the analysis of the headteachers’ perceptions as to the advantage of “Bagrut 2000”.

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Two headteachers (4, 19) mentioned, in addition, the issue of lack of resources that were needed as a result of the change in the teaching and evaluation methods.

"...The shortage of study rooms created difficulties for tutorial teaching and meetings between teachers and single or small groups of students..."

(Head No. 19)

This refers to the resources required for “Bagrut 2000”:

"...The school had to find the required resources, for instance enough classrooms, or a library that would respond to the needs and the demands of the students..."

(Head No. 4)

The above shows that most of the difficulties mentioned by the Type 2 headteachers, then, are associated with the change itself.

Three other headteachers (6, 17, 19) spoke about the required reporting to the project’s administration.

"...I'd say the greatest difficulty was the paper work. It was hard to convince the teachers..."

(Head No. 17)

The following table summarizes the headteachers’ perceptions of the difficulties:

Table No. 18: Type 2 – Perceptions of difficulties:

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in teaching, evaluating and learning methods</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td>*</td>
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<tr>
<td>Resources</td>
<td>*</td>
<td></td>
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</tr>
<tr>
<td>Reports to the project’s administration</td>
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</tbody>
</table>

**Type 3:**
In both cases, the headteachers perceived the difficulties in the same way. Both speak of one main difficulty – reporting to the project’s administration.

"...The paper work that had to be filled and sent...The teachers claimed that instead of pedagogy, they’re submitting reports..."  
(Head No. 15)

Headteacher No.5 also included her personal criticism and objections:

"...The requirements were unrealistic. If the Ministry of Education wants control, that’s fine with me. But it’s impossible to maintain control with so many details. It’s just unrealistic..."

It seems that the reporting requirement created difficulties in all the schools. The project administration’s tight control over the project made it difficult for the teachers, regardless of how the change was introduced. The reporting burden was mentioned as a difficulty by all of the types of headteachers. Although difficulties are part of the change process, this specific issue of reporting requirements will be discussed in detail in the course of the analysis of the headteachers’ perceptions regarding the aspect of management.

Oppositions and difficulties present only one of the points of view regarding the implementation of a change. Alongside them, the headteachers’ perceptions as to the advantages of “Bagrut 2000” will also be analysed. Opposition and difficulties, on the one hand, and the advantages of the change, on the other hand, complete the aspects of the headteachers’ perceptions regarding the implementation of “Bagrut 2000”.

The third general issue examined will be the headteachers’ perceptions of the advantages of “Bagrut 2000”.

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5.3 The Perceptions of the Heads Regarding the Advantages of 
"Bagrut 2000"

Type 1:
As was expected after analysing the previous general issues, here again, when analysing the advantages of "Bagrut 2000", issues relevant to the change itself, as well as the management thereof, were included in Type 1 headteachers' perceptions.

The first noteworthy finding was that headteacher No.3 did not refer to the advantages of "Bagrut 2000". According to her perception of change:

"...We perceived 'Bagrut 2000' as one of a number of changes in the system. We just didn't consider it to be that big a change. It is a local change..."

From her point of view, it was enough to have motivation and reasons to bring in change processes - for a change to take place. When this was accompanied by her perception that as headteacher her role was only to bring up the ideas, and from that moment on she did not have to be involved it was clear that she was not speaking about the advantages. She did not perceive the change as important, and thus did not give much thought as to the advantages of it.

As for the rest of the headteachers, their perceptions included, as was mentioned above, different aspects regarding the area of the change, the teachers and the area of managing the change.
Regarding the area of the change, indeed eight out of the nine headteachers mentioned the advantages concerning the change itself, such as changes in the teaching and learning methods (1, 2, 7, 9, 12, 14, 16, 18).

"... The project made the teachers adopt new teaching methods...

(Head No. 14)

The professional atmosphere (1, 2, 7, 12):

"...I believe that the project contributed to the teachers' professional abilities in the rest of the subjects..." (12)

And improvement in the teacher - student dialogue level (7, 9, 14):

"... The teachers felt closer to the students and the students felt closer to the teachers... There was great improvement in the teacher-student relationship... "

(Head No. 9)

The above perceptions of the headteachers prove that "Bagrut 2000" was successfully implemented. The above advantages are the core and essence of the change. The headteachers are aware of it and declare it with satisfaction.

Six out of the nine headteachers pointed out advantages in the managerial aspect: the support from the project's administration:

"... One of the best parts of 'Bagrut 2000' was the support, the instruction and the backing we received all throughout the project..."

(Head No. 9)

Teamwork was also indicated as one of the advantages in the perception of five headteachers (1, 12, 14, 16, 18):

"... The project brought many good things into our working methods... It forced the teams to work together ... So there's no doubt that 'Bagrut 2000' gave us a boost in terms of teamwork... "

(Head No. 14)
And five headteachers (1,2,7,9,12) presented the advantages from the teachers' viewpoint. They claimed that "Bagrut 2000" helped the teachers to avoid reaching a state of burnout, and encouraged them to show more initiative.

Headteacher No.9 described this well:

"...The process contributed to the teachers' growth, regeneration, self-efficacy, and their willingness to take educational challenges. Teachers who were burnt-out in the system suddenly felt and behaved like new teachers..."

And in addition, the good atmosphere in the common room:

"...The project changed something in the atmosphere..."

(Head No. 7)

Or, as another headteacher perceives it:

"...The atmosphere in the teachers' lounge is warm and supportive..."

(Head No. 2)

Last but not least, is the reflection of the principles of "Bagrut 2000" on the rest of the school. This issue was analysed as one of the three general subjects. Still, it is important to mention that two headteachers (1, 2,) concluded it as one of the advantages of the change.

"...The whole school was in a frenzy of activity. All of the teachers started using alternative evaluation methods...The effect was both horizontal and vertical..."

(Head No. 1)

In conclusion, table No.19 sums up the headteachers’ perceptions of the advantages of "Bagrut 2000".
Table No. 19: Type 1: The advantages of "Bagrut 2000":

<table>
<thead>
<tr>
<th>Changes in teaching and evaluation methods</th>
<th>1</th>
<th>2</th>
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<th>7</th>
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<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better and more professional atmosphere</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Teamwork</td>
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<tr>
<td>Preventing Burnout</td>
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<tr>
<td>Improvement in the teacher-student dialogue level</td>
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<tr>
<td>Support from the project's administration</td>
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<tr>
<td>Reflection on the rest of the school</td>
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<tr>
<td>Teachers show more initiative</td>
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</table>

The Type 2 headteachers’ perceptions include two advantages related to the change itself, the teachers, and the management of the change. Following are the issues of the advantages of "Bagrut 2000" as perceived by Type 2 headteachers.

**Type 2:**

Regarding the change itself – seven headteachers (4, 6, 8, 10, 11, 17, 19) mentioned the changes in teaching and evaluation, meaning, the purpose of the change, as advantages:

"...The teachers diversified their teaching methods. It enabled them to be more creative. We started with group studying, and one by one, the students started to shine..."

(Head No. 11)

A more specific example has been given by headteacher No. 6:

"...We started to devise projects for the students to prepare, work for them to do. Things started to change..."
Changes in the teaching and evaluation methods were a result of teamwork as they involved the whole staff. Indeed, four headteachers (4, 13, 17, 19) mentioned this.

"...Materials are prepared together, and this was, to a great extent, achieved through the project..."

(Head No. 13)

The second category of advantages, (according to Type 2), associated with "Bagrut 2000" is the teachers. This was very much evident in the perceptions of five headteachers (4, 8, 10, 13, 19), who mentioned the increased professionalism of the teachers.

"...The most significant change that took place following the project was the teachers' professional work especially in the students' evaluation..."

(Head No. 13)

Three of these headteachers (8, 10, 13) also claimed that the teachers re-examined their role-perception as teachers. This in itself was viewed as an advantage of "Bagrut 2000" by these headteachers.

"...The teachers were given the opportunity to re-evaluate their role as teachers..."

(Head No. 8)

Finally, though no less important, is the advantage associated with the management of "Bagrut 2000" - applying the principles of the change to additional subjects. This issue was extensively discussed at the beginning of this chapter, as a general issue, where the ‘butterfly effect’, as one of the aspects of the Chaos Theory, was analysed. Five of the eight headteachers (4, 10, 11, 17, 19) perceived the expansion of the change’s principles as an advantage. Headteacher No.19 elaborated on this:
"...The way I see it, the expansion of the project to other disciplines was very important. Now it is clear that all of the working patterns were changed all across the board..."

Following is the summative table of the advantages, according to the headteachers' perceptions.

Table No. 20: Type 2 - The advantages of "Bagrut 2000":

<table>
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<tbody>
<tr>
<td>Changes in teaching and evaluation methods</td>
<td>*</td>
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<td>Teamwork</td>
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<tr>
<td>Higher professionalism of the teachers</td>
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<tr>
<td>Teachers re-examining their role</td>
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<tr>
<td>Reflection on the rest of the school</td>
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</tbody>
</table>

**Type 3:**

Changing the teaching and evaluation methods, teamwork, school atmosphere and professionalism were the factors that make up, according to the headteachers’ perceptions, the advantages of "Bagrut 2000". Both headteachers mentioned the change in teaching and evaluation methods as advantages of the change. Both headteachers focused the change in the teaching and evaluation methods on the students.

"...It was very helpful for the weaker and the average students. They were now able to express themselves, thanks to the use of alternative evaluation methods..."

(Head No.15)

This perception of the headteachers is surprising since the change in the teaching and evaluation methods was done prior to the project. It can be assumed that the
headteachers referred to the essence of the change itself. In their opinion, a change was introduced into their schools, which they reported about.

As to teamwork, only headteacher No.15 perceived it as an advantage, and explained why:

"...The project helped the teachers develop their teamwork skills. The teachers were allocating time for working together. It was very good for them..."

Since, according to this headteacher, allocating time for staff meetings made up the reason for the advantage in teamwork, it is understandable why headteacher No. 5 refrains from mentioning this:

"...Allocating periods during the day for staff meetings was not invented by 'Bagrut 2000' - we did that from the beginning, in all teams..."

The result was the professionalism of all of the teams:

"...We became professionals in alternative evaluation which helps us make other changes..."

As well as an improvement in the school's atmosphere:

"...The process also improved the general atmosphere..."

All the above issues focus on the perceptions of change of nineteen headteachers whose schools constituted the pilot of "Bagrut 2000". According to Sergiovanni (1991, p. 83) and Morrison (1995, p. 15), much of the credit to such schools belongs to the headteacher. No doubt that the perceptions of change of these headteachers are the basis and the starting point for all the actions in their schools. Moreover, these perceptions are also the engine for the implementation of "Bagrut 2000" in their schools.
Following the examination of the headteachers’ perceptions as to the change itself, their perceptions regarding the other research questions will now be examined. The full puzzle will provide a complete depiction of the headteachers’ perceptions.

The research question that will be examined now deals with the headteachers’ beliefs in relation to introducing a curricular change into the education system.

5.4 The Headteachers’ Beliefs in Relation to Implementing a Change in the Education System

The headteachers’ beliefs, their faith and their vision, regarding the way of the implementation, all make their ability to introduce the change, to manage and to lead it easier and clearer. Indeed, all the headteachers reported their top three list regarding the implementation of a change as derived from their experience of the implementation of "Bagrut 2000". It can be seen as a situation in which the headteacher wishes to be in times of change. These beliefs of all the headteachers comply with Sashkin’s (1995) argument that the beliefs are part of the vision of headteachers and they offer better conditions for success than the present.

The following analysis represents the change in beliefs of the headteachers that belong to Type 1.
**Type 1:**

Table 21: The headteachers' beliefs in relation to implementing a change in the educational system:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>There must be vision and faith in the idea of</td>
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<tr>
<td>The importance of the involvement of the</td>
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<tr>
<td>headteacher in the process</td>
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<tr>
<td>Identifying partner/s in the staff, parents and</td>
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<tr>
<td>students who believe in the idea</td>
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</tbody>
</table>

The above items are those that are shared by the Type 1 headteachers. Nevertheless, one headteacher (16) did not share the perception of the third item, identifying partners who believe in the idea whilst headteacher No.1 only shared this item.

The first item, the belief in the idea and the vision, was emphasized by eight of the headteachers in this category. Indeed, Sharan (1997) and Inbar (1999) claim that headteachers perceive themselves as the source of the faith and the vision. Moreover, as seen in the literature review (Peter, 1992; Toffler, 1990; Sergiovanni, 1993), the headteachers of the 21st century will be required to operate in a more turbulent and unstable environment. One of the areas they would have to work on, then, is forming a vision and motivating all those involved towards changes driven by their vision.

"...I believe that the education system today is like a hi-tech industry - it has to change all the time, otherwise it will stagnate and regress..."

(Head No. 3)
This vision, according to Bennis and Nanus (1985), has to lead to a change that will help solve the problems of the present and create a better reality.

"...It was clear that the idea behind ‘Bagrut 2000’ matches with the school’s education approach...success was exactly what our students needed...To be taught in new, different ways, in order to get them back on the track of success..."

(Head No. 2)

However, such a vision will never lead to change if only the headteacher knows of it. A vision can be realized only if the headteacher succeeds in internalizing it among the staff. A practical example, concerning the implementation of "Bagrut 2000" was presented by headteacher No.9:

"...What they did was re-thinking the curriculum, in terms of the objectives, the rationale, the focus and the process..."

According to Bar-Kol (1997), faith in the change and vision helps bring out the headteacher’s ability to become a trustworthy, supportive and empowering leader. The above researcher claimed that a headteacher, who succeeds in instilling the faith in the change and the vision in the teachers, is a leader whose subordinates will follow wherever he/she goes. Still, it is important to remember that the faith and the vision must not be the headteacher’s exclusively. Bush and Coleman (2000), Forman (1998, p. 24), and Fullan (1992, p. 121), claim that since the vision is the product of collaboration, based on the values, approach and preferences of the staff, it would be impossible for the vision to be created exclusively by the headteacher. Furthermore, the headteacher cannot impose the change on the teaching staff.
"...There are no magic tricks here. It's very simple. If you work with the people and share ideas before operating, it will work. It's that simple..."

(Head No. 18)

According to Inbar and Pereg (1999), the headteacher is a prominent figure in instilling educational changes. The success of the change depends on the involvement of the headteacher, which includes both support and practical assistance. In general, the involvement of the headteacher in the different stages of the change, the workshops and the connections with external bodies is extremely important (Fuchs and Hertz-Lazarowitz, 1992). Indeed, the second item, which was shared by all of the headteachers, is the headteacher’s involvement. However, the perception of the extent of involvement is not the same among all of the headteachers. The analysis of the headteachers’ involvement was done, using their general statements during the interviews, as well as their responses regarding their contribution to the change. The fourth research question discusses the contribution of the headteacher, and so this issue will be discussed in length in the analysis of the fourth research question.

In addition to these beliefs, shared by all of the headteachers, other beliefs were held by individual headteachers. Three of the headteachers (3, 9, 18) believe that mutual trust, focusing on supporting the teachers on the one hand, and giving credit to the person who leads the change on the other hand, is highly important. These issues will be elaborated upon as part of the analysis of the leadership’s perception of the headteachers. Sharing and teamwork is another perception that belongs to two heads (12, 18).
As for the change itself, headteacher No. 9 believes that it is very important that the change poses a challenge and, as a result, empowers the teachers.

"...If we empower the teachers the change would eventually reach the students..."

(Head No. 9)

In addition, it is important to focus on one change at a time:

"...Not to divide your efforts. To avoid introducing dozens of programmes and projects simultaneously..."

(Head No. 16)

The headteacher of school No. 1 also focuses on the change itself. His perception is that a change is a concept that has to be an integral part in the day-to-day operation. Moreover:

"...The headteacher must believe that not changing means regressing...Every year a change has to be introduced, whether large or small..."

The perceptions of Type 2 headteachers include two of the beliefs that the former headteachers, those of Type 1, mentioned. However the consensus was not the same.

Type 2:

The common theme of all the headteachers is their belief in the need for partners in the change process, "...Make the others - partners..." (Head No. 11). This theme is in accordance with the common characteristic among these headteachers: the participatory decision-making process. It is no wonder, then, that these headteachers believe it is important to identify partners prior to introducing change into the school. For Type 2 headteachers, it is the natural way of acting.
"...People, people, people. It's all about people. The extent to which you can connect to people, connect them to your ideas..."

(Head No. 8)

As claimed by Bar-Kol (1997), headteachers who succeed in finding partners for their vision will be those, whose staff will follow wherever they go. As mentioned, these headteachers were described all throughout the study as those who value shared responsibilities. Coleman (2000) claims that a vision is the result of cooperation, and it is impossible that the vision be held by the headteacher alone, or imposed on the staff.

"...By definition you have to believe in the change and be able to create an enthusiasm in the staff..."

(Head No. 17)

Six of Type 2 headteachers point out the importance of examining the necessity of the change. In order to find partners for discussing and implementing the change, its necessity must be examined first (Morrison, 1998). In addition, a change that is necessary and significant to the school will stand a higher chance of succeeding (Huberman and Miles, 1984, p. 77).

"...There has to be an issue that needs a change and the conditions for making the change..."

(Head No. 6)

Examining the needs should be both theoretical and practical:

"...You have to define your objectives in operative terms. Otherwise, things just won't work...."

(Head No. 10)

In conclusion:

"...You have to believe that the change is justified, necessary, important, contributing, and leading somewhere..."

(Head No. 17)
Another theme shared by five of the headteachers (4, 6, 8, 10, 17) is the professionalism of the teams. This comes as no surprise, since the headteachers attributed great importance to the cooperation of the teams, and naturally, professional teams better execute the tasks of implementing the change. Fullan (2001, p. 76) claimed that the large number of changes that schools are expected to go through in recent years, leads to ambiguity of the changes in their first stages. There is no doubt, then, that the more professional the teams, the better they succeed in implementing the change.

"...I think that a successful change can take place only if the teachers know how to work with change. It has to involve the mind, the spirit. The faith and the tools..."

(Head No. 17)

The last issue, the involvement of the headteacher in instilling the change, was evident in the beliefs of four headteachers (4, 6, 8, 19):

"...If the headteacher is not directly involved, not even the smallest change will succeed..."

(Head No. 4)

Headteacher No. 19 gives the reasons for his involvement:

"...Make it show that it is important to you, on a personal level, and in your attempt to solve a problem..."

Other issues connected to the beliefs of one headteacher or another include:

Continuous learning, as mentioned by headteacher No.8:

"...I would say being constantly in a learning situation. Individual learning and group learning..."

The headteacher should give the staff credit (headteacher No.10):

"...I believe that a headteacher has to give the partners credit, trust and leeway..."
The Type-2 headteachers’ perceptions regarding the introduction of the change are presented in the following table:

Table No. 22: Type 2 - The headteachers' beliefs in relation to implementing a change in the education system

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying partner/s in the staff, parents and students who believe in the change</td>
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</tr>
<tr>
<td>Examining the need for change</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Staff that wants and knows how to work</td>
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<td></td>
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</tr>
<tr>
<td>The involvement of the headteacher in instilling a change</td>
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</tbody>
</table>

The Type 3 headteachers have beliefs that are similar to the first two types

**Type 3:**

Both headteachers initiated and introduced changes into their schools. Moreover, these headteachers allowed the teams to initiate changes. In school No.5, the whole system initiated and brought a change of such magnitude in the teaching and evaluation methods. Such a school cherishes changes and improvements. The same goes for school No.15. A number of teams initiated changes in the teaching and evaluation methods because they were not satisfied with the current situation. It is no wonder, then, that both headteachers believed, in regards to introducing change, that identifying the partners was an extremely important factor. This, as shown earlier, was expressed by all of the headteachers in all three typologies that characterized the initial decision-making in introducing "Bagrut 2000".

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"...Finding the right partners, including teachers, PTA committee, etc,..."

(Head no. 5)

It was important for headteacher No.15 to emphasize that in implementing a curricular change the students are important:

"...It is important to make the students partners. To know that you can also demand from the students... If you give them responsibility, they'll take it. If you don't they'll wait for you to do all of the work..."

Identifying the partners is the only item shared by the two headteachers as to their beliefs concerning the introduction of change. The other items, referring to the headteachers' beliefs, were found only in one or the other. Headteacher No.5 believed that, first and foremost, there has to be faith, and in addition, that it is important to initiate a number of simultaneous changes.

"...Once you believe in something you can convince others... You start simultaneously with a number of initiatives and move ahead as a front..."

As for headteacher No.15, curricular change should best take place in an atmosphere of teamwork and support:

"...Teamwork is the most important thing, but also to know that you have support..."

Following the analysis of the headteachers' beliefs, their perceptions as to the motives to enter the change process will now be examined, in compliance with the second research question.
The motive to enter the change process can be both internal and external, as mentioned by Ido and Bashan (1994, p. 61). In the case of "Bagrut 2000", the motive was both at the same time. The change itself, its goals and its objectives, makes up the essence of the Ben-Peretz Committee’s recommendations. Adapting the recommendations, in the case of the Type 1 headteachers, is a school-wide matter but finally the headteacher's decision. As for Type 2, it belongs to the headteachers as well as to the teams. Furthermore, Shachar and Sharan (1990, p. 227) claimed that teachers could make up the motive for a curricular change. In "Bagrut 2000" the teachers were not those that generated the change, but their teaching method and functioning were those that led the headteachers to introduce changes.

Following is the analysis of Type 1 headteachers. Table No. 23 presents the headteachers' perceptions regarding the motives for participating in "Bagrut 2000".
Table No.23: Type 1 - The motives for participating in "Bagrut 2000"

<table>
<thead>
<tr>
<th>Motive</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>A desire to change teaching, learning and evaluation Methods</td>
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<td>*</td>
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<td>*</td>
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</tr>
<tr>
<td>Refreshing the professional skills of the teachers</td>
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<tr>
<td>Educational and pedagogical consideration (the implications for junior high-school and/or other subjects and teams)</td>
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<tr>
<td>The need to change and the fact that the change was a challenge</td>
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</tbody>
</table>

The desire to change the teaching and evaluation methods was a primary motive for all these headteachers to enter the change process.

"...We were never happy with the teaching methods...We never accepted the Ministry's requirements and the way they wanted the subject to be taught in terms of the programme, the viewpoint and the matriculation exams..."

(Head No. 12)

Shachar and Sharan (1990, p. 227) claim that when teachers are exposed to actual outcomes, they become avid supporters of the change process. Even if "Bagrut 2000" leaves much of the initiative to the teachers (in everything connected to the teaching and evaluation methods), it seems that the message conveyed by the purpose of the change is very clear, and is relevant to the essential professional functioning of each and every teacher. Even if "Bagrut 2000" led to 'knowledge creation' in the core professional aspects of teaching, the message was nevertheless clear: changing teaching and evaluating methods.
The table indicates that the main motive for the change can be directly attributed to the essence of "Bagrut 2000". The need for alternative teaching and evaluation methods was an essential part of these headteachers' perceptions. Support for this issue can be found in the statements of seven other headteachers (1, 2, 3, 9, 14, 16, 18) who attributed great importance to refreshing the teachers' professional skills.

"...It somehow agreed with the feeling of myself and the staff, that the whole secondary school study programme needs to be 'shaken up'..."

(Head No. 14)

As mentioned, these two issues were central in the headteachers' perceptions, and were those that motivated the teachers to take part in "Bagrut 2000". Five of the headteachers (1, 2, 12, 14, 16) saw great importance in instilling the ideas of "Bagrut 2000" among the rest of the teachers and the students in the school. More about the expansion of "Bagrut 2000" ideas was presented and analysed as one of the general issues: the adjustment of the schools to the principles of "Bagrut 2000".

The last item regarding the motives to enter the change, shared by five Type-1 headteachers (1, 3, 7, 9, 16) was the mere need for change as a professional challenge.

"...I take changes as a challenge. Change leads to regeneration, you can call it breaking the old paradigms..."

(Head No. 9)

As seen in the literature review (Handy, 1990, pp. 168-187), the extent of change is so high that it becomes impossible not to bring in new changes. Schools indeed have become used to taking part in many changes. Regarding this group of
headteachers, "Bagrut 2000" was not just another change, but rather one that affected the professional essence of the school.

The motives to enter "Bagrut 2000", as mentioned by the Type 1 headteachers, were mostly a result of the state of the Israeli secondary school education system. The dissatisfaction of the headteachers with the teaching methods and with the professional level of the teachers should have been expressed, then, in the motives of the Type 2 headteachers as to entering the "Bagrut 2000" project.

**Type 2:**

As was mentioned above, teachers could make the motive for a curricular change (Shachar and Sharan, 1990, p. 227). Indeed, the way they were functioning evoked in the Type 2 headteachers the desire to implement "Bagrut 2000". Headteacher No. 11 was very specific and explained the problem very clearly:

"...The teachers taught from the same textbooks they studied from..."

The findings show that all of the Type 2 headteachers, indeed, claimed that the desire to change the teaching, evaluation and learning methods was the reason for implementing the change. According to Ido and Bashan (1994, p. 61), the motive for change can be on both the institution and the personal levels. Headteacher No. 8 combined both levels:

"...I felt very connected to the idea, which may look very presumptuous, of taking the students on 'intellectual trips', providing them with a real, holistic learning experience..."

Another explanation, focusing on the Bagrut examination, was given by headteacher No. 19:
"...The 'Bagrut' exams create an obstruction for the teachers and the students, and they are totally inadequate to the modern world. They force us to endorse shallowness, and put a lot of pressure on the students..."

(Head No. 19)

Naturally, the headteachers whose motive to introduce "Bagrut 2000" was changing the teaching, evaluation, and learning methods, indeed mentioned, as an additional motive, the desire to refresh and renew the teachers' professional skills. Six of the headteachers (4, 6, 10, 11, 17, 19) shared this perception.

"...I wanted to add 'colour'. We are a very 'textbook' school...I felt the place needed to be 'revived'..."

(Head No. 6)

Or, as headteacher No. 4 perceived it:

"...We believed that 'Bagrut 2000' would be able to 'shake up' the system..."

Caspi (1995) indicates that introducing change symbolizes development, and is seen as a status symbol. Moreover, since these headteachers perceived it important to improve the teachers' professional skills and the students' learning methods, it is no wonder that four of them (4, 6, 10, 17) perceived the need for change as a motive.

"...We saw the project as a genuine opportunity for change..."

(Head No. 17)

And also significant:

"...It was obvious that a significant change was bound to occur...It was obvious, though, that it represented something big..."

(Head No. 10)
Another two issues that the headteachers perceived as motives for entering "Bagrut 2000" were the fact that the goals of "Bagrut 2000" agreed with the school's educational philosophy (headteachers No. 8, 19):

"...It really matched the school's ideas and educational philosophy...It's a change that can make a real change in the school's 'being'...It dealt with the essence of our activities, on the basic, fundamental level..."

(Head No. 8)

And granting the school autonomy (headteachers 4, 13):

"...We perceived the project as granting the school autonomy. I thought, and still think today, that the school has to have a larger role in determining the students' final grades..."

(Head No. 4)

The following table summarizes the findings:

**Table No. 24: Type 2 - The motives for participating in "Bagrut 2000":**

<table>
<thead>
<tr>
<th>Type of Motive</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>The desire to change teaching, learning and evaluation methods</td>
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<tr>
<td>Refreshing the professional skills of the teachers</td>
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<tr>
<td>The need to change and the fact that the change was a challenge</td>
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<tr>
<td>The project's goal matches the school's educational philosophy</td>
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<tr>
<td>Granting the school autonomy</td>
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</table>

**Type 3:**

In these two headteachers' in-depth interviews, both were reluctant to discuss their motivation or the staffs' motivation for introducing "Bagrut 2000".

"...We were there before the project started..."
Still, both emphasized that their desire to change the teaching and evaluation methods was the key to the change.

"...We searched for different ways to evaluate the achievements of students who were taught using alternative teaching methods..."

(Head no. 5)

Headteacher No.15 also stressed this matter:

"...The evaluation method, using the Bagrut exams, didn't satisfy us. The teaching methods at that time were a race against time, very achievement-oriented..."

In conclusion, all of the headteachers who participated in the change mentioned the change in the teaching, evaluation and learning methods as their motive to enter the change processes. It seems that the need for this change was most important. It was the result of a Ministry of Education initiative (the Ben-Peretz Committee), the headteachers' desire (Type 1) and a combination of the desire of the headteachers and the different teams (Type 2). Moreover, it also grew "in the trenches" (Type-3).

Following the analysis of the headteachers' perceptions as to their beliefs, their motives and the stages of the change itself, the headteachers' perceptions regarding their contribution to implementing the change will be analyzed below.

5.6 The Headteachers' Contribution to the Implementation of "Bagrut 2000"

The last research question deals with the contribution of the headteachers to the implementation of the change. As was indicated in the literature review, the
headteacher is an extremely influential figure in the success of the change (Greidy, 1995, p. 17). As such, the headteacher is a prominent player in the process. This is expressed in both supporting and backing the teachers, as well as in his/her practical guidance (Inbar and Pereg, 1999). All the headteachers estimated their contribution.

**Type 1:**

The analysis of the statements indicates that all the headteachers (except for headteacher No.3) perceived their contribution as very significant. This is demonstrated in the words of headteacher No.18:

"...With all due modesty, if it had not come from me, it wouldn't have come at all... You can't do it without the headteacher..."

Headteacher No. 16 describes it in details:

"...I get into the small details...I believe I contribute a lot through these details..."

As to headteacher No.3, she seemed to be consistent in her perception. Her non-involvement resulted from her perception that her job was limited to bringing in initiatives. The staff did the rest of the work.

"...In 'Bagrut 2000' I believed the staff could work alone. I could move aside..."

Since the Type 1 headteachers were those who made the decision to enter the change process (as well as other related decisions) on their own, it is no wonder they perceived their contribution to the success of the change as very significant. Moreover, they held this view consistently regarding all of the aspects of implementing "Bagrut 2000", as expressed in the interview topics. The Type 1
headteachers (except for headteacher No.1) believed, (when asked about the recommended way to implement change), that the headteacher’s involvement is extremely important. Their involvement in the first stages of the change was indeed high, especially at the first and second stages. As for headteacher No. 1, he is one of the literature team members, and therefore he is involved as a teacher.

**Type 2:**

The contribution of the Type 2 headteachers, as perceived by the headteachers, is characterized by two distinct patterns. The first, in which the headteacher's contribution is only at the beginning of the process, and later limited his/her contribution to the reporting level, was mentioned by five headteachers (8, 10, 13, 17, 19).

"...I've been leading the project from day one. Now I meet with the teams and receive periodical reports from the subject coordinators..."

(Head No. 17)

The Type 2 headteachers reached the decision to implement the change in cooperation with others. They were thus naturally characterized as collaboration and collegiality-oriented. Within this pattern, based on trust, sharing, and the knowledge that they have someone to rely on, they perceived their role as one of support and assistance.

"...As a headteacher I can't be involved in every day-to day activity. A good headteacher has to leave some space for the others..."

(Head No. 13)

Therefore, the headteachers' contribution is:
"...I don't monitor every action of theirs. I'm there if they need help. I meet with them, to see what I can do to help them, and to hear from them about their progress and difficulties..."

(Head No. 10)

The last remaining three headteachers (4, 6, 11) perceive their contribution as very significant throughout the change of "Bagrut 2000":

"...I was part of the process from the start. I am present in all of the meetings..."

(Head No. 11)

In other words:

"...I am very involved in 'Bagrut 2000'... from within and outside the school..."

(Head No. 4)

Following is the summative table that presents the involvement of Type-2 headteachers.

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>The headteacher's contribution is only at the beginning of the process</td>
<td></td>
<td>*</td>
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<tr>
<td>The headteacher's contribution is significant throughout the process</td>
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</tbody>
</table>

**Type 3:**

There is an essential difference between the perceptions of these two headteachers as to their contribution to the change process, in spite of the literature report that the headteacher is an extremely influential figure in the success of the change (Greidy, 1995, p.17). Headteacher No.5 didn't mention...
her contribution at all. She assumed the responsibility, took part in the seminars and was keeping track on the change to its smallest details. In her perception, this is all part of her managerial approach, not to be seen as a special contribution.

"...I assumed the responsibility for setting the boundaries. It was important to me that my teachers saw that I was on their side in dealing with the Ministry of Education. It was also important that we took part in the project seminars. We were there too and we learned all about it. That's also part of my management philosophy..."

Headteacher No.15 saw her personal contribution to the change from an interesting angle:

"...I absorbed many of the crises resulting from the pressure and the extreme workload. I absorbed everything..."

Two other issues that were analyzed could complete the picture. The first is the response to the question “What would you have wanted to learn from the experience of other headteachers?”, and the second is the issue of the headteachers' confidence in the way they had implemented the change.

5.7 Learning from the Experience of other Headteachers

The desire to learn from the experience of others indicates openness to new ideas and willingness to improve and renew. Since the Type 1 headteachers make decisions without consulting others, it can be safely assumed that these headteachers are quite self-assured, and would not attribute great importance to meetings with other headteachers.

Following are the perceptions of the headteachers:
Table No. 26: Type 1 - Learning from other headteachers in the project:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>The meetings with the other headteachers had a great contribution</td>
<td>*</td>
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<tr>
<td>Little interest in learning from other headteachers</td>
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</tr>
</tbody>
</table>

The findings show that half of the headteachers attributed importance to meeting with, and learning from, other headteachers, whilst the other half attributed little importance. Headteacher No. 1’s perception was that the meetings were effective only with regards to one problem:

"...How they deal with the paperwork, the bureaucracy and the centralisation..."

Three headteachers (2, 3, 12) of the four, who attributed little importance to learning from other headteachers, made all of the decisions by themselves. As mentioned, the other four headteachers indeed perceived the meetings with other headteachers as essential. Such is headteacher No. 9 who perceives the headteachers' meetings as very important:

"...These are very enlightening meetings. A lot can be learned..."

A similar perception belongs to headteacher No. 14:

"...Great opportunities to meet real headteachers...I learned from the other headteachers, and not only about the project..."

A more specific perception belongs to headteacher No. 18:

"...I learned a lot from the other headteachers in the schools that belong to the project. It's mostly not about instilling change, but rather about procedural matters, such as rewarding the teachers..."

The Type 2 headteachers’ responses to the question “What would you have wanted to learn from the experience of other headteachers?” indicate that five of
the headteachers (4, 8, 10, 17, 19) did not perceive the contribution of the other headteachers as significant. This was to be expected. These headteachers shared the process with, and counted on, the other position holders and on those involved in the change, right from the beginning of the process. To this end, learning from the experience of other headteachers in "Bagrut 2000" is not significant to them. The different position holders in the school they manage, the school board members, the "Bagrut 2000" coordinators, and even the teachers in the different teams were all part of the discussions and deliberations. In cases of doubts, hesitations or conflicts, they were the first to be turned to.

"...The project coordinator, who I trust totally, attended all of the seminars. Perhaps it is not the right way to operate...I've been to only a very few of them..."

(Head No. 10)

He wasn't the only headteacher who perceived it that way:

"...My involvement became less intensive. The project coordinator went to all the seminars and conventions..."

(Head No. 19)

As mentioned, three more headteachers (6, 11, 13) perceived that the meetings with other headteachers contributed a great deal.

"...I learned a lot during conventions...I meet with people from Arab schools, from Kibbutzim. So it's natural that I learn..."

(Head No. 6)

"...I believe that I've always learned from meetings with other headteachers and visiting other schools..."

(Head no. 13)

Table no. 27 presents the above.
Table No. 27: Type 2 - Learning from other headteachers in the project:

<table>
<thead>
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<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>11</th>
<th>13</th>
<th>17</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little interest in learning from other headteachers</td>
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<tr>
<td>The meetings with the other headteachers had a great contribution</td>
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</tbody>
</table>

**Type 3:**

Regarding the headteachers’ views as to learning from other headteachers, it seems that both learned from the headteachers’ meetings. Nevertheless, the perception of headteacher No.5 was somewhat ambivalent:

"...I met people and exchanged opinions. We adopted some of the things that were done in other schools. On the other hand, the headteachers forum didn't work..."

The possible reason for this was since "Bagrut 2000" was not new in the school, she had more experience with the change than the other headteachers.

Headteacher No.15 could pinpoint what she learned from these meetings:

"...I learned that you don't have to give all the time. The school always thinks that it has to give the students and not to ask them for anything. The student's responsibility and commitment is very important and the headteachers weren't afraid to talk about it..."

The second issue, the confidence of the headteachers in the way they have introduced "Bagrut 2000", is the last issue that was analyzed regarding the headteachers' perceptions of curriculum change.
5.8 The Confidence of the Headteachers in the Way they have Introduced "Bagrut 2000"

Their answer to the question, “Would you have brought in the change in the same way?” indicates the headteachers’ satisfaction, confidence in their way and determination in introducing changes. Indeed, all the headteachers, of all types (except for heads No.2 and 4), believed in their own way of implementing the change.

"...Do you know another way?..."

(Head No. 14)

Or:

"...I think I would have done it the same. That's the way decisions are made. It works for us, and we're OK with it..."

(Head No. 12)

Still, the above mentioned resolve was not apparent in the Type 2 headteachers’ perceptions. They restricted their words, and preferred to “keep it safe”.

"...This is the right way...In reality, there are always limitations and things do not always go as planned..."

(Head No. 10)

A very interesting answer that splits it has been given by headteacher No. 13

"...In regards to implementation I wouldn't have changed a thing. I think we did it right. I wouldn't have changed the way we implemented the change. However, what I would do differently was start right away with three subjects..."

A similar answer, that deals with the subjects and not with the process of implementation, belongs to headteacher No. 17:

"...I'd make sure that a technological subject would be included. It would have been very important to make 'Bagrut 2000' more complete..."
Only one headteacher (No. 4) would have changed the way "Bagrut 2000" was implemented:

"...It would have been better, in my opinion, if the whole school knew about 'Bagrut 2000' beforehand..."

(Head No. 4)

**Type 3:**
Both headteachers do not refer to this issue in their interviews. In their opinion, making the change in teaching, evaluating and learning methods according to the policy of the Ministry of Education, only strengthens their vision and their belief that this is how things should be done.

In changes of the magnitude of "Bagrut 2000", the headteachers' views as to change in general, and the specific change in particular, are extremely important and crucial. They determine, to a great extent, the success of absorbing the change, as well as its overall success. No less important in any process of instilling change are the headteachers' leadership views and skills, since they are de facto the leaders of the change.

Following the analysis of the headteachers' perceptions of change, their perceptions regarding leadership will be examined.

**6. The Headteachers' Perceptions of Leadership:**

Leadership is connected to theories of change (Dalin, 1998, p. 80). The main meaning of educational leadership is to encourage and empower the teachers and all the other partners involved in the educational work (Bush and Coleman, 2000). The headteachers' leadership styles will be examined, whether they are transformational or transactional, task-oriented or people-oriented and all the
combinations thereof. It is important to mention that the headteachers' leadership was not a criterion in selecting schools for "Bagrut 2000". As claimed by the head of "Bagrut 2000", Dr. Ben-Elyahu:

"...We didn't look into the issue of the headteacher's leadership abilities, meaning that we didn't isolate this variable..."

Nevertheless, the project's administration indeed assumed that the headteacher's leadership would be taken into consideration.

"...I can assure you that we assumed that the supervisors' recommendation regarding a certain school took into consideration also the matter of the headteacher's leadership. That's for sure..."

(Dr. Ben-Elyahu)

The beginning of the analysis will examine the headteachers as transactional or transformational leaders.

6.1 The Perceptions of the Headteachers as Transactional/Transformational Leaders

6.1.1 Transactional Leadership

According to the literature review (Burns, 1978, p. 41; Bass, 1985), transactional leadership assumes that the transactions between the leader and the subordinates are based on exchanges. Furthermore, the transactional leader is aware of time limitations, and setting procedures controls the process. It is important to note, then, that the "Bagrut 2000" administration in the Israeli Ministry of Education was responsible for it and, to some extent, dictated the orientation of the project.
"...There are clear guidelines, which specify what to do, when and why..."

(Head No. 4)

Additional periods and increased pay for the efforts in instilling the change rewarded the teachers who took part in the change. The timetable for implementing “Bagrut 2000” and the control over it were also set by the project’s administration, so the headteachers were not responsible for this. Still, among the Type 1 headteachers, all of them, with no exception expressed during the interview views and perceptions that indicate being a transactional leader. Most of the perceptions of Type 1 headteachers, regarding the transactional leadership, concerned rewarding the teachers:

"...I asked the teachers to undertake a difficult task, but they were compensated for it...

(Head No. 2)

Headteacher No.16 mentioned the rewarding in her criticism of the way it was done:

"...If we had told the teachers, right from the start, that they would be rewarded generously for their efforts, they might not have been so intimidated..."

The leadership style of headteacher No.7 can be characterized as transactional not only in regards to "Bagrut 2000", but in general:

"... Before the Bagrut exams I add extra hours overtime, I don’t care how many hours they put in, as long as the students study hard and succeed...

Headteacher No.18 especially mentions rewarding the teachers:

"...I learned a lot from the other headteachers...about procedural matters such as rewarding the teachers..."
As for the Type 2 headteachers, the perceptions of one of them, (6), show transactional leadership.

"...I try to give the teachers good working conditions...I once paid someone to write a test...."

(Head. No.6)

As for the Type 3 headteachers, none of their perceptions included any reference to transactional leadership. They definitely perceived themselves as leaders, but the educational changes and improvements were much more the result of empowering the teachers and the teachers' faith. Their perceptions will be discussed in detail in the analysis of the headteachers' transformational leadership.

The second leadership type that is essential in implementing a change is the transformational leadership. The different types will be examined according to this skill of the headteacher.

6.1.2 Transformational Leadership

Leithwood (1992, p. 8) claimed that second level changes require transformational leadership. A transformational leader, according to Yukl (1989, p. 271), is a leader that, on the one hand, operates on the micro-level, when dealing with interpersonal processes, and on the other hand operates on the macro-level, when dealing with changing social systems and institutional reform.

In general, the leadership perception of the headteachers, from the point of view of transformational leadership, is indeed based on micro- and macro-level operation. They mention their influence on the teams and on the interpersonal process, and perceive as such their contribution to social changes and to the reform of the institution.
The analysis based on the headteachers' perceptions shows, that all of the Type-1 headteachers, except for headteacher No.7, and all of Type 2 and Type 3 headteachers, with no exception, can be classified as transformational leaders. 

Headteacher No.9, (Type 1) exemplifies this well:

"...I think that the process contributed to the teachers' growth, regeneration, self-efficacy and their willingness to take educational challenges...."

And Headteacher No. 4 (Type 2) explains the essence of being a transformational leader, in a very detailed way:

"...The school's management consults with the teachers regarding issues that have direct relevance to teaching and working with the students. The management delegates authority to the teachers and grants them the autonomy to act independently within boundaries set by the management..."

These aspire to change the situation and the general direction:

"...It somehow agreed with the feeling of myself that the whole secondary-school study programme needs to be 'shaken up'..."

(Head No. 14)

And bring in a new spirit of motivation, expectations and achievements:

"...One of the things that helped the people that went with me was my conviction. I saw beforehand where the whole thing was going....It gives the others confidence. You have to believe in your way..."

(Head No. 2)

Moreover, headteacher No.8 (Type 2) perceived the spirit of motivation, expectations and achievements as critical to the change process:

"...No change would succeed if it were not connected to the self-fulfillment of the people in the organization..."

Whilst headteacher No.14 (Type 1), focused on new working methods:
"...The project made the teachers adopt new teaching methods. We had to change the size of the study groups..."
(Head No.14)

A similar perception belonged to headteacher No.1 (Type 1):

"...The mere fact that the teams planned together every week changed working patterns within the teams..."

There is no doubt as to the transformational leadership of both Type 3 headteachers. Headteacher No.5 who led all the teams through changing the teaching and evaluation methods in such a large school, could never have done it without empowering the teachers and developing their self-efficacy whilst facing the challenge and the difficulties of the change. There is no doubt that such a headteacher had to operate in both the micro- and the macro-levels. Such a comprehensive and holistic change, like the one that took place in school No.5, required the headteacher's attention to interpersonal processes as well as to macro system-wide management.

"...The teachers had a strong belief that a pedagogical change was inevitable. I didn't need to convince them...We fight over every child, out of the belief that we have to reach out for every child and the belief that we are capable to do it. It is not my belief, it is theirs. It belongs to them..."
(Head No. 5)

Moreover, as reviewed in the literature review, Bass and Avollio (1994, pp. 3-4) refer to transformational leaders as leaders who behave in one or more of the four I's: Idealized influence, Inspirational motivation, Intellectual stimulation and individualized consideration. In the present analysis, it was found that the headteachers (with no differentiation between the types) had only two of the four ways of behaviours. Their way was Inspirational motivation and Intellectual stimulation. The headteachers had provided the teachers with challenges and clear
expectations as well as intellectual stimulations. On the other hand, none of the headteachers served as a role model (Idealized influence) or referred to the needs and achievements of each of the teachers (Individualized consideration).

The fact is that 18 out of 19 headteachers, who participated in this study can be classified as transformational leaders. Bollington (1999, p. 171) claims that such a leader is needed in times of change. The second fact is that 9 of them have transactional perceptions of leadership as well. According to Bass (1985), these two leadership styles should be seen as complementary rather than contradictory. Moreover, the ideal leader according to Bass (1985) is characterized as both transactional and transformational.

Now the headteachers' perceptions will be examined in regards with their being task-oriented, people-oriented, or the combination thereof.

6.2. The Headteachers as Task-Oriented/People-Oriented Leaders

In general, task-oriented leaders monitor and supervise the performance of their subordinates, whilst providing them with clear guidelines and explanations regarding the task itself and the timetable for completion. "Bagrut 2000" is a curricular change, whose guidelines were clearly conveyed to the headteachers, first by the Ben-Peretz Committee, and at later stages of operation it by the project's administration. Moreover, guidelines for the expected outcomes were set, and were externally monitored in each of the schools.
In general, the analysis of the headteachers' perceptions shows that indeed, eight out of the nine Type 1 headteachers are task-oriented and so are, in a way, two (4, 6) out of the eight Type 2 headteachers. As for Type 3, the two headteachers are characterized as task-oriented. The aims of the change, were, at the beginning, all theirs and therefore they were in charge of the private change and had to monitor it. There is no doubt that this requires being task oriented-leaders.

The orientation of Type 1 headteachers is represented by headteacher No.9, who elaborated on the issue:

"...I learned a lot from this project. I learned about setting measures for success. Today, we use the terminology of expected outcomes, maintaining the change. My awareness of maintaining changes grew a great deal, you have to constantly think about what you will need tomorrow for the project to work..."

In this type, only headteacher No.3 wasn't characterized as such, and she explains this clearly:

"...It's legitimate for a school to try things, stop, think it over, and decide not to continue with it..."

It was indicated that only two of the Type 2 headteachers are, in a way, task oriented leaders. As headteacher No. 4 explains:

"...Serious attitudes towards tests, in setting criteria, standards, etc,..."

Consistent with the common characteristics of transformational leaders, these headteachers, who are all defined as such, indeed do not express perceptions that characterize task-oriented leaders. The way they see it, the teachers are responsible for the successful execution of the tasks, since they were part of the change process. It seems that the Type 2 headteachers perceive their
contribution as leaders differently. They are transformational and people-oriented. They work with the position holders and with the teams. As such, these headteachers' perceptions is that when a specific position holder takes upon him/herself a task, he or she is responsible for its execution.

Indeed, seven out of these eight headteachers, perceive their leadership style as being people-oriented. The definition of headteacher No. 10 encompasses it all: "...You have to understand that every change depends first of all on the people...". In particular, and in a specific manner, headteacher No. 11 explains:

"...I did this out of responsibility for the welfare of the teachers and for their livelihood..."

Headteacher No. 19 summarizes all the perceptions of Type 2 headteachers, regarding this issue:

"...The most important thing, regarding the implementation of a change, is that it is important to constantly examine the level of satisfaction of your partners to the implementation process..."

This pattern is not surprising, as mentioned, in regards to the Type 2 headteachers. Surprisingly, though, most of the Type 1 headteachers (1, 2, 3, 9, 14, 16, 18) were also characterized as such.

"...The atmosphere is familiar, supporting. We worked hard to achieve this..."

(Head No. 2)

Or as headteacher No. 18 perceives it:

"...A teacher has to feel that he is not alone, that he can turn to you with any problem..."

The two type 3 headteachers are also people-oriented leaders. They care for the staffs and in their perceptions need to support them:
"...In leading the change, I was definitely the leader. It was especially important to me to support them. I sat with the teachers, I explained everything that was needed..."  

(Head No. 15)

Headteacher No.5 emphasized the importance of supporting the teachers and being attentive to their needs. As a leader, she was very diligent in protecting the teachers' rights.

"...I stood between the Ministry of Education and the teachers. My staff is not one that just receives orders..."

Since the above leadership styles can be examined on a continuum (Coleman, 1994, pp.55-60), the headteachers' leadership styles will be examined using the "managerial grid" developed by Blake and Mouten (1964).

Due to the nature of the change, and as mentioned earlier, most of the headteachers(except for headteacher No.3) were characterized as "results rated high". As for Type 1, five of them (1, 2, 9, 14, 18) were also in the "relationship rated high" column, and so their management style would be characterized as "team managers". As explained by Ben-Haim (1997), this style leads to mutual trust and respect. According to Coleman (1994, p. 59), this is the 'ideal' leader. In this case, decisions are made when needed, and the headteacher helps the teams to find solutions and settle conflicts.

This finding is indeed surprising, since as mentioned, the Type-1 headteachers were those who, at the initial stages of the change, operated alone. Furthermore, these five headteachers made all of the three initial decisions on their own, without consulting anyone. Three headteachers (2, 9, 14) were involved in the first stage of the change, whilst all five supported and assisted throughout the rest of the stages.
Three other headteachers (7, 12, 16) were characterized as “results rated high” and “relationships rated low”. These headteachers are identified as achievement-oriented as they see great importance in achieving goals, even if this hurts the different teams or individual teachers. These headteachers demand obedience and focus on the achievements of the organization.

"...Those teachers simply stopped teaching the subjects...I gave up on them, not on the change..."  
(Head No. 12)

The remaining headteacher (No. 3) was characterized as “results rated low” and “relationships rated moderate”. She indeed mentioned the importance of the welfare of the teachers and the good relationships with the management. Still, she claims that:

"...I'm not the type of headteacher that is perfect 100% of the time..."

The classification of the Type 2 headteachers presents a more homogeneous picture. Seven headteachers (4, 8, 10, 11, 13, 17, 19) are characterized as high in the two dimensions. In other words, they are "team managers" according to the "Managerial grid" of Blake and Mouton (1964).

"...We realized that the road to change requires a gradual, ongoing process, as well as attacking many fronts simultaneously...It doesn't matter how hard I would insist - if there isn't a good atmosphere nothing will happen..."

The same notion is the perception of this group of headteachers:

"...You have to define your objectives in operative terms. Otherwise, things just won't work. But you can't force a change on people unless you provide them with their needs and consider their desires..."  
(Head No. 10)

Headteacher No. 18, sums it up shortly:
"...Through changing the atmosphere it would be possible to make a total change in the school..."

Another headteacher (No. 6) is characterized as “results rated high” and “relationships rated low”. As was explained in the analysis of Type 1 this headteacher concentrates on achieving the goal, and pays very little attention to the teams.

"...I am a very strict headteacher...Everyone has a right to his opinion but at the end, I'm the headteacher and I make the final decision..."

(Head No.6)

The remaining two headteachers, the Type 3 headteachers, are classified as “results rated high” and “relationships rated high”. Therefore, their management style would be characterized as “team managers”. As explained by Ben-Haim (1997), this style leads to mutual trust and respect. According to Coleman (1994, p. 59), this is the ‘ideal’ leader. In this case, decisions are made when needed, the headteacher helps the teams to find solutions and settle conflicts. This has been the case in the schools that are identified as Type 3.

**Summary**

This analysis of the headteachers’ leadership styles is based on leadership in organizations, in the broadest sense of the term. In the case of educational leadership, in addition to its being transformational by nature as claimed by Bush and Coleman (2000), Ron and Shlayfer (1995), and Duignan and Macpherson (1992), the headteacher’s leadership also includes coordinating between inner-school and external bodies. The case of "Bagrut 2000" shows
that the coordination in everything that has to do with the change was done by
the project coordinators, except for four headteachers (6, 7, 12, 16) who
doubled also as project coordinators. Still, all the headteachers (except for
headteacher No.3) were regularly updated regarding the in-school and
external coordination activities, and mentioned this during the in-depth
interviews.

In addition, Chen and Addi (1993) claim that educational leaders in the Israeli
education system have a social mission. As mentioned, the change in "Bagrut
2000" includes social, as well as educational, messages. The headteachers
who participated in the pilot of "Bagrut 2000" may indeed be seen as
educational leaders. This will be further discussed in the "conclusion"
chapter.

The above analysis examined the headteachers’ perceptions regarding the
change itself and their own perceptions and actions regarding leadership.
However, instilling change successfully also requires wise management. As
claimed by Morrison (1995, p. 15): “...Successful change is about successful
management...”.

7. The Headteachers' Perceptions of Management:

The headteacher’s management style affects the teachers and the students alike,
and determines, to a great extent, the school’s climate. Management in education
is mainly concerned with keeping the organization running (Keren, 1998) and
having responsibility for the overall management and administration of the school
Orientation of management in education, according to Law and Glover (2000), and Whitaker (1998), includes the creation of a learning environment, evaluation, setting the curriculum, etc. All the headteachers who participated in "Bagrut 2000" indeed had an educational orientation, since they were dealing with a curricular change in the teaching and evaluation methods, based on creating a learning environment.

"...I believe that the physical structure of the school, the classrooms, doesn't fit the contemporary pedagogical thinking. Today you have to teach in a classroom that is also a computer library, with both computers and a blackboard. You have to have an auditorium and a room for personal tutoring. It's a different kind of school organisation, and this project requires it..."

(Head No. 9)

First, the headteachers' perceptions will be examined in the context of managerialism as the dominant ideology of management during the last decade of the 20th century.

7.1. Managerialism:

The essence of "managerialism" is centered on "the right to manage" (Helsby, 1999, p. 136). The analysis of the headteachers, focusing on this issue shows differences between the different types. The Type 1 headteachers indeed perceive themselves, at least at the beginning of the change process, as being in charge of managing, since they are those who decided alone to enter the project. The Type 2 and Type 3 headteachers act differently. They have partners, they consult others and the responsibility is not solely theirs.
As for the Type 1 headteachers, it was expected that the management style of most, if not all of them, would be characterized by managerialism. First, according to their own perception, they determine and decide the types of goals and changes, and dictate them to their subordinates. Second, eight of them were characterized as task-oriented and, as such, their management style naturally includes managerialism. However, this was not the case. Only two headteachers (2, 7) expressed views that represent managerialism.

According to headteacher No.2:

"...I made it my business to attend the meetings of all of the teams, because I am the one that dictates the policy..."

A more radical view was expressed by headteacher No.7:

"...Here, only I'm in charge...Everybody knows that I am capable of dismissing teachers. I usually don't resort to this, but I would do it if I had to. Nobody here undermines the headteacher's decisions..."

The fact that only two of the Type 1 headteachers mentioned this could be explained by the views that their "right to manage" was obvious, and thus did not need to be referred to.

Moreover, Codd (1993, p.159) claimed that the effect of managerialism on organizations is expressed, first of all, in their being hierarchical, competitive and very task-oriented. Eight out of the nine Type 1 headteachers were indeed characterized as task-oriented, whilst only two of the Type-2 headteachers were characterized as such.

Helsby (1999) adds that in the case of the education system, the teachers serve as a means to realize goals. As such, the control in the system is done
"top-down". The Type 1 headteachers' views, as analyzed in the change chapter, (regarding the preliminary decisions to enter "Bagrut 2000", appointing a coordinator and choosing the staffs), indeed indicate that their management styles are hierarchical and very top-down, especially in the preliminary decisions to entering the project, but also throughout the process. The management styles of four of the Type 1 headteachers (7, 12, 14, 16) were characterized as authoritative. These headteachers were those who reached the preliminary decisions themselves. Their management is based on control and supervision, lack of openness and distancing (Zak, 1991).

"...I was very blunt. I told them - if this is your position, then you're not going to do it..."

(Head No. 14)

These headteachers described the atmosphere as:

"...There are small groups. The work is done in a team..."

(Head No.12)

Watson (1993, p. 197) claimed that managing a school means support rather than control. At the other end of the spectrum, there is a democratic management style, characterized by openness, sharing and collegiality (Blase, 1986). Moreover, a better educational atmosphere characterizes schools with democratic management styles (Hallinger and Murphy, 1986, p. 335). It was found that the management style of five of Type 1 headteachers (1, 2, 3, 9, 18) was characterized as such.

"...The atmosphere is familiar, warm and supporting. We worked hard to achieve this...Everyone came with his own contribution...My meetings with the teachers were always
organized and planned, respecting the teachers' spare time..."

(Head No. 2)

"...In general we have very supportive staff. There is an atmosphere of helping each other..."

(Head No. 9)

Headteacher No. 18 described this well:

"...Regarding 'Bagrut 2000' most of the school was very proud of it..."

Unlike Type 1, the Type 2 headteachers demonstrate openness and confidence in the different teams. They are headteachers with a democratic management style. According to Zak (1991), such a management style is based on principles of equality, freedom and rationalism, as well as openness, collegiality and cooperation. Furthermore, the analysis of their beliefs shows that most of them (7 out of 8) perceive the fact that introducing a change in the education system would be best done by identifying partners in the team. The implementation of a change, according to five of them, will succeed when the work is done with teams that want and know how to work. With such perceptions, it is no wonder that managerialism is not one of the characteristics of Type 2 headteachers.

Like the Type 2 headteachers, the Type 3 headteachers demonstrate confidence in the different teams and democratic management style. This style is based on freedom, openness, collegiality and cooperation. Like Type 2, the Type 3 headteachers perceive the staff as partners to the change.

According to Watson (1993, p. 186), attempts are made to moderate the phenomenon of "managerialism". This claim was also expressed by the head of "Bagrut 2000":
"...So we have a problem but we're willing to be flexible. We understand the great effort that the teachers make but the teachers have to trust us in return..."

The headteacher's management style affects the teachers and the students alike, and determines, to a great extent, the school's climate. Models of management will be the next issues to analyse.

7.2 Models of Education Management:

Models of education management are important in bringing quality schooling, as long as they are appropriately matched to situations of practice (Sergiovanni, 1995, p. 37). The "Formal Model" (Bush, 1995) emphasizes the importance of hierarchical authority, especially in periods of crucial decision-making. The model suits the perceptions of Type 1 headteachers:

"...I do my job according to my understanding... It all has to come from the headteacher. With all due modesty, if it had not come from me, it wouldn't have come at all... You can't do it without the headteacher..."

(Head No. 18)

The rational approach within the formal model reflects best the headteachers' perceptions, since this approach deals mainly with instilling change. The process described in the rational approach of the Formal Model, starts with analyzing the problem, creating alternatives, choosing an alternative and finally, implementation (Bush, 1995, p. 39). The perception of the change in "Bagrut 2000" and the analysis of the actual implementation stages, indeed fit these stages.
The “Collegial Models” present the perceptions, the acting, and the way Type 2 headteachers manage the change. The model, according to Bush (1994), encourages innovations and the participation of the teachers in the decision-making process.

"...In my school I found a thinking team for changes. Anybody who wanted could be part of it. The choice was given to all the teachers. Obviously, not all the teachers were involved but everyone had the right to be..."

(Head No. 11)

Moreover, for the Type 2 headteachers, the disadvantages of the model, the contradiction of interests and conflicts, are not obstacles in the implementation of "Bagrut 2000". Entering the project, as well as the decision making for the different teams, was all-voluntary.

"...At the end of the evening nine workgroups submitted their candidacy..."

(Head No. 19)

According to Brundrett (1998, p. 313), the Collegial Model is the dominant paradigm of management in education.

As for Type 3, the headteachers encouraged innovations and the teams have had an important part as partners, initiators and pioneers. The curricular changes that these schools made were unique and special. The Collegial Models reflect the perceptions of Type 3 headteachers.

**Summary**

"...There is not a single pattern of instilling change...It is important to learn how the change should be done and gain experience...but that's all in theory. In reality, there are always limitations and things do not always go as planned..."

(Head No. 10)
The headteachers' responses, perceptions and behaviours, as analyzed in this chapter, indeed agree with the perceptions expressed above by headteacher No.10. Still, this thesis presented a number of common themes shared by all the headteachers who took part in the pilot of "Bagrut 2000". All the variables that were taken into account (by the project's administration) in choosing the schools for "Bagrut 2000", indeed appeared in the different types. In addition, a number of general subjects, such as defining the type of change, the adjustment of the schools to the principles of the change and 'knowledge creation', were all perceived in the same way by all of the headteachers.

Moreover, the findings indicate that the headteachers perceived the change as taking place in a time of uncertainty. As such, its initial design was vague and eventually evolved throughout the process of its implementation. The way they perceived it, the change took place "on the edge of chaos". Still, the change made up a great opportunity and challenge. All the headteachers perceived the change as a 'lever' for creating new teaching and assessing methods.

In spite of this fact, the decision-making process was different. Eight of the nine Type 1 headteachers were indeed directly responsible for making the three fundamental decisions as to entering the change. These headteachers perceived their involvement in introducing the change as one of support, assistance and counseling. These headteachers perceived their support as being an essential part of instilling the change. The analysis of this
perception of the headteachers showed that it led to delegating responsibilities to the teachers and the coordinators. It should be mentioned that in spite of the Type-1 headteachers’ perception that they assisted and supported the different staffs, their involvement in the different stages of the change was different. Two headteachers (3, 18) stopped their involvement once the decision to enter the "Bagrut 2000" project was made. The other seven were involved only at the first stage of introducing the change, and some also at the second stage. All of the headteachers reported assuming a supporting role only at the third stage and thereafter.

A totally different style of decision-making process belonged to Type 2. All the headteachers reached the decisions whether to enter the project and which teams would be included, in a cooperative and non-coercive manner. Moreover, according to the analysis of the perceptions of Type 2 headteachers, collegiality and cooperation characterize their operation patterns. It was important for these headteachers to be involved at the beginning of the change process but, at the same time, they believed that it was no less important to provide the teachers with room for action. This does not convey a complete transference of the responsibility. The headteachers inquire and intervene in different degrees all along the stages of the change process.

On the continuum between cooperation and the self-decision-making process are the Type 3 headteachers. In this case, all the first three decisions were the result of the situation in the two schools. Therefore, their perceptions were
different. Furthermore, because of this, the challenges of changing the
teaching and evaluation methods were dealt with earlier.

Changes, regardless of the way they are perceived or executed, are the result
of certain motivations, and include difficulties and oppositions. Still, there is
no doubt that changes lead to important gains and outcomes. These areas
were examined in the course of this study and the findings indicate that the
need to change the teaching, learning and evaluation methods was shared by all
the headteachers of all types. Furthermore, the headteachers of all of the types
also perceived it as the main advantage of the change as it included teamwork
and a more professional atmosphere. As known, difficulties and oppositions are
part of the “game”.

"Bagrut 2000" is a combined type of change, and, as such, with regards to the
headteachers’ perceptions of oppositions, it is important to note that there
were no cases of opposing the actual essence of the change. As long as the
change was voluntary and not coerced, oppositions to the essence of the
change were not significant. Still, differences were found between the
different types. These can be attributed to involving or not involving the teams
in the decision-making process. The Type 1 headteachers reported having to
deal with cases of teachers opposing certain issues regarding the principles of
the change, as well as students opposing the learning methods. The Type 2
headteachers, (except for two), did not encounter this type of opposition. The
Type-3 headteachers were somewhere in between. When the whole school is
undergoing a change process, there is always one group that expresses its
opposition as to the principles of the change. On the other hand, when certain
teams decide that a change is required, and they are the ones to initiate it,
there is naturally no oppositions, at least at the initial stages. The only issue that all of the headteachers had to deal with was opposing the obligatory reporting as required by the "Bagrut 2000" project’s administration.

Leadership and management are the additional issues that clarify the perceptions of the headteachers. Perceptions of leadership, which include transactional or transformational leaders, as well as task/people-oriented, characterize the different types. Type 1 headteachers, in their perceptions and actions are all transactional leaders whilst none of these perceptions were found in Type 3. One of the Type 2 headteachers had presented such perceptions or actions. As for the transformational leadership, eighteen out of the nineteen headteachers can be classified as transformational leaders. The meaning of this data is that nine headteachers are both transactional and transformational leaders. The next dimension of leadership that was analyzed, was headteachers as task/people-oriented. Headteachers, whose decisions-making process is their own (Type 1), are more task-oriented (eight out of nine) than headteachers whose style and perceptions regarding the decision making process is more cooperative. Indeed, only two out of the eight Type 2 headteachers can be characterized as such. Headteachers that enable their teams the challenge of initiating changes, like Type 3 headteachers, monitor the change and perceive themselves in charge of it. These headteachers are task-oriented leaders. Most of the teachers (seventeen) are people-oriented. These two characteristics of the leadership style are not two extremes.

The last issue, completing the picture of the headteachers' perceptions, is management.
Differences were found between the headteachers in their perceptions of management. Four of the Type 1 headteachers had a rather authoritative, top-down management style, whilst Type 2 and Type 3 headteachers' styles could be characterized as more democratic and open to the opinions of the teachers and the other position holders.

Change, leadership and management are the three main issues through which this thesis analysed the headteachers' perceptions and the way they implemented "Bagrut 2000". Change, leadership and management were also the issues that the head of "Bagrut 2000" perceived as essential in the headteachers' perception of the change:

"...It was important to us that they would perceive this change as an important one...That they would have managerial abilities...Be sensitive to the needs of the teams and make them part of the process, and accept and consider their opinions..."

Although the above were not the criteria for taking part in the change process, they were included in the headteachers' perceptions and actions. They had freedom, autonomy and room for initiation.

"...A change process has to be first of all possible, meaning that it's not just a great idea that is not applicable. ..Headteachers who perceive the change, lead the change and manage it. ..."

(Dr. Ben-Eliyahu, head of "Bagrut 2000")

The summary of the research findings and analysis is presented in the next diagram. It shows that the motivation to enter the change process of "Bagrut 2000" was similar among all the headteachers, although the decision-making process was different. This led to defining the three distinct types of headteachers. The way the change was introduced did not affect the
perceptions and the actions of the headteachers regarding the different stages of the change as well as everything concerning the stages.
Diagramatic Summary of the Analysis

The Motivation:
Changing the teaching and evaluating methods

The process of the decision making on entering
"Bagrut 2000"

Type 3:
Changes in teaching, learning and evaluation methods were carried out prior to “Bagrut 2000”

Type 2:
The headteachers applied a participatory strategy

Type 1:
The headteachers decided alone

The Change
1. No significant differentiation in the involvement of the headteachers.
2. From the 3rd stage the change is an ongoing part of the system.
3. The headteachers perceive their contribution as important.

Management

Type 3
Democratic
Collegial Models

Type 2
Authoritative (4)
Democratic (5)

Type 1
Formal Model (The rational approach)

Leadership

Type 3
Type 2
Type 1

People Oriented
Task Oriented
Transformational Leadership
Transactional Leadership
In those cases where the change was both voluntary and imposed, the reasons for entering the change processes could vary significantly, from both the viewpoint of the headteacher and that of the school itself. In the case of "Bagrut 2000", it was found that the motivation to enter the change was the same among all of the headteachers – the desire to change the teaching and evaluation methods used, and consequently, the way the students learn. This common base, shared by all of the headteachers who took part in the present study, indicates that the headteachers’ overall outlook took into consideration all their partners in the educational process. As such, the motivation to enter the change process and the headteachers’ perception of the change both indicate that the change was purely a curricular one, consisting of all the basic elements of ‘schooling’. These headteachers also understood that the change in the curriculum would become significant only if the teaching, as well as the learning methods would change. The headteachers’ perceptions as to the importance of "Bagrut 2000" and their motivation to enter the change both coincide with Dimmock’s (2000) claim that, without these two changes, there is no point in making a curricular change.

Regarding the process of the present study, it is safe to say that the motivation of the headteachers to introduce the "Bagrut 2000" change was entirely centered on the essence of the change itself. This was the basis for the typology. Indeed, three types of headteachers were identified. In itself, this was an interesting finding. Even when the motivation to enter the change process exists and is very apparent, the decision-making processes shouldn’t be taken for granted. In this study, nine headteachers made the initial decisions to enter "Bagrut 2000" by
themselves. These headteachers were classified as Type 1. Eight other headteachers, classified as Type 2, acted in a collegial manner, and their decision-making process was participatory. The two remaining headteachers in the sample took part in the "Bagrut 2000" project but not by following their own decisions; they made up the Type 3 group.

This was the starting point for the process of analyzing the headteachers' perceptions regarding change. It should be remembered that change is the main axis upon which this analysis is based. Since the headteachers' perceptions in the subject of curriculum change include both managerial and leadership aspects, their perceptions regarding these two aspects were analyzed as well. Still, it is important to remember that the core of this study is the analysis of the headteachers' perceptions regarding curricular change in general, and "Bagrut 2000" in particular.

The diagram, the research findings and the analysis presented in this chapter all indicate that no significant differences were found between the headteachers' perceptions regarding the different stages of implementing a change. According to the diagram, then, the arrows stemming out of all three types all aim at the subject of the change (including all of its components – stages, differences, contribution to the actual implementation, etc.) without significant differentiation. The three arrows lead to one place – the change “arena”. It should be noted that although the findings and the analysis of the headteachers' perceptions indicate differences in the area of opposition, it had no effect on the differences between the different stages of implementing the change, as mentioned in the findings analysis.
The analysis of the headteachers' contribution to the change process shows that all of the headteachers perceived their contribution as important (though differences were found regarding the nature of the contribution and its evaluation).

At the center of the diagram is the change. As mentioned, the headteachers' perceptions regarding change are the focal point of this study. Two other topics accompany the change – management and leadership which clarify, and even complete, the "jigsaw puzzle" of the perception of curriculum change among the "Bagrut 2000" headteachers.

The findings of the study regarding these two subjects are also presented in the diagram, in the form of arrows coming out of the different types. It seems indeed that the Type 2 and Type 3 headteachers are characterized by essentially democratic leadership styles and they act according to the Collegial Models, whilst the Type 1 headteachers' styles could be characterized partly as authoritative (4) and partly as democratic (5). The diagram also shows that, regardless of the types, all the headteachers were people-oriented and transformational leaders. Two of the three type groups (1 and 3) consisted of task-oriented leaders, whilst some of the Type 1 headteachers expressed views which identify them as transactional leaders.

The meaning of the findings and the analysis will be presented in the next chapter, which will deal with the conclusion of the research.
Chapter 5: Conclusions

Introduction

This thesis deals with the perceptions of change, as well as perceptions of leadership and management of a specific group of Israeli secondary headteachers who introduced a curriculum change - "Bagrut 2000" - in their schools. This special group of headteachers took upon itself the pilot project of making a curricular change in the teaching, evaluation and learning methods. It is a fundamental change, the extent of which is unprecedented in Israel since its foundation.

The over-arching question of this qualitative research deals with the perceptions of change of Israeli secondary headteachers as leaders and managers of a curriculum change. Four questions derive from it. The first: What are the headteachers' beliefs in relation to implementing a curriculum change in the education system? The second: What motivated the headteachers to implement the change? The third: What were the common or different stages of the implementation of the pilot of "Bagrut 2000" in the 22 schools? The last question focused on the headteachers' contribution to the implementation of the change.

The over-arching question, and the questions that derived from it, were based on the reality that changes and innovations in schools are, today, key terms in the education system both in Israel and abroad (Fullan, 2001; Dimmock et al., 1997; Caspi, 1995; Kula and Globman, 1994). Furthermore, according to Caspi (1995), and Inbar and Pereg (1999), changes have become a prestigious "status symbol" for headteachers
and, as a result, they are able to block or facilitate improvements or changes in general, and a specific changes in particular.

The professional literature, on which the analysis is based, includes, in general, the key issues of change, management and leadership. These key issues focus on characteristics and relevant data which are important for analyzing and concluding the headteachers' perceptions. It includes features of the Chaos Theory that enable the understanding of the headteachers’ perceptions, and also factors that help to achieve successful changes. The issues of oppositions and difficulties which are part of the “game” were also reviewed. Moreover, in accordance with the literature review of the stages of implementing a change, the analysis also focused on the stages of the implementation of “Bagrut 2000”. As was mentioned in the literature review, successful change involves good management as well as leadership.

The Research

The research paradigm is interpretive and there are very good reasons for choosing this paradigm as well as choosing the in-depth interview. According to Bogdan and Biklen (1982), the qualitative research examines the process during its occurrence and the analysis is inductive. Moreover, using a semi-structured in-depth interview led to a profound understanding of the headteachers’ attitudes and perceptions as to curricular change. In addition, the interview topics also referred to the aspects of leadership and management, all from the point of view of the headteacher and his or her experience with the implementation of "Bagrut 2000". This form of the semi structured in-depth interview enabled the comparison of the different headteachers’ perceptions, attitudes and actions. The topics in the interviews were
derived from the detailed research questions as well as from the relevant literature in the field. The literature review was mostly based on studies conducted in Israel and in the U.K., as well as on studies and literature from the U.S.

The pilot of "Bagrut 2000" took place in 22 schools in Israel, and this study is based on nineteen out of the twenty two headteachers that introduced the change in their secondary schools. As mentioned earlier, two of the religious headteachers were not interested in cooperating and I chose not to approach another headteacher from an Arab school due to the tense security situation in Israel at the time of conducting the study. The study covered the entire range of characteristics of the headteachers' population in the "Bagrut 2000" pilot project (headteachers from all educational sectors, from all regions, and from all types of secondary schools). In all, the research population makes up a true representation of the "Bagrut 2000" pilot headteacher population. It is important to also mention that according to the interview with the project's manager, the twenty two headteachers in the "Bagrut 2000" pilot make up a fair representation of the whole headteacher population in Israel.

The Presentation of the Findings and Analysis

The analysis is based mainly on a typology of the headteachers' perceptions. The starting point for the initiation of the change was the preliminary information about it. From this point on, there were a few possibilities. The headteachers could leave it, share the information with their deputies/S.M.T./etc., or decide alone. This is the stage from which their perceptions and actions about the change were analysed.
Furthermore, though the analysis focuses mainly on perceptions and actions about the change, the leadership and management of the headteachers were also analysed.

Although no primary or significant differences were found in the personal data of the headteachers or the schools' characteristics, three types of headteachers could be identified. This indicates that the headteachers' perceptions as to how the change should be introduced, managed and led, were those that eventually determined how the process took place, not the headteachers' or the schools' characteristics.

Any study that is concerned with perceptions of a change process raises the issues of a preliminary decision-making process on entering the change, the different aspects of the involvement of the headteachers through the different stages, as well as their management and leadership. All these issues were challenged in this thesis.

The basis of, and the starting point, for the analysis and the conclusions of the headteachers' perceptions and actions, shows this curriculum change is a combination of a voluntary and imposed change. As such, it enables drawing unique conclusions about the headteachers' perceptions of change. These perceptions embody the considerations related both to the imposed changes and those that were local initiatives. Since such a combination of changes, according to Earl and Lee (1999), stands the best chances to succeed, the conclusions, drawn from the perceptions of the headteachers who took part in the "Bagrut 2000" project, are extremely valuable.

Throughout the analysis of the data, the issues of 'knowledge creation', the 'butterfly effect' and deployment of the principles of the change to the other subjects and levels in the schools, have emerged regardless of the three different types. These issues are
the result of the era that is characterized by rapid changes and living on the edge of
chaos, if not in a chaotic era.

Thus, it can definitely be concluded that in spite of the fact that the change was
focused on a small number of subjects, and that the efforts and resources were put
into a limited number of teams, the headteachers were interested in, and did
believe, that it was important to allow the entire system to confront and
experience a change in the teaching, evaluating and learning methods. The
deployment was important to these headteachers even though the stages of the
implementation and all that had derived from it was conducted only in three
subjects. This perception of theirs agreed with the mentioned fact that the schools
operated in a world where frequent changes were the norm. It can be concluded,
then, that these issues were essential to the perceptions and considerations of each
of the headteachers at the initiation stage as well as during the actual
implementation of the change.

The analysis of the headteachers’ “top-three lists” revealed that all the
headteachers had a clear idea how the change would be executed. All of the
headteachers believed that identifying the partners was important in introducing
changes. This was especially important to the matter in question, since the starting
point for the typology was the headteachers’ decision based on this perception.
Although the headteachers believed that it was important to identify the partners of
the process, the Type 1 headteachers did not act accordingly, indicating a gap
between their perceptions and beliefs as to how the change should be executed, and
their actual actions. No such differences were found among the Type 2
headteachers.
No significant differences were found in the perceptions and actions of the headteachers of all types as to the different stages of introducing the change. This fact stands out versus the headteachers' starting point, i.e. the way they reached the initial decisions to enter the project. At the first stage of introducing the change, all of the headteachers took part and were highly involved in the change. At the second stage, as also indicated by the literature review, the responsibility for the change was delegated to those in charge of the change – realizing the guidelines, directives and different applications of the change. However, both types of headteachers perceived their behaviour as involved and important. They were aware of the nature of each stage, and were willing to support the teachers if needed. In each of the type groups, only one headteacher was not at all involved at the second stage (No.3 in Type 1 and No.19 in Type 2). Up to this point, the comparison was made only regarding the Type 1 and Type 2 headteachers, since the two Type 3 headteachers went through the first two stages prior to the inception of "Bagrut 2000".

As mentioned in the analysis chapter, the third stage was perceived similarly by the headteachers of all the type groups, and no differences were found between the groups. All the headteachers perceived the change as an integral part of the schools which they run. As mentioned, the headteachers' perceptions as to the fourth stage were not examined, since it is part of the guidelines of the "Bagrut 2000" administration.

The similarity between the headteachers was not limited only to the stages of implementing the change. The motivation to enter the change process was also the
same – changing the learning, teaching and evaluation methods. This reason was mentioned by all the headteachers as part of the advantages of "Bagrut 2000".

Generally speaking, regarding the headteachers' perceptions and actions, no differences were found in the headteachers' motivations, perceived advantages of the change and the different stages of the change. However, the examination of the oppositions to the change revealed that the decision-making process had a significant effect on the actual implementation. As expected, whilst most of the Type 1 headteachers (7) mentioned teachers who opposed the idea of the change, only two of the Type 2 headteachers mentioned such oppositions. When teachers were involved in the decision-making processes, their opposition subsided. No similar findings in this area were found in the Type 3 headteachers. However their perceptions and reports regarding oppositions support this conclusion. It could be expected that in school No. 5, in which "Bagrut 2000" ideas were already implemented, not all the 200 teachers approved of the change, and so the oppositions were of the type reported by the Type 1 headteachers, i.e. opposing the very idea of the change. In school No. 15, on the other hand, the change was an initiative of certain teams, not a top-down change. As such, oppositions, if any, were of the type reported by the Type 2 headteachers. Another cause for oppositions that came up in the in-depth interviews was the workload caused by the excessive reporting to the project's administration. This was mentioned by the headteachers, regardless of group type. It indicates that the headteachers' perceptions of the opposition were realistic. The burdening reporting requirements, as mentioned in the analysis chapter, came from the project's administration, and had nothing to do with the way the change was implemented. Sometimes the oppositions were the result of difficulties. The headteachers'
perceptions of the difficulties in the change were more focused among the Type 2 headteachers, and less so among the Type 1 headteachers, even though the headteachers in both type groups referred to the actual change in the teaching and evaluation methods as the main difficulty of the change. Only the Type 3 headteachers referred to the burdening reporting requirements.

As mentioned, the headteachers' perceptions of the change were also examined vis-a-vis their contribution to the introduction of the change. In all, the headteachers' perceptions of their contribution to implementing the change matched the way the change was implemented. In those cases where the headteacher made all the initial decisions as to entering the project by him/herself, he/she usually perceived the contribution as accordingly high and important. When the decisions were reached collegially, no single pattern could be identified though all the headteachers perceived their contribution as important. Regarding the Type 3 headteachers, where the change was already implemented in the school, the headteachers' perceptions were that the contribution was important and not limited to introducing the change, but also included leadership and managerial aspects.

Concluding the different topics that make up the essence of the change, the findings show that throughout the different stages of introducing the change, seen from the headteachers' points of view, no significant differences were found between the different types. As was indicated in the literature review, Fullan (2001, p. 82) claims that headteachers influence the change strongly, but do not play an instructional role.
However, differences were found between the different types in terms of leadership and management. Task-oriented leadership characteristics were found among the Type 1 and Type 3 headteachers, although the Type 1 headteachers could also be characterized as transactional. None of these characteristics were found in the Type 2 headteachers. In all three types, both transformational and people-oriented leadership characteristics were found.

Although the administration of “Bagrut 2000” gave clear guidelines for managing “Bagrut 2000”, differences were found in the management styles. In those cases where all of the initial decisions were made by the headteacher, it was found that the management style of four headteachers was authoritative and only five headteachers were characterized as democratic, opposed to the Type 2 and Type 3 headteachers, who were all democratic and acted according to the collegial models.

To complete the picture, the headteachers’ satisfaction with the way they implemented the curricular change was also analysed. All the headteachers, except for two (2, 4) were satisfied with the way they adopted the change.

**The Conclusions**

The conclusions of this study were based on the analysis of the headteachers’ perceptions regarding the change, the leadership and the management aspects of "Bagrut 2000", as seen in chapter 4.

The conclusions are as follows:
1. The analysis of the headteachers' perceptions shows that all of the headteachers perceive "Bagrut 2000" as an opportunity to change teaching, evaluation and learning methods. In other words, they had accepted the change as a means to change and improve the teaching skills of the teachers alongside the learning skills of the students. The conclusion is that these headteachers perceive secondary education as important and in their perceptions "Bagrut 2000" serves the moral purpose both in the micro and the macro levels, just as argued by Fullan (1999, p. 11). Moreover, they perceive "Bagrut 2000" as a must and a change that is needed.

2. All the headteachers perceive the "Bagrut 2000" change as taking place during a period which has the characteristics described in the Chaos Theory, or are "on the edge" of chaos. The conclusion is that these headteachers indeed understand the nature of change in the current reality as described by Gunter (1997) and Fullan (1999).

3. No significant differences were found between the different types, regarding perceptions and activities during the different stages of introducing the change. Once the initial decisions were reached, regardless
of how they were reached, the essential nature of introducing the change was similar. The back up of this fact is Fullan’s (2001, p.82) claim that the headteachers influence the change strongly, but do not play an instructional role. Moreover, even if the decision-making process was different, the headteachers managed to introduce the change in an adequate manner. The change was very important to them. In other words, the way the change was introduced by the headteachers was consistent with the characteristics mentioned in the literature review. As mentioned, the change was a combination of a compulsory and a voluntary change. It seems that the compulsory part, i.e. the guidelines given by the “Bagrut 2000” administration and the Ministry of Education, facilitated the efficient introduction of the change. The combination of the compulsory element and the initiative of the change executors proved to be a winning one. In this, the headteachers agree with the argument of Earl and Lee (1999).

4. The headteachers perceived the matter of identifying partners as very critical to the introduction of changes; however, the Type 1 headteachers did not apply this in practice. Conclusion – the headteachers’ perceptions constituted a key element in the success of the change; however, sometimes there was a gap between perception and practice. Again, the headteachers support the argument of Earl and Lee (1999): that instilling change will succeed only when it is a combination of both imposed and voluntary change.

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5. Differences were found between the different types of the headteachers' perceptions regarding oppositions to change. The conclusion is that the way the initial decision to enter the change process indeed has an effect - when the initial decisions are made by the headteacher him/herself, the opposition to the change itself and to its meaning will be stronger.

6. The burden of reporting was mentioned as a major problem in all the types. The compulsory reporting requirement is part of the "Bagrut 2000" administration's guidelines, and does not depend on the decision of any of the headteachers. Conclusion - the headteachers perceived change from a broad perspective, and when they spoke of difficulties, they also mentioned this aspect, which is, to the most part, a managerial one.

7. The perceptions of the headteachers regarding their contribution to the introduction of "Bagrut 2000" into their schools correspond to the way the initial decisions were made. When these decisions were reached in a collegial manner, the headteachers perceived their contribution as important. By the same token, when the initial decisions were reached by the headteacher alone, all of the headteachers (except for No.3) perceived their contribution as very important and significant, throughout the change introduction process. The conclusion: The headteachers perceived their
contribution to the success of the implementation of the change in accordance with the initial decisions.

8. The differences between the type groups at the initial decision-making stage do not necessarily affect their perceptions and actions at later stages, and with the type of leadership. All the headteachers are transformational leaders as well as people-oriented. These characteristics of the headteachers are regardless of the different types. The conclusion is that these headteachers agree with their perception that change is an opportunity for growth. This item is consistent with their perception of the change.

9. All type groups are characterized as transformational leaders and people oriented. But, when the change is forced and is not the result of mutual agreement between the partners, or, when it is so primal that it needs caution and responsibility - the leadership includes transactional characteristics. When the change is grassroots-driven, there is no need for transactional leadership. The conclusion: Indeed, the headteachers’ perceptions influence their functioning in the course of implementing the change.
The Weakness of the Study

The researcher would wish to acknowledge that the present study has two main weaknesses, which focus on issues connected with both the researcher herself and the nature of the research undertaken. As noted previously in this study, the researcher holds the position of Social Studies coordinator at “Harishonim” secondary school and the school’s headteacher belongs to the Type 2 group, and as such the researcher took part in the change process from the start. It is possible that this might have created a bias because of the researcher’s emotional involvement. Furthermore, it is possible that the fact that the researcher is the Social Studies staff coordinator at the school might have created a bias also with regards to the other headteachers’ perceptions. Nevertheless, the researcher believes that this is beneficial to the study. The headteachers trusted the researcher, and as was mentioned earlier in the section of trustworthiness, they ‘flowed’ after a while, and were open and honest in their responses.

Equally, the researcher wishes to acknowledge that, since the study only focuses on the perceptions of the headteachers, further research with other members of staff in the schools, such as classroom teachers might discover different views. Furthermore the researcher accepts that any such further research might add significantly to the findings of this research project. However, the headteachers were key figures in the management of change and the implementation of the reform. The many quotes from the headteachers’ words and the interpretation of them attest to the desire to gain
a broad grasp of the headteachers' perceptions, and the researcher contends that her grasp of some of these issues were derived in part from personal involvement in the process and resulting in detailed knowledge of "Bagrut 2000".

The second weakness, as mentioned, concerns the research itself. The motivation to enter the change process was the same among all the headteachers – the desire to improve the teaching, evaluating and learning methods in the school. This uniformity prevented the examination of the headteachers' general perceptions regarding changes in the education system. It was expected that different perceptions on the above issue would help the analysis of the headteachers' points of view and perceptions regarding the importance of changes in schools.

The Contribution of the Study

One of the central issues that any headteacher will have to deal with is the constantly evolving nature of the curriculum. This study adds to the existing body of knowledge in Israel about the change introduction patterns of secondary school headteachers in different sectors and areas, at a time characterized by rapid and intensive changes. Since no major curricular changes were made in the Israeli secondary school system since the state was founded, the headteachers' perceptions regarding the subject are naturally important and of great interest. The knowledge accumulated following this
study about the perceptions of the headteachers who implemented "Bagrut 2000" and the conclusions could help to train headteachers and mold their educational perceptions in the future.

**Research in the Future**

In future studies, continuing the theme of the present study, it might be interesting to examine and analyse these headteachers' perceptions as to introducing and operating new curricular changes, in relation to the success of the actual implementation of the change “Bagrut 2000”. This would require setting criteria for success, examining whether the different schools actually meet these criteria, and finally juxtaposing the extent of success in each school with the perceptions of each of the headteachers. In other words, it will be interesting to compare the perceptions of these headteachers with their perceptions in the present study and to find the different/common perceptions after the experience with success, regarding the implementation of a curricular change.

Focusing on this issue, the analysis of a future study would explore whether in 3-4 years time the headteachers would change their minds or stay fixated on the same patterns of change they had applied in the pilot project, especially in light of the initial premise of schools operating in a rapidly changing environment.

In conclusion, in this thesis the perceptions of Israeli secondary headteachers as to introducing curricular changes were examined and analyzed. The headteachers' perceptions need to be clear and comprehensible, as they determine the schools' policies, vision and action, setting the path for the rest of the school system.
Appendix No. 1:

Dear __________

Headteacher of the ___________ Secondary School

I'd like to thank you for agreeing to be interviewed on ____________ for my Ph.D. thesis. The thesis deals with the perceptions of curricular changes of secondary headteachers: leading and managing “Bagrut 2000”. The interview will focus on the perceptions of the headteachers in different areas related to introducing changes.

As agreed, the interview will be held at the school.

At your request, attached are the topics that will be discussed during the interview.

Thanks again for your cooperation,

Orit Cohen
Appendix No. 2:

The Issues of the Semi-Structured In-depth Interview:

General information about the headteacher and the school

The different stages of implementing “Bagrut 2000”

Difficulties in the implementation process

The good points in the process

The most important element in the implementation that would help introducing changes in the future

The headteacher’s contribution to the change process

Oppositions

The headteacher’s top three list for implementing a change

What would you like to learn from the experience of other headteachers?

The contribution of the change process to the school’s day-to-day operation

The relationship with the project administration
Appendix No. 3:

Dear __________

Headteacher of the ___________ Secondary School

I'd like to thank you for your willingness to grant me an interview, and for our meeting which was both interesting and pleasant.

Attached is the transcript of the interview, which I prepared according to the audio recording. If you find it necessary to add details or alter parts of the transcription, I'd be happy to do so. If otherwise you find that no such changes are needed, please send me a written approval for this.

Thank you again and best regards,

Orit Cohen
Appendix No. 4:

The Rabin Memorial High School (T.C.)

Date: 24th of March, 2000

The interview was held with: Mrs. Tami Gordon, the school’s headteacher

I believe that “Bagrut 2000” was the right thing to do in the new millennium. It was the best way to change the old-fashioned frontal method of teaching. Entering the project was my decision. I thought it was the right thing to do. I felt there was a readiness for the project. Not among everyone, though. Sometimes a decision has to be made, and only afterwards presented. Instilling change in a school is always a problematic thing. People are afraid of changes, and are unenthusiastic. I decided to go ahead with it, it was my decision. How should it be done? That was for the teachers to decide. The different staffs deliberated and considered the idea. For instance, the Civil studies’ staff wanted to know more; the Literature staff said it wouldn’t work, and that there would be problems. The Sociology staff was interested. The English staff wanted to try it for a year, and then decide. When I refer to the staffs, I actually mean the coordinators because they dictate the tone. I decided to go ahead with the project in one subject, and chose Sociology. I saw that both the coordinator and the staff showed readiness for the change. The coordinator took a great responsibility upon herself.

I knew it was the right thing to do, but I also knew where the problems were. I knew it couldn’t be done with the whole teaching staff at once. It wouldn’t have worked, because not everyone was ready for it. I said ‘let’s go ahead in one subject’, hoping
that something would happen. What did happen was that the teachers learned that the
students enjoyed themselves, and were able to internalize more material than before.
These were the main things the teachers learned.

Once Sociology "represented" the "Bagrut 2000" project, I stopped being involved in
the details. The Sociology staff was those who took the seminars, deliberated, and
decide. It was their responsibility. I stepped aside; my idea of being principal is
initiating ideas, and letting other people take it from there.

An example to this is the schools' relationship with a school in Los Angeles. The
idea of youth exchange came up. I appointed to this end someone who assumed the
challenge heart and soul. She came up with great ideas. For instance, she included
American students in the school's delegation to Poland. When you have the right
people in the right places, you, as the principal, can bring up the initiative and let
others take the challenge. In most cases it works. Sometimes, when you don't have
the right people, things fail. But I'm not one of those principals who supervise every
project. I try not to get too involved.

The Sociology coordinator is our "Bagrut 2000" expert. She knows what she's doing. She goes to all the seminars. The high school
division manager is also involved; I stepped aside. You need to move on.

We perceived "Bagrut 2000" as one of a number of changes in the system. I didn't
form a special implementation staff (S.M.T.), we just didn't consider it to be that big
a change. It is a local change; I think a lot can be learned from the way they do it. It's
a matter of the headteacher's personality. I can't be responsible for all the details.

When you have good people, they do the work, and you have to come up with the
ideas.
I don't want the whole teaching staff in every issue—we have over 150 teachers, and it wouldn't be efficient. I also don't believe in the pedagogical board. We work in teams in the school. For instance, we announced in the teachers' lounge that we want to reassess the whole issue of the pedagogical coordination. Whoever wants to participate is invited. Or, we announced that we were going to form a team that would be in charge of the "community period" as part of the curriculum. Whoever was interested was invited to come and join the team. In such a case the teachers in the team become the leading team. They present their result to the pedagogical committee, which has the right to make changes and comments. But at that stage the matter is settled. The issue itself is not discussed in the pedagogical committee.

**Difficulties and Oppositions:**

Speaking of difficulties and opposition, there were two types of difficulties: there were teachers who, I felt, were afraid that their workload would grow, and were enthusiastic about the idea. That was the most overt type of opposition. The second type of opposition was by teachers who opposed the idea itself. They thought that the students, in this stage of their lives, should listen only to what the teachers have to say. That's OK with me; not all teachers are compatible with the views of the 21st century. That's legitimate by me.

Regarding opposition in general, had there been a "hard core" of opposition, every change would have been accompanied by drama. But here, there was no hard core and no drama. I believe that the education system today is like a hi-tech industry—it has to change all the time, otherwise it would stagnate and regress. In hi-tech, products are sent to the markets that are not always finished and perfect. They are
rather examined in the process. The same should apply for changes in education. The teachers understood this. I have a few perfectionists; if they can’t see ten years ahead, how things will be, they won’t go for it. These are not necessarily the older teachers. We have quality teachers who as such are not willing to assume responsibilities. 

They understand that management includes compromising and cutting corners. They are not made for that. They tried, but they are not able to do anything if it isn’t clockwork. It’s a personality thing. Still, the good news is that none of them caused any harm. There were never any dramas. Some people would always avoid taking sides, and there would always be criticism and cynicism. That’s also OK. There are all kinds of people, but there are always those who are enthusiastic and want to go with your idea. It’s just the opposite of those who never like anything.

I have faith in the Sociology coordinator. If she believes something should be changed, she will do it. She is very organized.
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