SCHOOL IMPROVEMENT AND THE "SUCCESS FOR ALL" INITIATIVE IN ISRAEL: A STUDY OF AN UNDERPERFORMING SECONDARY SCHOOL

Thesis submitted for the degree of Doctor of Philosophy At the University of Leicester

By

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Abstract

This research evaluated the Israeli “Success for All” school improvement programme implemented in 10th grade, in an under-performing comprehensive high school (the experimental school) in a development town in Israel, during the year 1999-2000. The major aim of the programme was to increase the percentage of pupils passing the four 10th grade matriculation exams. Other aims included: increasing pupil motivation to succeed, heightening pupil educational self-image and school image, and eliminating pupil dropout. Data from sixty pupils and sixty parents, eight teachers and two administrators from the experimental school were compared with data from twenty-five pupils, four teachers and the principal of another under-performing, comprehensive high school in the same town, with a similar population mix (control school). Research tools included: questionnaires and semi-structured interviews at the beginning and end of the school year and documentary research (including matriculation scores and dropout rates).

Results show that over 93% of the experimental school pupils passed the four 10th grade matriculation exams, a percentage significantly higher than previous years and significantly higher than the results achieved by control school pupils in the exams taken by both schools. They also compared very favorably with the national norms.

Other results showed an improved educational self-image and school image in the experimental school; no change was observed in the control school.

In spite of the difficulties involved in distinguishing the impact of one variable in a complex school context, this research concluded that the SFA was most probably responsible for the above positive outcomes. The SFA was a wide-ranging, multi-faceted programme planned to expand and include all grades. Due to its high cost and budget problems in Israel, it was discontinued after one year.

This study also examined the SFA in light of effective schools and school improvement literature. Suggestions were made for an improved, less costly, programme.
Acknowledgements

I am greatly appreciative of several individuals who have been instrumental in the completion of this research and thesis. I take this opportunity to thank Professor Peter Ribbins for continuous advisement and invaluable guidance during my research. I also wish to thank Mrs. Tzippy Parnasa for her assistance with statistical calculations, and the principals and staff of both comprehensive high schools, whose cooperation was appreciated. A special thanks to my mother, wife and children, for providing a supportive, positive environment, which has enabled me to complete my work.

I would like to dedicate this thesis to the memory of my beloved father, Dov Beresh Kahan.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>i</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>iii</td>
</tr>
<tr>
<td>Preface</td>
<td>1</td>
</tr>
<tr>
<td><strong>Chapter One – Introduction – Educational and Social Context</strong></td>
<td>3</td>
</tr>
<tr>
<td>A. Context and Background of this Research</td>
<td>3</td>
</tr>
<tr>
<td>B. Purpose of This Research</td>
<td>8</td>
</tr>
<tr>
<td>C. Review of the Israeli Educational System</td>
<td>10</td>
</tr>
<tr>
<td>D. SFA School Improvement Programme – Implementation</td>
<td>29</td>
</tr>
<tr>
<td>E. Summary of Chapter One</td>
<td>51</td>
</tr>
<tr>
<td><strong>Chapter Two – Literature Review</strong></td>
<td>52</td>
</tr>
<tr>
<td>A. School Effectiveness</td>
<td>54</td>
</tr>
<tr>
<td>B. School Improvement</td>
<td>103</td>
</tr>
<tr>
<td>C. Leadership in School Effectiveness and School Improvement</td>
<td>154</td>
</tr>
<tr>
<td>D. School Effectiveness and School Improvement in Israel</td>
<td>160</td>
</tr>
<tr>
<td>E. Summary of Chapter Two</td>
<td>172</td>
</tr>
<tr>
<td><strong>Chapter Three – Methodology</strong></td>
<td>178</td>
</tr>
<tr>
<td>A. Details of this Research Investigation</td>
<td>178</td>
</tr>
<tr>
<td>B. Research Designs and Approaches</td>
<td>187</td>
</tr>
<tr>
<td>C. Research Tools</td>
<td>209</td>
</tr>
<tr>
<td>D. Ethics in Educational Research</td>
<td>214</td>
</tr>
</tbody>
</table>
# Chapter Four - Results

A. Sitting for and Passing National Matriculation Exams

B. Dropout Rate

C. School Image

D. Educational Self-Image and Perception Regarding Success

E. Motivation

F. Teachers' Attitudes Towards School

G. Homeroom Teacher and the SFA Programme

H. Evaluation of the SFA Programme by Participants

I. Summary of Chapter Four

# Chapter Five - Discussion

A. Discussion and Significance of Findings

1. Analysis and Significance of Findings

2. Elements of the SFA Programme that Contributed Towards The Improved Success on Matriculation Exams

B. The SFA Programme in Light of Effective Schools and School Improvement Literature

1. Effective Schools Literature and the Israeli SFA Programme

2. School Improvement Programmes and the Israeli SFA Programme

C. Evaluation of the SFA and Suggestions for Future Programmes

1. Difficulties and Problems Encountered in the Implementation of the SFA Programme, and Suggestions for an Improved Project (Non-Budgetary Matters)
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Reasons for Discontinuation and Suggestions for a Modified,</td>
<td>365</td>
</tr>
<tr>
<td>Less Costly, Programme</td>
<td></td>
</tr>
<tr>
<td>D. Summary of Chapter Five</td>
<td>370</td>
</tr>
<tr>
<td><strong>Chapter Six - Conclusions</strong></td>
<td>372</td>
</tr>
<tr>
<td><strong>Appendix</strong></td>
<td>382</td>
</tr>
<tr>
<td>I. Questionnaires</td>
<td>383</td>
</tr>
<tr>
<td>II. Semi-structured Interviews</td>
<td>393</td>
</tr>
<tr>
<td>III. Pupil Charter</td>
<td>395</td>
</tr>
<tr>
<td>IV. Interview Transcripts</td>
<td>399</td>
</tr>
<tr>
<td>V. Permission to Conduct Research</td>
<td>415</td>
</tr>
<tr>
<td><strong>Bibliography</strong></td>
<td>416</td>
</tr>
</tbody>
</table>
Preface

Can schools make a difference? Can they compensate for socio-economic deprivation? In spite of some dissenting voices such as Thomas and Bainbridge (2001, p. 55), who contend that “the effective schools movement…. is contaminated with a series of fallacies”, effective schools research indicates that the answer is - yes (MacBeath and Mcall, 2001). While it is true that there are factors that lie beyond the purview of schools, nevertheless, it has been shown that some schools can make a significant difference, when targeting specific populations. Mortimore et al. (1988) found that disadvantaged pupils made more progress in more effective schools than their counterparts in less effective schools.

Intensive efforts have been made over the past several decades of the 20th century, to identify and implement educational programmes that would raise pupil motivation and achievement, even for those pupils designated as disadvantaged low performers. “Yet despite an international library of studies we are still unable to say with confidence how ineffective schools become effective, or indeed to agree on what would constitute an effective school for the third millennium” (MacBeath and Mortimore, 2001a, p. viii).

This research thesis deals with a school improvement programme, called “Success for All” (SFA), which was implemented in a development town in southern Israel in the school year 1999-2000. This SFA programme was a synthesis of the research and practice of the approaches of both School Improvement and School Effectiveness. It is hoped that this thesis will be a modest contribution to the research literature, in the ongoing efforts to improve schools and to raise the achievement of those commonly referred to as “disadvantaged pupils”.

1
This thesis is divided into the following chapters:

Chapter One – Introduction – Educational and Social Context
Chapter Two – Literature Review
Chapter Three – Methodology
Chapter Four – Results
Chapter Five – Discussion
Chapter Six – Conclusions
Chapter One – Introduction – Educational and Social Context

This chapter presents the reader with the educational context and the social background of the population in this research. It includes an overall view of the town under study and its secondary schools, and the factors leading up to the designing and the implementation of the “Success for All” (SFA) school improvement program in this town (Section A). Section B (page 8) outlines the major aims and objectives of this research, and lists the research questions and hypotheses. Section C (page 10) provides a review of the Israeli education system and the emergence of comprehensive secondary schools, which was the type of school targeted by the SFA programme. Finally, Section D (page 29) describes in detail the SFA programme, including its underlying theory, along with the specific details on the level of the school, classes and pupils.

A. Context and Background of this Research

The project that this research is based on came about due to dissatisfaction with the prior educational outcomes of secondary schools in a development town in Southern Israel. After several months of joint planning between the Ministry of Education, the Israeli Association of Community Centres and the local municipality, it was decided to implement the “Success for All” school improvement programme in the two comprehensive secondary schools in this town.

A brief outline of the town’s history and its educational problems will help clarify the importance and significance of this SFA programme.
Population and social background

This development town was founded in 1955, mainly by immigrants from the North African countries of Tunisia and Morocco. A second wave of immigration to the town took place in the 1990s, bringing people from the former Soviet Union and Ethiopia, increasing its population to a peak of 25,000. In 1996, the town began to suffer a loss of population as many older, established families began to leave. The result was that in 1999, 44% of the town’s population was comprised of these new immigrants. These changes brought with it a worsening of the over-all socio-economic status of the town. A national survey in 1999 rated this town as the lowest of all Jewish towns in Israel, on the national socio-economic scale. The average income per person was only 0.59% of the national average, and the number of those who received supplementary government checks was 2.63 times more than the national average. At the end of 1998, the unemployment rate reached 18% of the working-age population, greatly exceeding the Israeli national average (Annual Report of the National Comptroller, 1999).

Educational background

The high school education provided by the town’s two comprehensive schools (grades 7-12), one religious and one secular, had a poor achievement record and a low public image. The percentage of 12th grade pupils eligible for a National Matriculation Certificate was consistently lower than the national norm (Israeli Ministry of Education, 2000; Sebirsky, 1999; Sebirsky, 2001). Only 0.5% of the town’s population enrolled in bachelor degree programs each year as compared to a national average of 1.4% (Annual Report of the National Comptroller, 1999). Consequently, more than half of the 12th grade pupils were studying in schools out of town (Sebirsky and Connors, 1998).
Although the town under study has made varied efforts over the past decade to raise achievement, significant improvement was not obtained. Until 1995, most of the pupils in the development town did not study in a matriculation track. One of the changes that affected both high schools, was the abolishment of the vocational tracks in the 1995-1996 school year, enabling all pupils to study in an academic track. Additional efforts to raise achievement included ‘whole town programs’ or projects that targeted selected elementary, secondary, or post secondary level pupils. In 1998-1999, the town was involved in the planning of a large-scale project with Ben-Gurion University of the Negev that was intended to encompass all schools, from kindergarten through high school. However, due to the high cost of implementation, the project was never begun.

The following is a list of the programmes implemented over the past decade in the secondary schools studied in this thesis. Both schools participated in the following projects:

   The project was not successful, and was stopped after one year.

2. “Mabar”– in the years 1993-present: This is a national project, in which one class in each grade of targeted senior high schools is selected to receive additional instructional hours.

3. “Michael”– 1995-present: Selected 10th –12th grade pupils participate in workshops designed to raise their self-confidence and to improve work habits, memory and thinking skills.

In addition to the above, the control school participated in the following project:

- “Shachar” – 1999-2001: Pupils who dropped out of school, or who did not pass all their matriculation exams, were targeted by the staff of a special evening school, and given intensive remedial study. This project was the main reason that the control school decided not to participate in the SFA programme.

Despite the above programmes, significant improvement in achievement was not observed, and there was no significant increase in the number of pupils eligible for a National Matriculation Exam (Israeli Ministry of Education, 1990-1997). Community leaders, school governors, Board of Education, parents and pupils were dissatisfied with the poor results on the National matriculation exams. The high rate of failure on the 10th grade Matriculation exams led to a negative chain reaction. The pupils began to lose faith in their ability to succeed. This in turn lowered their educational self-image and led to an increased dropout rate. The low public image of the town’s secondary schools was reinforced, and more parents sent their children to schools outside of the town or simply moved away. Parents put pressure on the town’s mayor, who in turn pressured the secondary school principals and the National Ministry of Education school governors to find a solution to the above-described state of affairs.

It was decided to adopt a programme called “Success for All”. The Israeli Association of Community Centres Ltd. Jerusalem was engaged to implement a programme that they had developed, based on Sizer’s Common Principles and Slavin’s “Success for All” programme. (See Chapter 2, page 126 for Sizer, and pages 122 and 128 for Slavin).
The original plan was for both comprehensive high schools in this development town to implement the SFA program in the 1999-2000 school year. Indeed, both schools began preparation for its implementation in the last months of the 1998-1999 school year. However, the secular school decided to “drop out” of the project at the beginning of the 1999-2000 school year. The secular school then became the “control school” and served as a comparison to the religious school – the “experimental school”. The reasons for this will be discussed in Chapter Five, pages 366-367.

It is important to note that both schools are not only located in the same development town, they even share the same courtyard. Both are the only comprehensive secondary schools in the town, and have been in existence since 1965. It can be said that they have virtually the same population mix, and in some cases children of the same family attended both schools. These schools are only differentiated by their religious ideology and practice. The experimental school is designated by the Ministry of Education as a religious comprehensive school, whereas the control school is designated as a secular comprehensive school. The second and third generation North African immigrants are in general less religious than their forefathers. Many Sephardim simply consider themselves “traditional” as opposed to “religious”, and there is no clear dividing line between religious and secular Sephardic Jews. Thus, the decision as to which school to send their children to is due to several factors, not only because of the preference for a religious based education. These include the academic achievement record of the school, school staff and school their relatives attended in the past. Based on the above description, it was considered appropriate to regard the secular
school that did not implement the SFA program, as a control school, to serve as a comparison to the experimental school.

As a senior staff member of the experimental school I was in a unique position to monitor the implementation of this project. I was given the opportunity to assess the results of the programme and to critically analyse what went well and what went wrong. Thus the idea for this research thesis came into being.

* * * * *

Section B below presents the major aims and objectives of this research, research questions and hypotheses.

**B. Purpose of this Research**

The following is an outline of the major aims and objectives of this research.

**Broad Aims:**

1. The monitoring of a “Success for All” (SFA) school improvement project.
2. The examination of the effects of the project on success in matriculation exams.
3. The examination of the effect of the project on the dropout rate.
4. The examination of the effect of the programme on the school’s image in the eyes of the pupils and parents.

**Specific Objectives:**

1. Evaluation of the “Success for All” school improvement project:
   a. An examination of the theoretical basis of the proposed programme.
b. Critical discussion of the implementation of the programme.

2. Examination of the results of the project and identification of causal factors:

a. Pupil success on the 10th grade matriculation exams.
b. Pupils remaining in high school.
c. The effect of the programme on the school’s image in the eyes of the pupils and parents.

3. Evaluation of the programme by participants: pupils, teachers and parents.

**Research Hypotheses:**

1. Following the implementation of the SFA programme, there will be an increase in the number of tenth grade pupils who will pass their matriculation exams in the experimental school, as compared to the number of pupils who passed their exams in previous years.

2. In the year 2000, more tenth grade pupils from the experimental school will pass their matriculation exams as compared to the control school.

3. In the year 2000, no tenth grade pupils will drop out of school and not continue on to the 11th grade.

4. The implementation of the SFA programme in the experimental school will raise the image of the school in the eyes of its pupils, while there will be no change in the image of the control school in the eyes of its pupils.

5. The implementation of the SFA programme in the experimental school will raise the image of the school in the eyes of the parents.

6. As a result of the new programme, the experimental pupils’ educational self-image will be heightened, while the control school
pupils will not express any change in their educational self-image at the end of the 1999-2000 school year.

7. As a result of the new programme, teachers in the experimental school will express increased belief in their pupils’ ability to succeed, while teachers in the control school will not show such a similar increase.

8. As a result of the SFA programme, pupils in the experimental school will express increased motivation towards learning, as compared to pupils in the control school at the end of the 1999-2000 school year.

This research studied a school improvement programme that was implemented in a comprehensive high school, located in a development town in Israel. The Israeli educational system is unique, and has gone through a number of radical changes in the fifty plus years of its existence. Therefore, it is important to outline its history, with emphasis on the development of the structure of the secondary school system. This will supply the reader with the necessary context for understanding the SFA project and the significance of this research thesis.

C. Review of the Israeli Educational System

This section presents a brief survey of the development of Israel’s educational system, and the emergence of comprehensive high schools in response to social needs and pressures.

Historical overview

Education in Israel has changed dramatically in the years since it became an independent state in 1948. Many of the changes were initiated due to the gap between the achievement of pupils of European-American origin and those of African-Asian origin. At the time of its independence,
Israel’s Jewish population was only 650,000, most of them of European origin. Due mainly to immigration from Asian and African countries, by 1957 Israel’s population almost tripled, and reached approximately 1,800,000. In an effort to populate sparsely occupied areas, government policy at that time was to settle immigrants in new towns established in the northern and southern areas of the country. These towns became known as “development towns” (Sikron, 1960).

One of the first laws passed in 1949 by the newly independent country was the provision for free, compulsory education for children aged 5-14, from kindergarten through eight grade (elementary school). Secondary school education was not compulsory, and all secondary schools charged tuition. There were three types of secondary schools: a) academic - leading towards National Matriculation Certificates enabling entrance to Universities; b) vocational - leading towards certificates provided by the Ministry of Labour; and c) agricultural - preparing pupils for work on farms (Schmida, 1987a).

Since secondary schools charged tuition, they were attended mainly by the elite, moneyed classes. Acceptance to a secondary school of any type was based on academic performance in elementary school, in addition to the ability to pay tuition. Pupils who could afford the tuition and had a good academic record attended academic high schools. Those who could afford the tuition but had a weak academic record attended a vocational or agricultural high school. Since the new immigrants, for the most part, could not afford high school education, most of their 14 year-old children, upon completion of the eighth grade, joined the unskilled work force, or were unemployed. After a few years, it became apparent that two distinct socio-economic groups were emerging in Israel: a middle to upper class comprised predominantly of citizens of European-American

In an attempt to rectify this situation, in 1955 the Ministry of Education introduced the “Seker Exam”, which was given to all pupils in the eight grade. Success on this exam, together with a teacher’s recommendation, rewarded the pupil with a reduction in high school tuition. Tuition was divided into a ten level scale; a public committee that took into consideration the socio-economic level of his/her parents determined a pupil’s position on this scale. The remainder of the tuition was paid by the national and local governments. In this manner, it was expected that significantly more pupils of Asian-African origin would be able to continue their education.

However, this new system did not bring about the desired result, due to these pupils’ poor achievement on the Seker Exam. Beginning with the lower grades of elementary school, a distinct gap was observed that increased with each higher grade, between the academic achievement of the new immigrants and the more established population. Despite many efforts to close this gap, including special programmes that targeted the new immigrants, the gap increased, rather than decreased. A subsequent lowering of the passing grade on the Seker exam for these pupils only, added a small percentage of pupils to the ninth grade (Or, 1964).

From the mid 1950s, development towns sprung up which did not have a tradition of separate academic and vocational high schools. When the need for secondary schools arose, these towns established comprehensive high schools with both academic and vocational tracks “under one roof”. In theory there was one school, but as will be discussed later in this section, in practice, due to tracking policies, there were in essence two separate entities in the same institution. This brought about labelling, and placement of pupils as academic or vocational from an early age (Pur,
This led to the establishment of the comprehensive secondary school system in Israel (see below).

In 1968, in view of the increasing educational and social gap among citizens of different ethnic origins, a parliamentary committee adopted a resolution that created several changes in the structure of the educational system in Israel. The goals of the reform were to reach a higher level of scholastic achievement and to advance the social integration of various sectors of society (Sprinzak et al., 2001). The following outlines the major aspects of this reform (Schmida, 1987a):

a. Expansion of compulsory and free education to include 10th grades. (In actuality, addition of one year of compulsory and free education, until the 9th grade, came into effect in 1973, and addition of another year came into effect in 1979.) In most development towns, in the 1970s, the local municipality took upon itself to expand free education in the comprehensive high schools to include all grades; the more established cities did so several years later. Today, school is tuition-free for all grades.

b. The abolition of the Seker Exam and enabling all pupils who completed junior high school to continue to senior high school, without going through a selection process.

c. A new structural organization that divided schooling into three stages: six-year elementary schools (grades 1-6), three-year junior high schools (grades 7-9) and senior high schools (grades 10-12)

d. The resolution, that the preferred structure of secondary schools is the “comprehensive secondary school”. In each school, both academic programmes leading towards the matriculation certificate, and vocational programmes, leading to vocational certificates, would be available.
e. Junior and senior high schools were to be combined into one six-year comprehensive school, wherever possible, to enable preparation of pupils for the upper grades, and to encourage continuity.

f. The raising of the academic requirements for teachers. Up until that time, most elementary school teachers received teaching licences upon the completion of two or three years in a Teachers Seminary. Secondary school teachers were required to have a University degree. When junior high schools were combined with senior high schools, it was mandated that junior high teachers also have a University degree, to be on the same academic level as the senior high school teachers. The assumption was that this new requirement would result in raising the academic level of the pupils in the junior high.

Comprehensive Secondary Schools

The schools participating in this research study are classified as comprehensive secondary schools. The original concept of comprehensive schools was developed in Europe and the United States. In Israel it was introduced on an experimental basis in development towns and other areas populated by new immigrants, from the 1950s. These schools began as two or three year comprehensive high schools that arose to meet local needs. In time, these schools grew to four-year institutions (Zucker, 1985).

In 1968, as part of the reforms enacted in the Israeli school system (see above) comprehensive high schools were established on a national scale. The Ministry of Education listed the aims of the comprehensive school as follows (Smilansky, 1973):

14
a. Improvement of teaching conditions – construction of new buildings and laboratories, acquisition of modern equipment, and implementation of new teaching methods.
b. Provision of equal opportunity for children residing in development towns and in immigrant concentrations to both academic and vocational studies under the same roof, and the opportunity for mobility between these tracks.
c. Solution of social and cultural problems by placing pupils of varied social, cultural and educational backgrounds in the same institution.
d. Participation in joint social activities, regardless of the pupil’s track, background or socio-economic status.
e. Turning these comprehensive schools into desegregated frameworks, enabling all Israeli pupils to learn under the same roof.

The following have been identified as some of the key characteristics and goals of comprehensive secondary schools (Schmida and Bar-Lev, 1971).

1. The comprehensive school accepts all the children residing in a certain neighbourhood or community, without discerning between socio-economic or educational background. In other words, the comprehensive school is the community’s school.
2. The educational staff of the comprehensive school is prepared to meet the needs of all pupils, including the weakest ones.
3. The comprehensive secondary school has various academic and vocational programmes and tracks. The aim of multiple tracks is to enable each pupil to learn in a programme most suited to his/her needs, and to fulfil his/her potential.
4. The comprehensive school provides cultural and social activities in order to create one unified society.

In theory, it is possible for a pupil to go from one track to another in the comprehensive school if he/she demonstrates the ability to do so. In practice however, it was found that although the aim of the comprehensive school was to break barriers and stigmas, and to enable equal opportunity for all, this was not the case [Kahan (Cohen), 1987]. Most comprehensive institutions had two distinct pupil categories under the same roof - academic and vocational. Much criticism was levelled about tracking the pupils early into vocational programmes, thus not giving them an opportunity to sit for the matriculation exams (which are necessary for higher education – see next section). An in-depth study done in 1978/80 found that relatively more pupils of African-Asian origin were placed in vocational tracks due to their lower achievement level, and that learning in these tracks hindered their acceptance into higher education programmes (Shavit, 1984).

The Israeli Parliament Education Committee published reports, in 1981 and 1987, regarding the comprehensive school system. These reports included: (Gaziel, 2001):

a. Although there had been efforts to improve achievement and social integration, systematic care of at-risk-pupils had not been intensified, and little had been accomplished in terms of social education.

b. The committee concluded that comprehensive schools failed to achieve their dual aims of social integration (equality) and improving at-risk pupil achievement.
Several Israeli studies made in an attempt to determine the reasons for comprehensive schools failed to answer the needs of the at-risk pupils. The following are some of the conclusions:

a. Educational integration is not possible in development towns whose population is comprised almost entirely of families with low socio-economic status (Ayalon, 1992).

b. Since public comprehensive schools have a reputation for lower achievement than private schools, parents who were able to afford it, sent their children to study in private schools outside their town (Schmida and Katz, 1995).

c. Public comprehensive schools usually lacked specific study programmes and offered little academic counselling; this led to pupils’ choosing courses haphazardly. In addition, there was little understanding of the connection between schoolwork and life outside the classroom (Newmann, 1992).

d. Some of the major ideas and theories behind the comprehensive school reform were not put into practice. Researchers found that comprehensive schools did not accept all pupils without prior selection, and placement of pupils in tracks was usually based on achievement factors. Conditions of placement did not leave room for mobility between tracks and social activities were no different than in non-comprehensive schools (Schmida and Guttman, 1981).

e. The assumption that vocational-technological education would be the solution, for the absorption into the system of pupils from all over the world, turned out to be incorrect. Arguments have been made that the time devoted to learning a technological subject is “a waste” for the pupils; it would be better for them to devote this time and effort to studying basic matriculation subjects (such as English, Hebrew and mathematics). Any pupil interested in
vocational-technological subjects would be better off studying them after the required army service, when the information learnt would be up-to-date (Sharon, 1999).

f. Other factors contributing to the failure of comprehensive schools to meet their goals were found to be: ‘top-down’ educational curriculum, teacher apathy toward at-risk-pupils, lack of parental involvement and pupils’ apathy toward school work, weak academic performance and disciplinary problems (Oakes, 1985; Shavit, 1989).

The above brief survey, of the development of comprehensive high schools, shows that although great expectations were held regarding such schools as a means of solving many of the social and educational problems of the Israel school system, these expectations were not realised. Reform in school structure was not the magic pill to cure the ills. However, this new structure of secondary schools is now a given fact, and comprehensive high schools are here to stay in Israel for the foreseeable future.

The next stage in the quest for improvement was the planning and implementation of special programs in targeted schools, in attempts to combat some of the problems. These new programmes were geared to achieve the original goals envisioned for comprehensive high schools, and were part of a revised educational outlook at the beginning of the 21st century.

Some of the issues currently being debated and tested are (Aviram, 1999):

1. Universal acceptance of all pupils into a single type of school and teaching with a holistic approach, as opposed to selective acceptance and tracking according to ability.
2. A universal syllabus, or learning programmes, suited to individual needs.
3. Providing weak pupils with a vocational technological education as opposed to providing all pupils with an academic education.
4. Evaluation of pupils in relation to others as opposed to individual evaluation.

It was hoped that reforms would help decrease the widening social gap between the Afro-Asian and European-American descendents, by enabling all pupils to complete the 12th grade, and providing equal opportunity for higher education and white-collar professions. The implementation of these changes, in the entire country, took almost 20 years. The most significant outcome was the success of the comprehensive schools in keeping a majority of pupils in the educational system until the age of eighteen. However, the academic achievement of those of Afro-Asian descent remained far below those of European-American descent (Swirski and Swirski, 1998). In a continuing attempt to close the cultural gap, many individual schools and local municipalities have implemented various school improvement projects, targeting pupils of Afro-Asian descent. The SFA project examined in this thesis is one such programme.

**Present-day educational structure**

At present, schools in Israel are divided into the following educational groupings:

1. Nursery – from 3 months to three years of age, usually divided into age groups. Most of these facilities are privately owned.
2. Pre-kindergarten – four year old children, mostly run by the municipalities. Although not compulsory and not tuition-free in most cities, the majority of Israeli children attend them.


5. Secondary schools – any school above 6th grade:
   a. Junior high schools - grades 7 through 9
   b. Senior high schools -
      - Academic or vocational high schools - grades 9-12 or 10-12.
      - Comprehensive high schools – grades 10 through 12.


**Teaching hours in elementary and secondary schools**

The number of pupils per class varies greatly, and ranges from a minimum of 10 pupils up to a maximum of 40 in elementary school and 42 in secondary school. An elementary school teacher carries a workload of 30 teaching hours per week, whereas the teaching load of a junior or senior high school teacher is 24 weekly hours. One of the differences between elementary and secondary schools is the number of teachers assigned to each class. In elementary schools most of the subjects are taught by a single teacher who also serves as the homeroom teacher, or “mechanech”. In this manner, one teacher teaches a pupil approximately 20-25 hours weekly, out of an average of 30 hours a pupil spends in school.

In contrast, in secondary school each subject is usually taught from 2-5 hours weekly; approximately ten different teachers teach the secondary school pupil each week (Schmida, 1987b). Teachers in Israel are required to be in school only for assigned class teaching periods. This in essence
means that a teacher is required to be present in school for only 24 hours each week. Furthermore, many secondary school teachers teach less than a full position in a particular school. This does not allot teachers time to spend with individual pupils, or to take care of other matters. This practice differs from other countries, where a teacher is required to remain in school for the entire school day, and fulfil other duties.

Thus, the mechanech, who receives an additional three, non-teaching hours per week for his/her class, is the main figure who attends to the needs of his/her pupils, including problems relating to subject-matter teachers. The mechanech in secondary schools teaches subject matter to his/her homeroom pupils on the average of 5-8 hours of the pupils’ total 42 weekly hours; this makes it more difficult to get to know the pupils.

A major figure in the SFA programme was the mechanech, who was to attend to the specific needs of each pupil in his/her homeroom. Because he/she was expected to play a key role in this programme, his/her responsibilities were expanded and significantly more non-teaching hours were added to his/her position. The traditional role of the mechanech is outlined below.

**The Traditional Role of the Mechanech (Homeroom Teacher)**

The “mechanech” plays a very important part of the Israeli pupils’ education. The position of “mechanech”, commonly translated as homeroom teacher, is more encompassing than that of the homeroom teacher that in American schools. His/her role includes functions that are usually assigned to guidance counsellors in the United States. In a number of ways, the mechanech’s role is similar to the class tutor in the UK pastoral care system. Pastoral care emphasizes the importance of teachers concern with the wider needs of their pupils, including their
personal, social, emotional and moral needs, in addition to imparting knowledge (Best et al., 1980).

The Hebrew term “mechanech” (educator) is used in this thesis to better understand the comprehensive responsibilities of the Israeli homeroom teacher. Every child, from first through twelfth grade, is assigned to a specific class with a homeroom teacher. In elementary school the homeroom teacher is with his/her class most of the school day. However, in junior high school (7th to 9th grades) the homeroom teacher teaches his/her class less subjects and therefore spends less time with his/her pupils. All schools have a weekly period called “hour of mechanech”. During this period, class problems, current events, social and moral issues are supposed to be discussed, giving the homeroom teacher an opportunity to influence the pupils’ values, ideas and beliefs, and to help them become more aware citizens. In most schools the mechanchim, who comprise about thirty percent of the teaching staff, are considered the elite group in the faculty. Important management decisions are considered to have been ratified by all the teachers even if in actual practice they have been approved only by the mechanchim, who usually meet on a regular basis (Gordon and Ackerman, 1984).

The unique responsibilities of the teacher holding this position play a crucial role at all levels of education, from first through twelfth grade. To fully understand the structural changes proposed in the project under study, it is first necessary to become acquainted with the traditional job description of the “mechanech”.

The following describes in detail the role of the mechanech and his/her expected duties, as outlined by the Ministry of Education (Israeli Ministry of Education, 1994).
1. The mechanech (in conjunction with all the teachers of the class) takes care of the educational and social aspects of the pupils in his/her class. He/she leads a one "hour of mechanech" session, presents class issues to other teachers and to the principal, and cultivates the relationship between the school and his/her pupils.

2. The mechanech instructs his/her pupils about regular class attendance, good behaviour, pleasant and correct manners. He teaches them personal hygiene and cleanliness, and care of their personal belongings (clothes, books, etc.). He emphasizes the importance of obeying school rules and fulfilling imposed duties.

3. The mechanech in the religious school, in conjunction with the other teachers and parents, encourages the religious growth of the pupils and the enhancement of their religious awareness. This includes promotion of social welfare activities together with parents, and helping the needy, sick, elderly, etc.

4. The mechanech acts consistently and persistently to coordinate the teaching activities of all subject-matter teachers, and determines, after consultation with the subject-matter teachers, the amount of homework to be assigned for each subject.

5. The mechanech handles all the pedagogical affairs of his/her pupils and collates the grades of all subjects, for each pupil, each trimester.

6. The mechanech follows the general development of his/her pupils, both in school matters and activities outside of school. Special attention is to be paid to underachievers, and to those suffering from social maladjustment. He is responsible for their mental health and adjustment, in conjunction with the school staff, parents and outside professionals, when necessary.
7. The mechanech initiates meetings between parents and subject-matter teachers.

8. The mechanech is responsible for the guidance of the class’s social life. He/she accompanies them on class excursions to the movies, theatre, etc., in cooperation with subject-matter teachers and parents. He encourages the pupils to read appropriate literature, and guides them in their work.

9. The mechanech will conduct group guidance sessions dealing with inter-personal and general class problems. He/she will organize class parties, trips and other extra-curricular activities.

10. The mechanech must meet with the parents of all his/her pupils at least once a trimester to discuss the achievement, behaviour, health and method of education of each individual pupil. (It is recommended that subject-matter teachers also meet with the parents for this purpose.)

11. The mechanech is required to have an hour each week when he/she is available for individual meetings with parents and pupils.

12. The mechanech will schedule a meeting of all parents, at least once a semester, to discuss general educational problems, hygiene, child development, homework, etc.

13. The mechanech will become familiar with the home environment of each pupil, and will make home visits when appropriate, especially in cases of problematic pupils.

14. The mechanech is responsible for carrying out the instructions of the school principal and the school pedagogical council and reports on his/her class to the principal and pedagogical council.

Any reader of the above would probably ask, how it is possible for a mechanech to carry out all the expected functions and duties, in one
weekly period (fifty minutes) of assigned contact with his/her class consisting of up to 42 pupils, or even with the addition of three weekly non-teaching hours that are usually added to a mechanech’s teaching position and salary. In practice, most mechanchim, while trying their best under the given conditions, cannot carry out all that is described above. In high school (10th to 12th grades), the mechanech usually teaches his/her class only one subject, for an average of three hours a week, thus limiting his/her contact with the homeroom class. This fact, coupled with the large number of pupils a teacher sees each week, makes it difficult for a mechanech to get to know all his/her pupils well enough to guide and assist them, as called for in the job description. In addition, the pupils on their part do not feel close to the mechanech.

The SFA intervention program saw the mechanech as playing a crucial role in the implementation of the new program, and a major force in achieving its goals. For this reason, the duties expected of the mechanech, and the compensation awarded for the effort, were carefully considered and outlined. The reader will find details of the role expected of the mechanech under the new program, and the large number of administrative hours allotted for carrying out these duties, beginning on page 36.

* * * * *

The major aim of the SFA programme was to raise the numbers of pupils eligible for a national matriculation certificate. The following is an overview of the importance of this certificate, and the requirements for receiving it.
Matriculation Exams in Israel

The measure of a secondary school’s success in Israel is the percentage of its pupils who succeed on the matriculation exams. Matriculation exams play an extremely important role in the education system in particular, and in society in general. These exams determine the subject matter that is taught, how the teachers teach, and the way the pupils learn. The emphasis is on succeeding, with high grades, on the exams at the cost of neglecting other educational goals.

Teachers and parents see these exams as the epitome of educational activities, on all levels. The matriculation certificate holds the key to the future for all Israeli youth and in particular for youngsters growing up in developmental towns. Without this certificate, entrance to higher education and better paying jobs is denied to them, and thus significantly reduces their chances for upward social and economic mobility. Thus, this certificate has a strong influence on an individual’s future, and has social, economic and political ramifications (Schmida, 1987b).

The schools studied in this research have had a low level of success on these exams for many years (Israeli Ministry of Education, 1990-1997). The major aim of the school improvement project studied in this thesis was to increase the number of pupils passing the National Matriculation exams, and thus enabling their attainment of a National Matriculation Certificate. The following section is an overview of the scope of required exams and their scheduling, which will enable a comparison with the new structure proposed in the intervention project.

The following is a brief outline of the exams needed for a matriculation certificate (Pur, 1989):
1. Required exams – required subjects to be tested for matriculation can be studied on a number of levels, from minimum level of mastery (1 point level) to maximum level (five points). Exams may be divided into smaller units of one point each. (Three weekly hours per year are devoted to teaching each point. A subject tested on a five-point level is taught for 15 weekly hours - usually 5 weekly hours for each of three senior high school years.)

2. Elective exams chosen from a compulsory list.

3. Additional elective exams.

A pupil is eligible for a matriculation certificate if he/she accumulates a minimum of 21 points. It is possible to accumulate up to 32 points.

**Required exams:** (Exams can be spread out over the three year senior high school programme.)

1. Hebrew language and literature - at least 4 points.
2. English language - at least 3 points
3. Mathematics - at least 3 points
4. Bible - at least 2 points
5. Jewish history and citizenship - at least 3 points.

Total = 15 points in required exams.

**Elective exams chosen from a compulsory list**

This list consists of two parts: a) academic subjects (i.e. chemistry, physics) and b) technological subjects (i.e. electronics, computer technology). At least one subject, chosen from one of these two lists, on a 2-point level minimum, is required.
Additional elective exams
In this category the pupil can choose to sit for exams in additional subjects and/or to take higher-level tests (more points) in the above subject categories. In addition, a pupil may take an exam that is prepared by the school itself, in one subject only. The grade on this exam will be recognized as a full grade for the matriculation certificate.
Pupils also have a special option, whereby they can do a supervised research project in place of one matriculation exam.

One of the innovations of the school improvement project under study in this thesis was a revision in the organization of the matriculation exams. Under the national system, most matriculation exams are concentrated at the end of the 11th and 12th grades, in the month of June and the beginning of July. Under the “Success for All” project, more exams were to be taken in the tenth grade. In all grades, some matriculation exams would be scheduled for the end of the first semester (January-February) and others for the end of the second semester (June-July). Details of this arrangement can be found in the following section.
D. SFA School Improvement Programme – Implementation in a Development Town

This research monitored a school improvement program that was implemented in a low SES comprehensive high school in a development town in Israel. This programme, called “Success for All” (SFA), was developed by the Israeli Association of Community Centres Ltd. Jerusalem in conjunction with the Ministry of Education. It aimed at raising the academic achievement of pupils studying in comprehensive high schools in development towns, in raising the image of the school in the eyes of the town’s populace, the pupils and their parents, and in keeping as many pupils in school as possible,

For this purpose, the designers of the SFA programme (representatives of the Israeli Association of Community Centres) first met with representatives of the regional Board of Education. They received an overall picture of the existing educational problems, and their expectations from a school improvement programme. They then met with the town’s mayor, the local chairperson of the department of education, and the principals of both comprehensive high schools, to better understand the special problems and the specific needs of the local pupils. This led to a design for school change that is presented in detail below (Israeli Association of Community Centres, Ltd., 1998). In Chapter Five these proposed changes will be discussed and will be compared with their actual implementation.

This section will provide an in-depth description of the “Success for All” school improvement programme and its underlying theory. The material presented in this chapter appears in internal documents that were distributed to those associated with this project. Specific documents are
referred to throughout the chapter. This material is presented in detail in order to give the reader an understanding of this project, how it was to be implemented, the structural and personnel changes to be made in the school and the expected outcomes.

As mentioned above, the major aim of the “Success for All” school improvement programme was to increase the number of pupils who pass their matriculation exams, thus making them eligible for a National Matriculation Certificate. The following are the assumptions underlying the Israeli SFA programme, as formulated by the creators of the programmes (Israeli Association of Community Centres, Ltd., 1998):

1. *All pupils can succeed*: This assumption was based on the slogan coined by Slavin (1984) – ‘Success for all’. He argued that any pupil who was not organically mentally impaired could learn and achieve in a mainstream school programme. Some pupils might need more assistance than others or require different teaching methods, but *every child* can succeed in school. This basic premise also underlies the programmes for school improvement designed by Sizer (1993), and others. The SFA programme assumes that almost *every pupil can succeed in school and achieve a matriculation certificate*. Brighouse and Woods (1999, pp. 128) put this very well: “All children are gifted....some just open their packages sooner than others”.

2. *The reasons for not passing the matriculation exams include social, cultural and psychological factors, and not the lack of cognitive ability*: Effective schools research has shown that although family background and socio-economic factors play an important role in pupil success, schools can overcome negative environmental factors (Teddlie and Springfield, 1993).

3. *Relating to individual needs and characteristics is the key to academic success*. It is up to the school to pay special, individualized attention
to these pupils in order that they reach their potential (Schmida, 1987a). This would be achieved by a) programme flexibility and individualized instruction, and b) strengthening the role of the "mechanech" (homeroom teacher).

These above assumptions led to the following aims and objectives (Israeli Association of Community Centres, Ltd., 1998):

a. To significantly increase the number of pupils eligible for a national matriculation certificate.

b. To enable equal opportunity for all pupils to take the matriculation exams. Prior to the introduction of the “Success for All” project, not all pupils were encouraged to sit for matriculation exams. Encouraging all pupils to take the matriculation exams, is based on the assumption that all pupils have the basic innate ability to succeed, provided that they are given the proper nurture.

c. To curb pupil dropout as much as possible. Schools in the project are committed on keeping as many pupils in school as possible. This will be achieved as a result of the following:

1. Increasing pupil motivation to remain in school, with the realization that achieving a full matriculation certificate is both a desirable and a realistic goal.

2. Making the necessary school organizational changes, to maximize pupil success, offering individualized instruction and special help when necessary.

3. Strengthening the ties between the pupils and their homeroom teacher, to help them cope with personal and/or learning problems.

4. To avoid labelling pupils non-academic or vocational early in their high school programme. This labelling destroys motivation, and arbitrarily derails many pupils from a full
academic programme leading to a National Matriculation Certificate.

d. To raise the image of the school. The schools in this Southern developmental town suffer from a low public image, in the eyes of the more established population in Israel in general, and among the town’s populace in particular. It was hoped that by significantly raising the level of the pupils’ achievement and enabling more pupils to achieve a matriculation certificate, the school’s standing would improve within the community, and parents’ aspirations that their children receive a first rate education, would be satisfied. This new image would help to attract the more gifted local pupils who presently enrol in out-of-town schools. This, in turn, would also help to raise the educational and social level of the school. Thus, the negative cycle of poor image, low success rate on the matriculation exams, and the loss of gifted pupils to out-of-town schools, would come to an end.

Fig. 1.1 is a schematic representation of the aims and objectives of the ‘Success for All’ school improvement project.
Fig. 1.1: Aims and Objectives of the SFA Project (Israeli Association of Community Centres Ltd. Jerusalem, 1997).
To achieve the above-described aims and objectives, interventions were planned for almost all aspects of school processes and classroom practices: 1) school structure, 2) curriculum, 3) classroom leadership, 4) Scheduling and teaching practices, 5) pupil involvement and commitment, 6) parental role, and 7) structure and administration of matriculation exams (Israeli Association of Community Centers, Ltd., 1998):

1. School structure:
   a. *The entire school staff should be focused on ensuring success for the pupils.* This includes the principal and administrative staff, track coordinators, homeroom teachers, specialized teachers, guidance counsellors and others. Coordinating policy among the entire staff is a necessary pre-requisite for the success of the structural changes.
   b. *The work plan slogan is “Pygmalion”.* A “Pygmalion” programme believes in the ability of the pupils to succeed, does not label them, does not compromise with it or with the pupils, and demands constant effort.
   c. *The structural change is a “developing” one,* starting with tenth grade the first year, tenth and eleventh grade the following year, and encompassing tenth, eleventh and twelfth grades the third year.
   d. *Future long-range planning envisions the inclusion of the junior high school (grades 7-9).* It is difficult to get to the root core of the pupils’ learning difficulties as late as the tenth grade, when the race for the matriculation certificate has already begun. Therefore, after the programme progresses in a cumulative manner, upward from the tenth grade to the twelfth, it will then go downward, to include the ninth, eighth and seventh grades.
e. **Decrease to minimum the anonymity of the pupil.** A decrease in the number of subjects studied simultaneously leads to a lessening of the feeling of anonymity experienced by pupils. Teachers having a smaller pupil load and fewer pupils in each class will get to know each one better. This will enable them to meet a pupil’s individual needs to a greater extent (Sharan et al., 1998).

2. **Curriculum:**

a. **Learning is operative and goal-oriented.** Each subject syllabus contains specific content levels which pupils are expected to master step-by-step. The pupils receive a list of the tasks they must fulfil in order to succeed, the exact subject content they must cover and master, and the skills they must be competent in. The teaching methods selected are those that serve the pupils needs and increase their chances of success.

b. **The learning is organized on a semester basis.** Whenever possible, subjects are studied for one semester. Each one of the semesters constitutes a self-contained unit of study.

c. **The pupils take matriculation exams twice a year (fall semester and spring semester).** Matriculation exams will be given twice a year. This system has two advantages. Firstly, it enables the pupils to divide the workload, resulting in fewer subjects to study at the same time. Secondly, it allows more opportunities to re-take an exam if the pupil wishes to improve his/her grade.

d. **The pupils begin the matriculation exams in the tenth grade.** The matriculation exams begin in the tenth grade, at the end of the fall
semester. The school development committee, in conjunction with national school inspectors, will determine the exam schedule (Israeli Association of Community Centres Ltd. Jerusalem, 1997).

e. The matriculation certificate will enable the pupils to go on to institutes of higher learning. There are various matriculation certificates, depending on the subjects studied and their level. It is necessary to match the matriculation programme to the individual needs and abilities of the pupil, so that the path to a higher degree of his/her choice will not be blocked. Each school, in accordance with the national guidelines, will decide on the combination of subjects to be studied for the matriculation exams, and the semester in which the exams will be taken.

f. During the last semester of the twelfth grade the pupils will receive assistance, to enable them to be re-tested in the subjects that they had failed.

g. During the Spring semester of the twelfth grade, pupils who have successfully passed all their matriculation exams will be permitted to take academic courses for credit, in an institute of higher learning.

3. Classroom Leadership – The Homeroom Teacher:

a. The homeroom teacher will lead and guide the programme changes in his/her class over a period of three years.

b. The homeroom teacher is responsible for the structural changes in his/her classroom. He/she is directly responsible for the implementation of the new guidelines relating to pupils and teachers. The same homeroom teacher will lead his/her class for the entire three years (10th to 12th grades).
c. *The homeroom teacher is responsible for encouraging the pupils to succeed.* He/she has to monitor each pupil’s progress. He/she will meet regularly with all teachers that teach his/her class, and work together with them as a team. They will discuss difficulties, teaching methods, progress, etc. regarding each of the pupils. The homeroom teacher audits other teachers’ lessons in order to give immediate feedback.

d. *The homeroom teacher is responsible for behaviour and discipline.* He/she is responsible for discipline in his/her class. Although behaviour and discipline are issues that all staff has to deal with, the homeroom teacher is the one directly responsible. In general, when the class climate is one of motivation, the discipline problems usually decrease.

e. *The homeroom teacher is responsible for class solidarity and moral education.* He/she serves as the social director for the class; plans and carries out extracurricular activities at least once a week. The socialization of the class, and the informal meetings with the pupils are a necessary condition for the success of the motivational process. In addition, the homeroom teacher is responsible for pupils’ internalisation of the school’s code.

f. *The homeroom teacher is responsible for the motivational process.* He/she has to have ongoing dialogues with individual pupils concerning their achievement and personal problems. Emphasis should be placed on nurturing the hopes and aspirations of the students. This is the ideological basis for raising motivation.

g. *The homeroom teacher is responsible for contact with the parents.* He/she is responsible for consolidating the parents into a support group for the pupils during the process of change. This includes visits to the homes and parent-teacher evenings.
h. The homeroom teacher is responsible for the organizational and logistical aspects of the structural change. He/she is responsible for implementing the programme schedule and the marathon intensive learning sessions.

i. Work schedule. The homeroom teacher will work each week in his/her class, according to the following breakdown:

- 8-10 hours: teaching subject matter
- 5 hours: moral and social education.
- 4 hours: organization (meetings with teachers and administration).
- 2 hours: extracurricular social activities.
- 3 hours: auditing other teachers’ lessons and discussing them.
- 3 hours: individual conversations with pupils and parents.
- 1 hour: administration and logistics.

In addition to the usual 4 hours a homeroom teacher receives (one hour is devoted to actual class time, the other three hours for administrative activities), the homeroom teacher participating in the project will receive an additional 14 non-teaching hours to fulfil the above responsibilities and requirements. The key to the additional hours is 0.56 weekly hours per pupil. (25 pupils X 0.56 = 14 weekly hours.)

(If the homeroom teacher teaches subject matter for 10 hours, then one hour is subtracted from the “moral and social education”, and another hour from organization. Twenty-four weekly hours is considered a full teaching position in the 7th to 12th grades. In the usual school structure, the homeroom teacher receives 4 hours for “moral and social education” and administration, and 6 hours subject matter teaching) (Dushkin and Ormian, 1967).
4. Scheduling and teaching practices:

a. *The school year will be divided into two semesters, fall and spring.*

At the end of each semester, beginning in the tenth grade, the pupils will take matriculation exams, in at least two subjects.

The semester studies will consist of the following:

1. Three learning marathons outside the school grounds for each matriculation subject. These marathon sessions consisted of intensive study devoted exclusively to a specific subject.

2. Regular classes on campus.

b. *Due to the emphasis that is placed on achievement in matriculation subjects under the SFA programme, the curriculum will be comprised of three types of lessons: matriculation subjects, required studies and elective courses.*

1. **Matriculation subjects:** The subjects that will be tested by national matriculation exams will be taught intensively for 4-5 months instead of the usual year-long teaching. The learning will be carried out in the following three intensive ways:

   a. *First learning marathon* – Between one and a half and two and a half weeks after the beginning of the year.

   b. *Regular campus learning* – Two and a half months with increased class time.

   c. *Second learning marathon* – Additional marathon prior to the matriculation exams.

Figure 1.2 depicts the 10th grade curriculum and matriculation exams for the school year in the experimental school. Instead of the pupils having to sit for all four exams during a short period at the end of the school year, this arrangement calls for
two exams (Hebrew Language and Oral Law) to be given at the end of the first semester, and two other exams (History and Bible) to be given at the end of the school year. This reduces by 50% the number of exams that the pupils are required to take within a short period of time. It should be noted that 10th grade pupils in the control (secular) school are only required to take two matriculation exams, both of which are given at the end of the school year.

<table>
<thead>
<tr>
<th></th>
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<th>Winter Exams</th>
<th>Weekly hours</th>
<th>End of School Year Exams</th>
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<tr>
<td>1</td>
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<td>8</td>
<td>Matriculation exam</td>
<td>1 Matriculation subject- Bible</td>
</tr>
<tr>
<td>2</td>
<td>Matriculation subject- Oral Law</td>
<td>8</td>
<td>Matriculation exam</td>
<td>2 Matriculation subject- History</td>
</tr>
<tr>
<td>3</td>
<td>Required subjects</td>
<td>13</td>
<td>3 Required subjects</td>
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<tr>
<td>4</td>
<td>Foreign language</td>
<td>5</td>
<td>4 Foreign language</td>
<td>5</td>
</tr>
</tbody>
</table>

Fig. 1.2: The 10th grade curriculum – total of 34 weekly hours (Israeli Association of Community Centres, Ltd., 1998).

2. **Required studies:** Every pupil is required to take courses that are not tested by national matriculation exams but by internal exams. These courses and their final grades must appear on the final matriculation certificate. Tenth grade pupils are required to take physical education and geography. In addition, subjects that are tested in later years
are also included in this category; for example, mathematics in the 10th grade.

3. **Elective courses**: In the normative high school setting in Israel, the client – the pupil - almost never determines the content studied. The content is very often irrelevant to the pupils’ lives, and does not interest them. The result of this is low motivation and even development of resistance towards learning. This behaviour has a great effect on the teacher, and puts the school in a whirlwind of disciplinary actions. The proposed changes are based on the belief that the pupil should be a partner in determining the subjects and content to be studied. For this reason the new programme will include elective courses in a wide variety of subjects, (not only academic), to be taught in the eleventh and twelfth grades, which will be based on the pupils’ preference (e.g. music and art).

Fig 1.3 sums up the number of weekly hours that will be devoted to each subject in the 11th and 12th grades.  
**Total**: 34-46 hours weekly
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<tr>
<th></th>
<th>Semester 1</th>
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<th>Semester 2</th>
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<tr>
<td></td>
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<td><strong>Winter</strong></td>
<td><strong>Weekly</strong></td>
<td><strong>End of</strong></td>
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<td></td>
<td><strong>hours</strong></td>
<td><strong>Exams</strong></td>
<td><strong>hours</strong></td>
<td><strong>School Year</strong></td>
</tr>
<tr>
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<td>8-10</td>
<td>Matriculation exam</td>
<td>1 Matriculation</td>
<td>8-10</td>
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</tr>
<tr>
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<td>8-10</td>
<td>Matriculation exam</td>
<td>2 Matriculation</td>
<td>8-10</td>
</tr>
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<td></td>
<td>exam</td>
<td>subject - 4</td>
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<tr>
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<td>3 Required</td>
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<td>8-10</td>
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<td>4-8</td>
<td>4 Elective</td>
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<td></td>
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<td></td>
<td>language</td>
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Fig. 1.3: Outline of Course Schedule for 11th – 12th grades (Israeli Association of Community Centers, Ltd., 1998).

c. *Subjects that will be tested by national matriculation exams will be studied during regular teaching periods and in concentrated marathons.* For each matriculation subject there will be two marathon sessions, one at the beginning of the semester and one at the end. Some of the sessions will be in the afternoon, after regular school hours, and some in concentrated, single subject, intensive learning morning sessions, instead of the regular course schedule. There will be a preference for having the marathons at a location off the school grounds, if possible. Changing the learning environment can be a factor in heightened motivation. These marathons are an integral part of the regular curriculum.
d. **Teaching will be done by professional teachers and teaching assistants.** Teaching assistants will augment the professional teaching staff in all matriculation subjects, and will work together with the teacher in the classroom. This is to enable more individualized teaching to help pupils overcome their individual academic difficulties. The number of teaching assistants assigned to each class depends on the make-up of the class and the subject being studied. The final number for each class will be determined by the project’s steering committee in each school.

e. **There will be no required homework. All effective learning takes place in the classroom.** Classroom instruction will be sufficient to prepare pupils for the matriculation exams. We cannot assume that the pupils will manage to complete mastery of the subject matter on their own at home. Past experience in these schools has shown that pupils do not take their homework assignments seriously, and their economic situation does not allow them to engage private tutors (the norm in more affluent communities). Therefore, classroom instruction will include exercises and drills to ensure mastery of the subject matter.

f. **Learning will also take place by peer teaching.** Peer teaching and group work will be gradually introduced. These methods strengthen the reciprocal responsibility of the pupils on the one hand, and enable more effective teaching on the other (Sharan and Sharan, 1976).

Fig. 1.4 is a schematic representation of the development of pupil motivation as a result of the structural change. It can be seen that a major aim of the marathons is to increase pupil motivation.
Fig. 1.4: Schematic representation of the development of pupil motivation as a result of structural change (Israeli Association of Community Centres, Ltd., 1998).

5. Pupil involvement and commitment:

a. *The pupil gradually learns to be successful.* In the proposed plan, the pupil does not have to take many matriculation exams at once, and thus has a chance to learn to cope with them gradually. This is one of the reasons for beginning the exams in tenth grade. In addition, the chance for passing the exams does not end in the tenth grade, and the pupil has opportunities to be re-tested over the next two years. This possibility raises the motivation of the pupils.

b. *The pupil is aided by other pupils.* Individual pupils in the class support each other during the learning process (peer teaching), and the class serves as a support group. In this manner the pupil does not feel alone and isolated.

c. *The pupil is aware of and understands the three-year programme leading towards the matriculation certificate.* It is very important
for the pupil to be familiar with the entire programme leading up to the matriculation certificate. This involves detailed planning, and understanding the difficulties and tasks he faces. Above all, this means the involvement of the pupil and the class in carrying out this programme to a successful conclusion.

d. *The pupil learns to take responsibility for the learning process.* Gradually, the pupil learns to be responsible for his/her learning. He/she will be encouraged to turn to the homeroom teacher to discuss any difficulties he/she encounters, and to turn to fellow pupils for support. The knowledge of the high school programme, and the understanding of the tasks that stand before him/her, enable the pupil to take responsibility for his/her actions and behaviours. This will aid in motivating the pupil towards increasing his/her effort and self-discipline. These changes will not occur at once, but are part of a long process that involves the homeroom teacher, subject-matter teacher, teacher assistants and peers. Responsibility also means internalising the school’s code of morals and ethics.

e. *The system sees the pupil in a holistic manner, and the pupil sees the system in a holistic manner.* Just as the system is expected to know all about the pupil, and not just his/her cut-and-dry achievement record, so the pupil is expected to better understand the school system. This understanding will enable him/her to take advantage of all the avenues open to him/her for ensuring success (Liu and Barnhart, 1999).

6. Parental role:

a. *The parents are an integral part of the pupils’ success and support cycle.* The parents will be partners from the beginning of this new school programme, and be made aware of its aims
and principles. They will serve to support the pupils on their path toward success, and they are expected to actively support their children in the tasks ahead of them. They will receive regular progress reports from the homeroom teacher.

b. Based on the reports they receive, the parents are expected to play an active role in their children's progress (Israeli Association of Community Centres Ltd., 1997).

The expected benefits to be derived from the above changes were summarized by the Israeli Association of Community Centres Ltd. (1997) as follows:

1. A challenging and "Pygmalion" curriculum – a programme that refrains from labelling pupils, and sincerely believes in the ability of all pupils to succeed.
2. Decrease in anonymity – attention is paid to the individual needs and progress of each pupil, with fewer pupils per teacher.
3. Speeded-up, focused teaching – many hours spent on learning a subject in a short period of time, increases the effectiveness of the teaching, and allows pupils to concentrate on fewer subjects at the same time.
4. Changed environment - learning outside the school grounds under improved conditions serves to increase motivation.
5. Individual monitoring of progress – frequent individual monitoring with formative evaluation (as opposed to summative evaluation) can increase a pupil's chances for academic achievement.
6. Peer group as a basis for individual success – peer teaching and group work strengthen responsibility of pupils and enable more effective teaching.
7. A constant figure (the mechanech – homeroom teacher) is responsible for all the individual and group needs of his/her class, thus enabling more efficient implementation of the project.

8. Teaching methods geared to individual needs.

9. Parents are an integral part of the learning process, thus narrowing the gap between demands of the school and expectations in the home.

10. Possibility of a second chance for taking matriculation exams before leaving the school in the 12th grade, thus increasing the possibility for receiving a national matriculation certificate.

11. Completion of most matriculation subjects by the middle of twelfth grade, thus allowing a semester for remedial work, and preparation for retesting, in matriculation subjects that the pupils failed.

The following is a summary of the guiding principles of the proposed new learning structure (Israeli Association of Community Centres, 1998):

1. *All pupils* will prepare for a national matriculation certificate.

2. Since the fall semester is shorter than the spring semester, the subjects taught in this semester will be those that are less demanding.

3. The spring semester is longer than the winter semester; therefore the subjects taught in this semester will be those that need more preparation time.

4. English as a foreign language and mathematics, will be taught continuously for two and a half years; the matriculation exams will be given at the end of the fall semester of the twelfth grade.
5. Matriculation exams in Hebrew composition and oral expression will be given at the end of the 11th grade, upon completion of four semesters, for the following reasons:
   a. Acquisition of oral and written communication skills is a necessary requirement for success in other subjects.
   b. Many tenth grade pupils from both schools exhibit difficulties in expressing themselves in writing.

6. The subjects selected for the 10th grade matriculation exams are those that require minimum ability in written expression.

7. In addition to the subjects tested by matriculation exams, the school administration will select the required courses, based on the curriculum outlines of the Israeli Board of Education. These courses will be taught throughout the entire year, or concentrated in one semester, as per school decision. (For example, physical education.)

8. Each school, in conjunction with the school inspectors, will decide on the composition of the matriculation exams for the three years, and will try to schedule the exams in such a way that they will be completed by winter of twelfth grade.

9. The school will also offer elective courses in the 11th and 12th grades. The number of pupils to participate in each course will be 8-10. These courses will be either one or two semesters each.

10. As a result of introducing the matriculation exams as early as the end of the fall semester of 10th grade, and spreading the matriculation exams over three years, in the spring semester of twelfth grade the pupils will only have to complete 2 more matriculation subjects. Pupils who failed a previous exam can be retested at this time.
Summary of the main aspects of the “Success for All” school improvement programme

1. Origin of the programme and steps taken in its introduction and adoption:
   a. Representatives of the Local Board of Education outlined the educational problems of the town, to experts in the Israeli Association of Community Centres (IACC) who were recommended by the Ministry of Education.
   b. The IACC developed the “Success for All” school improvement programme, to raise the level of achievement of the pupils studying in the secondary schools, in this development town.
   c. The SFA programme was then presented to the town’s mayor and council, the local Board of Education supervisor and representatives.
   d. It was then presented to the principals of the two local comprehensive secondary schools in the presence of the local Board of Education supervisor.
   e. The programme was presented to the schools’ teaching staff for discussion and approval.
   f. Teacher workshops were held in preparation for the programmes implementation.
   g. The programme was presented to the parents of 10th grade pupils in the school.
   h. Pupils signed a commitment agreement during the first week of school (Appendix III, page 398).
2. Chart of Proposed Change

Fig. 1.5 presents a summary of the major aspects of the SFA programme.

<table>
<thead>
<tr>
<th>Target of Change</th>
<th>Proposed Change/Action</th>
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<tbody>
<tr>
<td>Curriculum</td>
<td>• Courses semester instead of yearly</td>
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<td></td>
<td>• Less subjects per semester</td>
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<td></td>
<td>• More hours for matriculation subjects</td>
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<td></td>
<td>• Learning marathons</td>
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<td></td>
<td>• Spreading out of matriculation exams</td>
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<td></td>
<td>• Opportunity for retesting</td>
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<tr>
<td>Teaching practices</td>
<td>• Frequent pupil monitoring</td>
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<td></td>
<td>• Fewer pupils per teacher</td>
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<td></td>
<td>• Teaching assistants</td>
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<td></td>
<td>• Peer teaching</td>
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<tr>
<td>Teacher motivation and</td>
<td>• Workshops for motivation and problem solving</td>
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<td>guidance</td>
<td>• Frequent meetings with various experts</td>
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<td>• Outside monitoring by experts</td>
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<td>Homeroom teachers</td>
<td>• Enhanced relationship with pupils</td>
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<tr>
<td>(Mechanchim)</td>
<td>• Close contact with parents</td>
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<td></td>
<td>• Addition of non-teaching hours to job position</td>
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<td></td>
<td>• Redefinition of role of homeroom teacher to include responsibility for seeing to all</td>
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<tr>
<td></td>
<td>aspects of carrying out project</td>
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</table>

Fig 1.5: Summary of the major aspects of the Israeli SFA programme.

3. Expected outcomes included: greater success on matriculation exams, lower dropout rate, increased pupil motivation, improved pupil educational self-image and improved public image of the school.
E. Summary of Chapter One

This research was based on a school improvement programme, carried out in an underachieving comprehensive high school, located in a development town in Israel, in the school year 1999-2000. Chapter one outlined what this programme was, and why it was set up. In addition, it provided the reader with the context necessary for understanding the significance of the programme and this research study. Later chapters will analyse what actually did happen, and compare the results with the control school.

* * * * *

Chapter Two presents a review of Effective Schools and School Improvement Literature, as relevant to this study.
Chapter Two — Literature Review

Introduction

This research examined the effects of a school improvement programme, “Success for All” (SFA), on the academic achievement of 10th grade high school pupils in a development town in Southern Israel. This programme was implemented following several earlier improvement projects, whose results were disappointing; the expected improvement in pupil achievement was not attained. Its design was based on the knowledge derived from effective schools research, and on several school improvement programmes that served as models for the SFA programme.

For more than three decades, school effectiveness research and school improvement research went their separate ways, with little contact and mutual exchange of knowledge. As Reynolds et al. (1993) point out, this dichotomy was especially prevalent in the United Kingdom, and was also the case worldwide, with North America being the major exception. These researchers go on to say “only in Israel internationally do we see any systematic application of school effectiveness findings in school improvement programmes” (ibid, p. 40).

This chapter presents an overview of how effective school research and school improvement programmes, each separately, attempted to improve schools and raise achievement levels. This review and analysis of school effectiveness and school improvement literature will provide the necessary background to better understand this research thesis, which is a critical investigation of a school improvement programme based on a synthesis of both school effectiveness theory and school improvement practice.
Reynolds et al. (2000, p. 48) within an extensive review of the literature distinguishes between effective schools and school improvement research as follows:

- **Effective Schools Research** – research concerned with the processes of effective schooling, evolving from case studies of outlier schools, through contemporary studies merging qualitative and quantitative methods in the simultaneous study of classrooms and schools.

- **School Improvement Research** – examining the processes whereby schools can be changed, utilizing increasingly sophisticated models that have gone beyond simple applications of school effectiveness knowledge to sophisticated ‘multiple lever’ models.”

Numerous and varied theories and studies from both research schools will be discussed, with the aim of showing both the common and the contrasting elements within each field and between the two fields. Emphasis will be placed on the theories and programmes that have elements in common with the SFA project under study in this research.

This chapter is divided into the following sections:

A. School Effectiveness
   1. Origins and historical background
   2. Definition and measurement of school effectiveness
   3. Relevant research studies on school effectiveness
   4. Criticisms of school effectiveness research
   5. Summary of school effectiveness

B. School Improvement
   1. School improvement theory
2. Developing concepts and trends in school improvement
3. School improvement strategies and programmes
4. Criticisms of school improvement

C. Leadership in School Effectiveness and School improvement

D. School Effectiveness and School Improvement in Israel

E. Summary of Chapter Two

**A. School Effectiveness**

This section discusses the following topics related to school effectiveness:

1. Origins and historical background
2. Definition and measurement of school effectiveness
3. Relevant research studies on school effectiveness
4. Criticisms of school effectiveness research
5. Summary of school effectiveness

1. **Origins and historical background**

This section will discuss the origins and the development of the concept “school effectiveness”. This field grew out of a debate, whether or not schools can make a difference.

Dissatisfaction with the educational system on the one hand, and assessment of educational outcomes on the other hand, is not a new issue. Educators and governments throughout the Western Hemisphere addressed these problems in various ways. Most researchers have defined effectiveness in terms of measurable pupil outcomes (Frederick, 1987). This concept of effectiveness was based on the level of the outcomes as measured by tests, with little or no attention to other factors.

One of the first attempts to assess school effectiveness took place in Boston, USA in 1845. This research served as a milestone in the history
of educational assessment, in that it established a long tradition of the use of achievement tests as a primary method of evaluating educational outcomes (Madaus et al., 1979). The municipal educational administration of the city of Boston decided to use written tests instead of the oral exams that were common at that time. The explanation given for this change was quite surprising. It was argued that the change enabled a closer correlation between the salary of school principals and pupil achievement. The educational board also used the results of these exams as an excuse to fire principals who objected to abolition of physical punishment for pupils. This issue was a first priority of the educational system at that time (Kellaghan and Madaus, 1982). The linking of teachers’ salaries and pupil achievement became a common practice.

The issue of the effectiveness of schools re-appeared in the 1960s, as part of the protest against social inequality prevalent in US society. Demands were voiced to compensate the underprivileged classes, by increasing the financial resources available to schools populated with low socio-economic status pupils. A belief in the importance of education as a means of achieving social mobility, as well as concerns regarding uniformity of access to quality education, led the American Congress in 1965 to request that the Commissioner of Education undertake an assessment of the level of equality of educational opportunity in the public schools. This assessment is popularly known as “The Coleman Report” (Coleman et al., 1966).

The results surprised even the researchers themselves. The report reached four major conclusions: a) the strongest predictors of achievement, across all racial groups, were social characteristics of the pupil’s home environment (parents’ education, income, etc.); b) for minority pupils, the next strongest predictor of achievement related to
social characteristics of the school (its percentage of white pupils and the average economic background of all pupils); c) for southern black children, teacher characteristics (education and years of experience) had a modest impact on achievement; d) after controlling for all the above, factors related to school fiscal resources (per-pupil spending) and curricular and instructional facilities appeared to have little or no effect on school achievement (Boyd and Shouse, 1997). The disappointing and challenging conclusion of the Coleman Report was that “schools don’t make a difference”, and could not compensate for the effects of social class. What makes one human being more likely than another to succeed in school is determined either by biology, socio-cultural inheritance or a combination of both (Silcock and Brundrett, 2002).

In the United Kingdom, Bernstein (1970) raised a similar view based on linguistic theories. He argued that lower class children lack certain elements of conceptual thinking that are an integral part of the cognitive repertoire of middle class children.

From the middle to the end of the 1960s, doubts about the importance of schools for pupil outcomes, brought about for the first time a “coalition of practitioners”, which included teachers, principals, school improvers, researchers and sometimes - educational policy representatives. The coalition involved itself in the development of educational theories about education and their testing. This emerging educational effectiveness movement believed in the importance of education and that schools could make a difference. The Coleman Report triggered a new wave of “process product” research, epitomized by the “effective schools” studies of the 1970s and 1980s, including the "Search for Effective Schools" project, which sought to identify schools which were effective despite a poor, largely minority pupil population (Edmonds, 1979). These studies
primarily examined the workings of urban, elementary schools. The methodological approach used, was to identify the significantly effective (and sometimes significantly ineffective) schools. Instructional effectiveness was defined by pupil test score results, higher than one would predict, on the basis of the socio-economic status of pupils’ families. In addition, attempts were made to identify school processes and characteristics that seemed to make a difference in pupil learning. On the basis of these studies, lists of “effective practices” for classroom instruction and school management and organization were compiled (Boyd and Shouse, 1997).

The “Search for Effective Schools” project led in turn to the “Effective Schools Movement”, which became a major movement inspiring a large amount of research. This movement was founded on three main assumptions: a) as measured by standardized tests, some schools are unusually effective in teaching poor and minority children basic skills; b) these successful schools exhibit characteristics that are correlated with their success and are within the domain of education to manipulate; and c) the characteristics of successful schools provide a basis for improving other schools (Bickel, 1983). The bottom-line being that schools do matter, and can affect pupils beneficially. Furthermore, “school effects are owed to schools and teachers and not to covert factors such as parental attitudes, degree of affluence or dominant type of linguistic code” (Silcock and Brundrett, 2002).

School effectiveness research increased awareness of the need for accountability of schools, and the responsibility of educators to provide all children, regardless of background, with opportunities for high achievement, and led to shifts in educational policies in many countries.
It also provided new ideas about school improvement. The assumption was that improvement would come about by focusing on factors affecting achievement that were found to be alterable. Supporters of the effective schools movement claimed, that what was needed to make city schools more effective, was to adopt a more focused and achievement-oriented approach to schooling, similar to that which had proven to be successful in several urban schools. These achievement-oriented strategies include school-wide instructional focus, high expectations for achievement, and a shared culture that binds pupils, teachers and principals together (Wang, 1992). Studies of school improvement projects would therefore give more insight into the strategies necessary for changing schools and helping them to become more effective (Maughan et al., 1990).

In addition, the effective schools movement required teachers to develop a set of "effective teaching" practices and to become involved with the principal in school improvement efforts (Kelley and Odden, 1995).

The effective schools movement was very influential among researchers and educators. "Equally important, it signified a major shift in our understandings about how schools work, moving from explanations involving fiscal capital to those centred around human and social capital" (Boyd and Shouse, 1997, p. 3 online). Support for the effective schools movement was so widespread in the US, that the American Congress passed the Hawkins-Stafford School Improvement Act of 1988, which included incentives for following effective school principles. A pertinent survey found that more than half of the US school districts initiated or planned programmes based on effective school research (Snider, 1989).

Reynolds and Teddlie (2001) summed up the contributions of School Effectiveness Research as follows:
1. Invented a discipline with a professional association, accompanied by an international journal to advance knowledge.

2. Has generated a valid knowledge base that can be utilized in school improvement projects.

3. Has improved the chances of educational advance by combating some of the pessimism of previous years - “It has helped to destroy the myth that the influence of family background is so strong on children’s development that children are unable to be affected by school” (Reynolds and Teddlie, 2001, p.103). It has also “helped to reduce the prevalence of family background being given as an excuse for educational failure by teachers” (ibid).

2. Definition and Measurement of School Effectiveness

The previous section provided a general historical perspective of the evolvement of the concept of school “effectiveness”. Since this thesis is the examination of an attempt to increase a particular school’s effectiveness, it is important to understand the meaning of this concept, as it is commonly referred to in school improvement projects in general, and in the improvement project under study, in particular. This section will examine the theoretical aspects of school effectiveness in more detail, and will discuss the definition and measurement of school effectiveness.

a) Defining “School Effectiveness”

Defining ‘school effectiveness’ has proved to be a complex issue and no one “approved” definition is available. A survey of effective schools’ literature reveals that there is no consensus on the definition of an effective school. Thus, educators and researchers involved in school improvement projects had a variety of methods for measuring school
effectiveness. The wide range of designs, methods, and measures of effectiveness, which characterize the effective schools research, make comparisons difficult. Sometimes the research itself leads to the definition of an effective school, and sometimes a theoretical definition is proposed before the research.

Most researchers have defined effectiveness in terms of measurable pupil outcomes. Westbrook (1982) states that the reasoning behind this seems clear, since the quality of the "product" of the school, the pupil, is the most critical element of the effective school. From the literature it appears that the ultimate goal of all schools is improved achievement (Frederick, 1987).

The following are a sample of definitions found in the literature.

1. Rutter et al. (1979) attempted to measure success by reference to pupils' behaviour both in and out of school, their academic achievements and attendance records.

2. Salganik et al. (1980) defined an effective school as one in which the observed average exceeds the predicted mean achievement.

3. Frederiksen (1975) considers an effective school to be one in which two or more independent groups of pupils perform at about the 75th percentile on standard achievement tests.

4. On a similar note, but with the addition of consideration of the time frame, Hallinger (1983) defined an effective school as one in which the mean pupil achievement on mandatory standardized tests matches or exceeds predictions for three consecutive years.

5. Lezotte et al. (1974) measured effectiveness as relative to other schools in the city. They say a school is effective if its achievement scores are at or above the citywide average grade equivalent.

6. Clark and McCarthy (1983) define effectiveness much the same as Lezotte, but refer to school mean gain as at, or above, citywide gain.
7. Brookover (1981) relates effectiveness to national achievement. He defines an effective school as one in which a major proportion of the pupils achieve at, or above, the average national levels.

8. McCormack-Larkin and Kritek (1982) determine effectiveness as a parameter within a specific school. In their eyes an effective school is one in which the percentage of pupils scoring in the average and high achievement categories (Stanines 4-9) is increasing, while the percentage of pupils in the low achievement categories (Stanines 1-3) is dropping.

9. Clauset and Gaynor (1982) linked effectiveness with regards to low-achievers. They wrote that an effective school is one in which the achievement gap, with respect to grade level standards for initially low-achieving pupils, is closed over time.

10. Dorman (1981) claims that effectiveness should be related to race and socio-economic status. He feels that an effective school is one in which the initial gap between cohort groups, based on race and socio-economic status, remains stable or is reduced.

11. Edmonds (1982) and Gauthier (1982) argued that an effective school is one that brings an equal proportion of its highest and lowest classes to minimum achievement levels.

12. Blom et al. (1986) defined effectiveness as follows: “School effectiveness is the degree to which a school succeeds better than other schools do in making their pupils score higher on achievement tests than one might expect when the input variables such as initial attainments and SES-levels are taken into account”.

13. Gaziel (1992) enlarges on the four basic postulates of Parsons (1951) that survival of a social system depends mainly on, adaptation, goal attainment, integration and latency. Gaziel suggests that school effectiveness includes the following dimensions:
services utility - the extent to which the school is effective in utilizing the talents and qualifications of its staff members; adaptivity - the extent to which the school is flexible and responds to demands; affectivity - the extent to which school staff feel committed to the school and are satisfied with their working conditions; and feedback - the extent to which the school management encourages feedback from staff members and provides staff with information regarding evaluations of their work”.

14. Madaus et al. (1980, p. 22) feel that in order to be able to assess a school’s effectiveness it is necessary to know its goals and objectives. They state that a school can be called effective “to the extent that there is congruence between its objectives and its achievements. Effectiveness is not an all-or-nothing proposition; a school might be only partially effective”.

15. Chen (1990) argues that school effectiveness emphasizes two interrelated operational goals: a) High academic achievement which surpasses the achievement level expected on the basis of the pupils’ socio-economic status (SES) variables: and b) Weak relationships between SES and academic achievements.

16. Mortimore (1991b, p. 9) defines an effective school as “one in which pupils progress further than might be expected from consideration of its intake”.

17. Townsend (1994) says that an “effective school is one that by its actions has caused or produced a result” (p. 127). He qualifies by adding that since schools are publicly funded the “effect must be a positive one from the public perception” (p. 127).

18. Cheng (1996a, p. 2) views school effectiveness from an input-output perspective, and assumes that effectiveness is a combination
of or a comparison between what a school can produce (output) and what has been put into the school (input).

19. West-Burnham et al. (1995, p. 25) suggest that a simple definition of effectiveness might be “attainment of stated outcomes”.

20. An international study of the quality in schooling by the OECD adopted the following definition: An effective school is one that promotes the progress of its pupils in a broad range of intellectual, social and emotional outcomes, taking into account socio-economic status, family background and prior learning (OECD, 1994).

21. A definition of effectiveness that was derived from an extensive review and synthesis of effective school research is: “effective schools are those in which all pupils master priority objectives” (Northwest Regional Education Laboratory, 1984). This definition leaves room for the determination of the specific objectives by each institution, governing board, etc. and may be best suited for effective school research.


“The effective school would seem to have the following characteristics:

- When time and activity structures were not arbitrary and could be tailored to the different rates, interests and developmental levels of the child; when children had the opportunity for choice and some organization of their own time.

- When it didn’t make children unhappy.

- When children were involved rather than passive.

- When activities took place both within and without the school walls.

- When school brought diversity to the fore, didn’t denigrate difference and accepted successes other than the merely cognitive or ‘academic’ ones.
• When school valued self-knowledge and emotional growth and evaluated positively rather than negatively.
• When school made its values clear and worked in partnership with the community.
• When school was orientated towards the future as well as the past.

Fig. 2.1 below compares the various definitions of school effectiveness presented in this chapter. It can be seen that there is no consensus as to the definition of this concept, an important factor to be weighed when examining the conclusions of each researcher.
<table>
<thead>
<tr>
<th>Researchers</th>
<th>General School Achievement</th>
<th>Achievement of Certain Groups within a School</th>
<th>Achievement Relative to other Schools or Norms</th>
<th>Other Factors</th>
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<td></td>
<td>+ (As compared to goals and objectives)</td>
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<tr>
<td>Townsend (1994)</td>
<td></td>
<td>Effective in public's perception; has produced a result</td>
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<tr>
<td>Cheng (1996a)</td>
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<td>Input-output perspective</td>
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<tr>
<td>West-Burnham et al. (1995)</td>
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<td>Attainment of stated outcomes</td>
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<tr>
<td>Postman and Weingartner (1973)</td>
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<td>Various school characteristics</td>
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Fig. 2.1 – A comparison of definitions of “school effectiveness”. The + signs mean that the researchers definition can be assigned to the marked category.
Goldstein and Meyers (1997, p.1) sum up the issue of defining educational effectiveness with the following: “Effectiveness, if it means anything, is multidimensional. Schools differ in their effectiveness by curriculum subject and are differentially effective for different groups of pupils: their effectiveness also changes over time”.

Frederick (1987, p. 1) lists the following questions that should be taken into consideration by researchers:

- What are the key variables that should be measured? Should the criteria for effectiveness include cognitive skills only or cognitive and social skills, psychomotor skills, emotional well being, cultural appreciation, etc.?
- For whom should the school be effective?
- At what level should the data analysis take place? Should the data be analysed at the school level or for a specific cohort of pupils?
- How will the variables be measured?
- Will the data be gathered at a single point in time or longitudinally?

Internal vs. External Effectiveness and Efficiency

As seen above, the concept of effectiveness is not very clear. In an attempt to clarify the issue, Cheng (1996a) classifies school effectiveness into four categories, two concerning effectiveness and two concerning efficiency. This distinction is important because studies on effective schools have used the term “effective” very broadly, as seen in the above section “Definitions of Effectiveness”. This classification may help to clarify in the reader’s mind the type of “effectiveness” researchers refer to in their studies. The following is an outline of the four categories as presented by Cheng (p. 3).
1. “School’s technical effectiveness (or internal effectiveness) – If the school outputs discussed are limited to those happening in school or just after schooling (e.g., learning behaviour, skills obtained, attitude change, etc).

2. School’s societal effectiveness (or external effectiveness) – If the school outputs discussed are the effects on the society level or the life-long effects on individuals (e.g., social mobility, earnings, work productivity).

3. School’s technical efficiency (or internal efficiency/internal economic effectiveness) – If the school outputs are those happening in school or just after schooling.

4. School’s societal efficiency (or external efficiency/external economic effectiveness) – If the school outputs are the effects on the society level or the life-long effects on individuals.”

Cheng goes on to say that the relationship between technical effectiveness and societal effectiveness or between effectiveness and efficiency is very complicated, and not necessarily positive. For example, a school may succeed in giving a pupil a good technical education, but it is possible that these skills may be outdated by the time the pupil begins his/her career. On another plane, numerous studies challenge the traditional belief that schools have “positive” effects on society, such as social mobility (Blackledge and Hunt, 1985). In general, a school that is high in one category is not necessarily high in another, and enhancement of one category does not necessarily promise increase in the others (Cheng, 1996a).

b) Measuring School Effectiveness

In order to measure school effectiveness, it is first necessary to define what is to be measured. Since the definition of school effectiveness
seems to be very complex, and some may say, elusive, some researchers
turned to organizational theory, under the assumption that schools can
be viewed as organizations. This comparison might aid in the
clarification of the concept of school effectiveness, and might thus
enable it to be measured.

When schools are viewed as organizations, school effectiveness should
concern itself with the question whether differences in the organizational
structure of schools lead to differences in output (Olthof and Lugthart,
1992, p. 345). Cuttance (1985) used four frameworks to describe the
orientation of research projects: 1) the input-output framework, 2) the
organizational framework, 3) the institutional framework and 4) the
exemplary schools framework. Olthof and Lugthart (1990) examined the
publications that used the organizational framework, according to
Cuttance, and concluded that not even one project was set up using a
strictly organizational theoretical approach. The researchers also
examined models used in school effectiveness research as outlined by
Blom et al. (1986) and concluded that even when organizational school
variables are used, they are not grounded in an organizational theoretical
approach. Othof and Lugthart therefore concluded that organizational
theoretical approaches are not commonly used in school effectiveness
research.

The traditional approach to measuring school effectiveness is the
functional approach. According to this approach, an organization is
thought to be successful if it achieves the goals it sets for itself, or the
goals that an outsider sets for it, with its approval.

This viewpoint is based on three assumptions (Freidman, Horowitz and
Shalev, 1988, p. 11):
a. The decision-makers in the organization are rational people, who make decisions based on pre-decided goals, and who direct their decisions towards meeting those goals.

b. The number of goals that the organization sets for itself is relatively small, and do not oppose each other.

c. The goals are clear and well phrased, so that the members of the organization understand them, and are able to direct their activities to achieve them.

It can be said with certainty that most organizations have more goals than their leaders are ready to admit. An organization has “official goals” which are defined and open. For example, the official and clear goal of schools is to teach each pupil according to his/her ability (Steers, 1977).

In addition to the official goal, an organization has operative goals. The operative goals are the actual and practical intentions of the organization, which guide its activities. Sometimes, the official and the operative goals coincide, and sometimes they do not. In addition, goals can change in time, and might not be accompanied by reformulation of the original ones. When goals do not determine the organizational behaviour, managers in these organizations act in ways that are not consistent with attaining the official or the operative goals.

Hoy and Ferguson (1985) suggest a model for the study of school effectiveness. This model consists of the following parameters:

a. The manner in which a school adapts itself towards the changes around it.

b. The measure by which it achieves its pre-defined goals.

c. The degree of unity of the school.

d. The preservation of organizational commitments.
Measuring School Effectiveness Based on Theoretical Research Models

Some argue that in order to properly measure school effectiveness, one must begin with a theoretical model, which includes both a definition of school effectiveness and the criteria to be measured. The following is a survey of theoretical models found in school effectiveness literature. These models will serve as a source for comparison with the school improvement project examined in this thesis (see Chapter 5, page 347).

- **Goal model**—assumes that a school is effective if it can accomplish its stated goals with the given input. It assumes that the goals are clearly stated and generally accepted (Cheng, 1996a). Critics argue that since the goal model depends on specific measurable and time-bound goals, whereas most educational goals are intangible, its usefulness is limited (Cohen, 1989). Others claim that the use of standardized exams as the measurement of school effectiveness, narrows the definition of effectiveness and acts mainly to serve public interests (Miskel et al., 1983) and may yield adverse effects on the school’s educational processes (Cheng, 1996a).

- **System-resource model** (also known as Resource-input model)—a school is effective if it can acquire the resources it needs (Etzioni, 1975). The quality of factors such as pupil intake, facilities, resources and financial support from outside agencies are important indicators of effectiveness according to this model. The ability of a school to attract high-quality pupil input seems to be a necessary condition for some schools to become effective or to achieve high academic performance. (Cheng, 1996a). Critics claim that overemphasis on the acquisition of input may reduce the effort the school should put into educational processes and outputs. Nevertheless, this model is used by some educational economists, and is useful if the connection between input and output is clear (Hanushek, 1981).
• **Internal Process Model** – assumes that a school is effective if its internal functioning is smooth and “healthy”. Thus, important criteria of school effectiveness are the internal organizational activities and practices in the school (Cheng, 1993). Leadership, communication, participation, coordination, adaptability, planning, decision-making, social interactions, school climate, teaching methods and classroom management are often used as indicators of effectiveness (Cheng, 1996a, p. 7). Viewing effectiveness as a process and not as an end state tends to minimize many of the obstacles in effectiveness research (Steers, 1977). If there is a clear relationship between school processes and educational outcomes this model should be useful (Cheng, 1996a).

• **Strategic-constituencies model** (also known as *Satisfaction model*) – a school is effective when all its strategic constituencies (the principal, teachers, parents, pupils, education authority, etc.) are at least minimally satisfied. Satisfaction with the school response to their demands is the basic criterion for a school’s effectiveness (Zammuto, 1984). This model is appropriate only where the demands of the main constituencies are compatible, which is not usually the case.

• **Legitimacy model** – defines a school as effective if it can survive as a result of engaging in legitimate or marketing activities. It assumes that schools “strive for legitimacy with the external public in order to enhance their longevity and avoid being selected out of the environment” (Cameron, 1984, p. 278). The indicators of effectiveness are often related to the activities and achievements of public relations, marketing, accountability, school public image, reputation or status in the community. This model is useful primarily when the survival and demise of schools must be assessed in a changing and competing environment (Cheng, 1996a, p.8). It follows therefore, that unless the
school has approval of legitimacy in the community, it cannot be considered effective.

- **Organizational Learning Model** – depicts a school as being effective if it is able to adapt to its environment and learn how to make improvements. It is very important for the school and staff to be able to deal with change and to reduce internal opposition to change (Argyris, 1962; Cheng, 1996a). In some ways this model is similar to the internal process model. The difference is that this model emphasizes the importance of learning behaviour to effective school performance (Cheng, 1996a). This model is useful for the evaluation of new and developing schools, or schools in rapidly changing environments.

- **Ineffectiveness Model** – seeks to describe school ineffectiveness from a “negative” side, because it is difficult to identify criteria of effectiveness from a “positive” side, as can be seen from the above. Cameron (1984) defines a school as effective if there is an absence of characteristics of ineffectiveness in the school. The model assumes that it is easier for concerned school constituencies to identify and agree on criteria for school ineffectiveness than for criteria of school effectiveness (Cheng, 1996a). When the criteria for school effectiveness are not clear, but there is a need for school improvement, this model is practical.

- **Total quality management model** – is in many ways an integration of the above models, particularly the organizational learning model, the satisfaction model and the process model. According to this model, a school’s effectiveness is related to total management of people and internal processes to meet strategic constituencies’ needs. It provides a more holistic way of understanding and managing school effectiveness. Evaluation indicators include leadership, people management, strategic
planning, process management, quality results, constituencies’ satisfaction and impact on society (Cheng, 1996b).

Seven of the eight models described above are compared in Fig. 2.2. The “Ineffectiveness Model” is not included in the table because this model views effectiveness as an absence of “ineffective characteristics”, without elaboration of their nature.
<table>
<thead>
<tr>
<th>Point of Reference</th>
<th>Name of Model</th>
<th>Effectiveness Criteria</th>
</tr>
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<tbody>
<tr>
<td>Concerned with external factors</td>
<td>1. System-resource model</td>
<td>1. Can acquire necessary resources</td>
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<tr>
<td></td>
<td>2. Legitimacy model</td>
<td>2. Can survive due to legitimate or marketing activities</td>
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<tr>
<td></td>
<td>3. Organizational learning model</td>
<td>3. Is able to adapt to its environment and improve</td>
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<tr>
<td>Concerned with internal factors</td>
<td>1. Goal model</td>
<td>1. Can accomplish stated goals</td>
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<tr>
<td></td>
<td>2. Internal process model</td>
<td>2. Internal functioning is smooth and “healthy”</td>
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<tr>
<td>Concerned with both internal and</td>
<td>1. Strategic-constituencies model</td>
<td>1. All strategic constituencies (principal, teachers, pupils, education authority, etc.) are minimally satisfied.</td>
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<tr>
<td>external factors</td>
<td></td>
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<tr>
<td></td>
<td>2. Total quality management model</td>
<td>2. Total management of people and internal processes to meet constituencies’ needs.</td>
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Fig. 2.2: Comparison of theoretical research models of school effectiveness.

**Creemers’ comprehensive model of educational effectiveness**

Creemers (1994b) argued that the various lists of correlates of school effectiveness were derived mainly from studies in which each correlate was the only independent variable. The factors were rarely studied together, and their effects on pupil outcomes, even when studied together, is doubtful. Creemers and Scheerens (1994) designed a model that is based on the idea that school effectiveness should be studied from a perspective of four levels – the student, the classroom, the school and
the context of the school – with the higher levels contributing to the lower ones. Three key learning characteristics were used in examining the different levels and their impact on student achievement: a) quality of instruction, b) time for learning and c) opportunity to learn.

Creemer’s model assumes that student achievement is strongly influenced by the student’s social background, intelligence, motivation, the way the students spend their time during their lessons and the way they use their opportunities to learn. The classroom level factors include the key concepts of time for learning, opportunity to learn and quality of instruction. The "quality of instruction" was subdivided into curriculum, grouping procedures (mastery learning, ability grouping, cooperative learning, etc.) and teacher behaviour (management, atmosphere, homework, evaluation, goal setting, etc.) On the school level the factors include quality (rules and agreement about classroom instruction, evaluation/policy system, school culture), time (time schedule, rules and agreements about time use, orderly and quiet atmosphere) and opportunity (school curriculum, consensus about mission, rules and agreements about how to implement the school curriculum).

A large number of studies utilizing multi-level modelling show that the great majority of variation among schools is due to classroom factors, while school influences were low (Scheerens et al., 1989). The school level factors that are the most important are those that enhance quality, time for learning and opportunity for learning. On the other hand, the classroom level factors are what really count because they directly affect pupil outcomes (Creemers and Reezigt, 1996). Creemers and Reezigt point out that many school effectiveness studies were based only on a two level analysis, i.e. school factors and student achievement, without taking into account the classroom level factors. If these classroom level factors had been part of the study, then correlation between school
factors and school achievement might have been reduced. Reezigt et al. (1999) argue that theoretical models that have been constructed for studying school effectiveness that attempt to establish a hierarchy of the various factors are lacking, in that they do not consider the way that individual factors might influence achievement together as a group.

Fig. 2.3 is the schematic representation of Creemers’ basic model of school effectiveness (1994).
Reezigt et al. (1999) suggest that a factor on the classroom level may have a different effect on student achievement than the same factor at the school level. To further complicate matters, it should be noted that the factors at the different levels interact. This raises many questions regarding the value of lists of individual correlates of effectiveness that are a mixture taken from all four educational levels. In addition, effective correlates identified in earlier studies are not very stable over time, subjects, grades, groups of students, departments within schools, or districts and countries (ibid).
It is now known that there is no recipe for effectiveness that is independent of history, context or personnel (Reynolds, 1990). What is effective varies in accordance with the social environment of the school, stage of school development and with the specific outcome measured. In addition, there is no cross-cultural agreement. For example, the issue of assertive instructional leadership of the principal was found to be an effective common factor in the United States (Levine and Lezotte, 1990), while in Holland, this factor was not found to be important (Creemers and Scheerens, 1989). Thus, more research is needed to determine how factors affect different types of children and schools.

This section provided an overview of definitions and measurement techniques of school effectiveness. In Chapter Five, beginning on page 348, factors found in the school improvement project under study having an effect on achievement, will be compared with the factors discussed in the literature.

* * * * *

The next section will present relevant research studies carried out on effective schools in various parts of the world.

3. Relevant Research Studies on School Effectiveness

Research over the past few decades has described features of effective schools and has stimulated the development of programmes oriented towards improved school effectiveness (Gaziel, 1996). It has sought to explore the relationship between the way a school is organized and the extent to which it achieves its stated goals (West-Burnham et al., 1995, p. 23).
Gaziel (1992) divides the research literature on effective schools into three types:

a. Academic focus – concentrating on basic academic skills and pupil achievements (Edmonds, 1979; Andrews, 1989).

b. Climate focus – including issues such as rules, regulations and guidelines (Ogilvie and Sadler, 1979).

c. Multidimensional focus - including academic performance as well as school climate, school adaptation to change, and penetration of feedback (Rutter et al., 1979; Gaziel, 1992).

This SFA project had the main goal of increasing the number of pupils who passed their 10th grade matriculation exams. It had a strong academic focus, but also included other issues: dropout rate, educational self-image, school image, pupil discipline and pupil motivation. Therefore, this research can be classified as having a multidimensional focus, targeting academic and other factors. In order to examine these diverse factors, it was necessary to employ a variety of research techniques.

In this section the reader will find a survey of research studies on school effectiveness that were carried out in various countries. Their conclusions, related to characteristics of effective schools and the possibility of improving ineffective schools, as well as the issues still being studied, give the background needed to understand the SFA school improvement programme. The programme was designed on the basis of conclusions derived from effective schools research. Factors found to be common to effective schools formed the framework of the programme to be implemented.

As discussed above, page 55, the Coleman Report originally concluded that socio-economic factors had a greater effect on pupil achievement
than the school did. Plowden Report (1967) and Jencks et al. (1972) also concluded that family and neighbourhood characteristics have a greater impact on pupil performance than individual schools. Reactions to these findings were strong. The Neo-Marxists saw Coleman's findings as confirmation of their basic argument, that schools are tools in the hands of the elite, and are destined to preserve the existing social order (Bowles and Gintis, 1976).

Much criticism arose regarding the conclusions of the Coleman Report that the quality of schooling a pupil receives, accounts for only about ten percent of the variance in pupil achievement (Marzano et al., 2001, p. 1). Critics claimed that Coleman and Jencks interpreted their results by focusing on the percentage of explained differences (Rosenthal, 1991; Hunter and Schmidt, 1990), while the more meaningful way to interpret the findings is in terms of percentile gain in achievement (Marzano et al., 2001). Another criticism of the Coleman Report targeted its "production function" framework, where schools were implicitly conceived of as "black boxes" through which resource inputs were somehow converted into educational outputs. The problem with this portrayal is that pupils within the same school do not always receive equal amounts of school resources, tend not to share equal access to the library, the computer lab, or to the most experienced teachers, and often are exposed to different types and levels of instruction via tracking or ability grouping (Boyd and Shouse, 1997).

Educators, who found it difficult to accept that schools do not influence achievement, established "The Search for Effective Schools" project. It asked the question: "Are there schools that are instructionally effective for poor children?" (Frederick, 1987). They claimed that input/output research, such as was done by Coleman and his colleagues, cannot really determine links between what happens in schools and achievement. The
use of economic indexes, as a basis for measurement of school effectiveness, was not valid. They argued that these studies concentrated on output and ignored processes taking place in the schools.

In September 1974, Lezotte, Edmonds and Ratner (1974) described their analysis of pupil performance in twenty elementary schools in Detroit, which served a predominantly poor and minority population. An effective school was defined as being at or above grade equivalent in math or reading. An ineffective school was defined as being below the city average. Using these criteria, it was found that eight schools out of the twenty were effective in teaching math and nine in teaching reading. Five schools were effective both in math and reading. The importance of this study was that it showed that effective city schools did indeed exist, and could be located.

In attempts to refute the pessimistic conclusions of the Coleman Report, studies were undertaken independently in the United States by Edmonds (1979) and in the United Kingdom by Rutter et al. (1979). They “were concerned with examining evidence and making an argument about the potential power of schooling to make a difference to pupils’ life chances. The researchers set out to investigate whether schools – in their national contexts – showed any effects when account was taken of the differences in their pupil populations” (Mortimore, 2000, p. 7). The conclusions of both these studies were very similar; the contribution schools made to determining levels of pupil achievement was very small, when compared to contextual variables such as home background (Ribbins, 2000). Rutter et al. (1979) found that the schools that were effective were not those with better buildings, better libraries, special teaching methods, unusual curriculum or more qualified teachers, but had the following characteristics:
a. Uninterrupted classroom instruction and teachers starting lessons on time.
b. Making explicit the academic context of lessons.
c. Praising and rewarding pupils constantly.
d. Setting homework systematically to consolidate learning.
e. Good learning and leisure conditions for pupils.
f. Different expectations of teachers for pupils and of the principal for teachers.
g. Pupils taking responsibility for their own learning.

In the US, Edmonds (1979) concluded that not only could all children learn regardless of their background, but also that some schools are more effective than others. He identified five factors that were found in most of the effective schools, and became the classical model for effective schools. *The five factors are:* educational leadership, high expectations from learning, climate of order, emphasis on basic skills, supervision and close monitoring of pupil progress.

Edmonds' research was verified in Britain by Mortimore et al. (1988) and Mortimore (1993). In addition, Mortimore and his colleagues concluded that differences in student achievement among primary schools, can be explained by an educational leadership that reflects involvement and commitment, the monitoring of students' progress, a positive atmosphere backed up by the involvement of school management and parents, and structured and well-regulated teaching, keeping a limited curricular focus (Mortimore et al., 1988).

Conclusions of research studies in the late 1970s and early 1980s appeared to enhance the significance of the school itself as a variable (West-Burnham et al., 1995). Averch et al. (1974) emphasized the possibility that schools may have different effects on different subgroups
of pupils, and ignoring this point may account for the inability of researchers to identify effective school programmes.

The ‘Search for Effective Schools’ project led to the *Effective Schools Movement*. It became a major movement as to size and amount of research it spurred. Despite some differences among themselves, researchers used one operative definition as to educational outcomes – standardized exams in reading comprehension and in mathematics (Murphy et al., 1985). The effective schools movement emphasized that the primary focus of the schools is instructional effectiveness (Frederik, 1987). In addition, schools must assume responsibility for success or failure in pupil learning. All pupils were expected to achieve regardless of their home environment, family income, ethnic identity or sex. The movement spurred researchers to examine and identify the complex and dynamic variables that are characteristic of schools with high achievement levels. These variables include school climate and instructional leadership. The movement led to the recognition that an effective school should also emphasize non-cognitive skills, such as discipline and leadership, in addition to cognitive outcomes.

The model used for assessing school effectiveness was based on the measurement of the difference between actual output and expected output of pupil parameters. The actual output is defined by the average grade in reading comprehension and mathematics and the predicted level of output, together with control of pupil background variables, which comprise the system’s input. The underlying assumption behind this model is that among all the input variables participating in the educational process, it is necessary to distinguish between those that are not under control of the school (quality of the pupils), and those that the
school can have an effect on (teaching methods, various resources etc.). Therefore, in order to evaluate school effectiveness, it is necessary to control for pupil factors in addition to the others already taken into consideration.

One of the first researchers to use the retrospective method was Weber (1971), who identified four primary schools located in poverty areas whose pupils were found to have very high reading scores. Weber found the following eight variables in schools that were successful in the teaching of reading skills: strong leadership, climate of discipline and order, emphasis on reading skills, high expectations for achievement, assessment of pupils' progress, teachers' aides for reading, goal focused faculty and individualized approach to teaching.

Brookover and Lezotte (1979) also studied the effectiveness of schools in improving reading skills and came to conclusions that agreed with the first five variables found by Weber. Austin and Holowenzak (1985) added another four variables: ability of the principal to choose teachers, level of teachers, small number of pupils per teacher, and teacher involvement. Clark and McCarthy (1983) identified variables identical to those cited by Austin. Glenn (1981) found processes concerning team work, such as joint planning and developing, in addition to Weber's first four factors.

In a comprehensive study in Britain, Tomlinson (1981) found correlation between effectiveness and a) goals (joint and clear); b) pedagogical leadership of the principal; and c) efficient time management by the principal and d) parent involvement.

An extensive review of the effective schools research in the United States [Northwest Regional Education Laboratory (NWRL), 1984] included examination of research in six areas: school effects, teacher
effects, instructional leadership, curriculum, programme coupling and educational change and implementation. Druian and Butler (1987) summarized the following key factors of effective schools as were outlined in the NWREL report:

a. **Leadership**: The role of the building principal is to focus the whole school on instruction and use this focus as a means of establishing and acting upon priorities in the school. The principal and all others in the school know the school is a place for learning.

b. **Climate**: All staff and all pupils share the expectation that all pupils can learn. Effective schools exhibit equity in terms of learning. Learning takes place in a safe, orderly environment, and pupils are expected to behave according to established, fairly executed, rules of conduct.

c. **Classroom instruction and management**: All teachers are highly skilled in and use a variety of instructional methods and techniques. There are clear instructional objectives, activities are tied to objectives, and there is frequent monitoring and evaluation of pupil progress toward those objectives.

In a study made of the five best private and public secondary schools in a city in Brazil (best as determined by using university entrance exams as the criteria), the following were found: institutional development and diversity of solutions given to similar educational problems, academic emphasis, capacity of adaptation, congruence of values, good organizational structure and a climate conducive to learning (Sisson de Castro et al., 1990).
De Glopper (1990) describes the findings of two large-scale studies in the Netherlands, in which school effects were related to characteristics of the mother tongue curriculum. Both studies found that curriculum factors have only a limited contribution in the explanation of school effects. Hofman and Groen (1990) linked school data, class and pupil data with Dutch school board data. By using results of linear structural modelling, they examined the influence of school board activity on six dimensions of selected factors of effective schools. They concluded that only about 17% of variance in the effective school factors could be explained by school board activity. Levine and Lezotte (1990) listed subcategories: productive climate and culture, focus on central learning skills, appropriate monitoring, practice-oriented staff development, outstanding leadership, salient parent involvement, effective instructional arrangements and high expectations; they all have their own independent effects on pupil achievement.

Research in Britain in the 1990s covered factors such as stability over time of school effects, different effects of schools for different groups of pupils, work on conceptualising the nature of the school and classroom processes within ineffective schools and the existence or size of school effects. The research suggests that the size of primary school effects may be greater than those of secondary schools (Sammons et al., 1995).

Reezigt et al. (1999) used Creemers' (1994a) model of educational effectiveness to reanalyse a large-scale longitudinal dataset that contains elementary school data as to pupil cohort, their teachers and their schools (For details of this model and schematic representation see page 74). They found that some classroom and school factors had positive effects on achievement, but these factors were not stable for school subjects and pupil cohorts.
However, Reezigt et al. (1999) suggest that it is possible that not all effectiveness factors have separate effects, and that their effects may be due to their inter-relatedness. Factors at the classroom level may influence achievement in a manner different from factors at the school level. Finally, it is possible that the factors at the different levels might interact. They go on to say that it is still hard to verify these ideas based on empirical evidence. For example, although the idea that classroom factors have the strongest effects on achievement is the commonly accepted approach, (Wang, Haertel and Walberg, 1993), empirical support is not substantial, because classroom and school factors were seldom studied both together.

Ceris (1999) suggests that the same school can be effective on some levels and not on others. For example, a school that is performing well academically as measured by pupil grades, may not be performing well socially as measured by attendance rates and pupils liking for school. Or, it is possible that a school teaches some subjects more effectively than others, as judged by scores on standardized tests.

Contradictory results were found regarding the maintaining of effectiveness over time. Early studies had suggested that schools maintain a consistent level of effectiveness over time, but more recent research suggests that school effectiveness is dynamic, and changes over time (Gray et al, 1996; Thomas et al., 1997). On another issue, early work found that schools were equally effective (or ineffective) with all types of pupils. More recent studies suggest that schools are more effective for particular types of pupils than others, e.g., a school may be more effective for boys than for girls, for different ethnic groups or for pupils of varying academic abilities (Teddlie el al., 1989; ARO, 1999). According to Reynolds et al. (1996), the Smith and Tomlinson (1989) study is notable for the differences shown in academic effectiveness
between schools, and for the substantial variation of results in different school subjects. Out of 18 schools, the school that positioned first in mathematics was only fifteenth in English achievement (after allowance had been made for intake quality).

Reynolds et al. (1996, p.135-7) summarized research on school effectiveness in Britain, over the years.

1. Early effectiveness research emphasized characteristics of the learning environments of secondary schools with different levels of effectiveness, using group-based cross sectional data on intakes and outcomes.

2. This was followed by studies on the differences between schools as measured by academic achievement, delinquency, attendance and levels of behavioural problems.

3. Research studies in the 1980’s included the following:
   - Value-added comparisons of educational authorities on the academic outcomes.
   - Comparisons of selective school systems with comprehensive or all ability systems.
   - Differential effectiveness of different academic sub unit or departments.
   - Differential effectiveness of school upon pupils of different characteristics.
   - Small scale studies that usually focused upon one outcome and attempted to relate this to various within-school processes, particularly in the case of disruptive behaviour and disciplinary problems.
   - The wide range of outcomes on which schools were assessed (including mathematics, reading, writing, attendance,
behaviour and attitudes to school), for the collection of a wide range of data upon school processes with a focus upon classroom processes.

Creemers et al. (1998, p. 127) outlined the progress made in Britain in the field of school effectiveness research, as follows:

- The development of outcome measures to evaluate school effects, which include social and affective factors in addition to the cognitive domain and that of basic skills.
- The size of the "educational effect" has been established in several research projects, as related to different levels in the education system.
- Important progress has been made in the conceptualisation and measurement of processes at different levels of the education system.
- Most of the research studies continue to focus on factors and variables that cause or contribute to effectiveness, at various levels. Investigations were also made into variances between findings in different countries.
- The development of models that are more theoretically based or oriented, and the generation of more 'theoretical' explanations for the differences in educational outcomes among pupils, classrooms, schools and contexts, both nationally and internationally.
- Major progress has been made in the methodology of research, such as the use of qualitative methodology for case studies.
Effectiveness research has provided various lists of factors and characteristics of effective schools. Scheerens (1999, p. 13) compared five review studies done by Purkey and Smith (1983), Levine and Lezotte (1990), Scheerens (1992), Cotton (1995) and Sammons, Hillman and Mortimore (1995). He concluded that there is a high degree of consensus that the following five factors enhance school effectiveness: a) achievement orientation (closely related to "high expectations"), b) cooperation, c) educational leadership, d) frequent monitoring and e) time, opportunity to learn and "structure" as the main instructional conditions.

Reynolds et al. (1996) in summing up effectiveness research in the United Kingdom list key factors that were identified as being crucial in determining school effectiveness:

1. **Professional leadership**: One of the undisputed conclusions is the importance of the head teacher's leadership. Three characteristics have been found to be associated with successful leadership:
   a. Strength of purpose, an emphasis upon recruitment of the proper teachers and the generation of consistency and purpose within the school's management (Sammons, Hillman and Mortimore, 1995).
   b. Sharing of leadership positions (Mortimore et al., 1988).
   c. The head teacher playing the role of the 'leading professional' by being involved in and knowledgeable about, what goes on in the classroom (Mortimore et al., 1988; Rutter et al., 1979).

2. **Shared vision and goals**: Schools were found to be more effective when the staff arrived at a consensus on the aims and values of the school, and when they put these into practice through consistent and collaborative ways of working.
a. Unity of purpose, involving a consensus on values (Rutter et al., 1979).

b. A positive impact on pupils' progress was found to be consistency of practice in adopting a particular approach to school curriculum guidelines (Mortimore et al., 1988) and in approach to discipline (Reynolds, 1976; Rutter et al., 1979).

c. Collaboration between colleagues (Rutter et al., 1979) and teacher involvement in decision-making (Mortimore et al., 1988).

3. A learning environment: In addition, effectiveness is also determined by the school's climate.

   a. An orderly atmosphere (Rutter et al., 1979; Mortimore et al., 1988).

   b. An attractive working environment (ibid).

4. High quality teaching and learning:

   a. Making the maximum of learning time. This is determined by many factors such as the proportion of the day devoted to academic subjects (Bennett, 1978), the proportion of the lesson actually devoted to learning (Rutter et al., 1979) and not on administrative matters (Alexander, 1992) and the amount of time spent on interaction with pupils (Alexander, 1992; Mortimore et al., 1988).

   b. Academic emphasis as measured by the entry of a high proportion of pupils into public examinations (Smith and Tomlinson, 1989) and in relation to senior staff checking that homework had been done (Rutter et al., 1979).

   c. The amount of curriculum covered had been shown to be a factor in effective schools. Bennett (1992) found that
differences in the amount of curriculum covered varies both for pupils within the same class and in different schools.

5. **High expectations**: When teachers had high expectations for their pupils’ success, they were more active in helping them (Sammons, Hillman and Mortimore, 1995). In another study, Tizard et al. (1988) found that teacher’s expectations of both individual pupils and entire classes had a strong influence on the content of lessons.

6. **Positive reinforcement**: This factor involves clear and fair discipline (e.g. Mortimore et al., 1988) and direct and positive feedback (Rutter et al., 1979).

7. **Monitoring pupil progress**: An important feature of effective schools was found to be well-established mechanisms for monitoring the progress and performance of pupils, classes, and the school as a whole.
   a. Record keeping for monitoring pupil performance/achievement (Mortimore et al., 1988).

8. **Pupil rights and responsibilities**: Good staff/pupil relations were found to have a positive effect on pupils’ self-esteem (Rutter et al., 1979). In addition, schools that had a high proportion of pupils with responsibilities within the school, thus conveying trust and setting standards of mature behaviour, were found to be more effective (Reynolds, 1976; Rutter et al., 1979).

9. **Purposeful teaching**: This factor is related to efficient organization, which included preparing lessons in advance (Rutter et al., 1979) and well-structured lessons (Mortimore et al., 1988).
Sammons et al. (1996) added two factors to this list: a learning organization and home-school partnership.

**Ineffective Schools**

All the above describe characteristics of effective schools. However, what about ineffective schools? Are they simply schools that lack the characteristics of effective ones? Myers (1996) claims that 'troubled' schools have their own individual clustering of factors that include a dynamic mix of student ambivalence, low staff expectations, a persuasive negative ethos and weak or inconsistent leadership. Other researchers have reported similar findings (e.g. Rosenholtz, 1989). Reynolds (1995) feels that assumptions should not be made as to what 'ineffectiveness' is, and not to just assume that an ineffective school is simply a school that lacks things that make a school effective.

**4. Criticisms of Schools Effectiveness Research**

Criticism of effective schools research can be divided into three main areas (Teddlie and Reynolds, 2001):

- Political
- Methodology and theory
- Conclusions derived from research.

This section will only address the latter two areas, since political aspects are not germane to this study.

**a. Critique of methodology and theory**

1. *Sample size* - Many of the studies encompassed only a small number of elementary schools that were located in the culturally privileged suburbs of large cities in the United States. Weber's study (1971) included only seven schools and Brookover and Lezotte (1979) examined eight schools in
California. The researchers claimed that the sample of schools was small because they concentrated on exceptional schools, which by nature narrowed down the population.

2. *Populations studied* – a) **Socio-economic level**: The sample populations studied by different researchers varied widely. If there was no control for the variable of ‘population’ among the various researchers, how is it possible to compare results? As mentioned in ‘sample size’, the first classical studies were carried out in exceptional schools; later research focused on inner city schools. Ousten (1993; 1999) questions whether the features attributed to effective schools as a result of effective school research really relate to all schools, or perhaps only to inner city schools.

b) **Elementary versus secondary schools**: Farrar et al. (1984) addressed the problem of generalizing Effective Schools results obtained in elementary school setting, to secondary schools. They believe that within the high school context, the reliance of research on pupil achievement creates problems, and that there are other goals in addition to academic ones. These goals are on the social, personal and vocational level; therefore salient measures for secondary schools should include good discipline, lack of vandalism and good attendance. In high schools, the implementation of Effective Schools programs encounters difficulties due to decreased collaboration and increased complexity and resistance on the part of the teaching staff, and due to the nature of the pupil population, which is much less malleable.

On the same issue, Gorodetsky et al. (1990) propose that the specific achievement measures of effectiveness used in research
on secondary schools should be different from those used in elementary schools. They argue that secondary schools are more sensitive to and more subject to demands of external agencies such as Universities, job certification boards, etc. In addition, secondary schools differ in nature from elementary schools in other ways, including pupil distribution among different streams and specialization.

3. *SER should be longitudinal* – (Lauder et al., 1998).

4. *Social class* – Social class has a large impact on student achievement, but school effectiveness research has mostly ignored the impact of social class and overstated the importance of schools (Thrupp, 1999). Riddell (1998) criticized the fact that instead of being recognized as an important element in measuring effectiveness and in strategies for school improvement, social class is reduced to a variable to be controlled for and thereafter ignored.

5. *Positivistic orientation* – SER is essentially a technist literature. It lacks a critical perspective on the relationship between schools and their societal and political context (Thrupp, 1999, p. 17). Instead of a positivistic orientation it should adopt a more critical theory orientation.

6. *Model followed* – Lauder et al. (1998) call for the adoption of the contextual model, which takes into account the impact of pupil background and the school’s community.

7. *Qualitative vs. quantitative designs* – Scheerens and Bosker (1997) found striking discrepancies between the results of qualitative reviews and quantitative meta-analyses in the area of school organizational factors. In addition, Thrupp (1999) and Riddell (1998) call for more qualitative studies in SER.
8. *Statistical techniques*— Scheerens (1992) argues that many of the effective school studies that were carried out prior to the mid 1980s were hampered by the lack of sophisticated statistical techniques. The more advanced techniques allow greater separation of the effects of pupils and schools (Goldstein, 1987).

9. *Variables taken into consideration*— Another type of criticism claims that both waves of research that were carried out in the 1970's ignored certain variables. The first wave, that included disregarded factors concerning processes occurring within the school such as the effect of educational variables like teacher behaviour and organizational processes, while emphasizing the effect of material school characteristics (e.g., Coleman et al., 1966; Jencks et al., 1972; Averch et al., 1974). The second wave (Edmonds, 1979; Brookover and Lezotte, 1979; Rutter et al., 1979) that studied factors within the school, did not take into account the following factors: school surroundings and class, teacher and pupil characteristics. All of these factors, and others, are necessary for building a comprehensive theory of effective schools.

Stedman (1987) criticizes the Effective Schools formula because many of the so-called ‘effective schools’ were found to perform below grade level. He proposes a new nine-category formula of effective practices: ethnic and racial pluralism, parent participation, school governance shared by teachers and parents, academically rich programs, skilled use and training of teachers, personal attention to pupils, pupil responsibility for school affairs, an accepting and supportive environment, and teaching aimed at preventing academic problems.
10. **Criteria used in defining school effectiveness** – As discussed at the beginning of this chapter, page 61, effective schools literature includes a wide range of definitions for concepts such as “school effectiveness” in general, and academic performance, in particular. For example, Cheng (1993) focuses on “pass rates”; Heck and Marcoulides (1996) grouped schools into three categories according to their scores on standardized tests; Gaziel (1997) assigned schools to two categories using their “raw scores” in mathematics, Hebrew and English, together with the ratings of superintendents and inspectors. Pang (1998) classified schools as ‘excellent’ based on the perceptions of parents (Maslowski, 2001).

11. **Data on how teachers perceive the class and school** should be included in SER (Riddell et al., 1998).

12. **Range of student outcomes too limited** – Slee and Weiner (1998, p. 2) stated that “... the discourse of effective schooling and school improvement is narrow in its assessment of school effects. ... reducing school learning to discrete assessable and comparable fragments of academic knowledge”.

13. **Lack of fundamental research and in-depth observational data** - Scheerens (1993) divided school effectiveness research into three categories:

   a. Fundamental studies whose aims are the building of models and theories, and testing hypotheses.

   b. Foundational studies aimed at elementary conceptual issues such as stability and consistency of effects.

   c. Applied studies such as national assessments and indicator systems.
Creemers and Reezigt (1997) claim that most of the research concerns the foundational and applied types, while fundamental research is much less common. In addition, these researchers feel that there is a lack of in-depth observational data, and too many conclusions have been made on the basis of teacher and principal questionnaires, which raise serious doubts about the validity of the data. Although there have been many effectiveness studies, very few have used a wide range of data collection techniques, such as observation and questionnaires, etc., and linked them to pupil outcomes (ibid, p. 410).

b. Criticisms regarding conclusions derived from research

1. *Are the “effectiveness factors” to be used as measures of effectiveness, or as predictors of effectiveness?* - Critics cautioned against using the five factors found by Edmonds (1979) variables exclusively as measures of effectiveness. They should be regarded as correlates of effectiveness and not as predictors. In a similar vein, Stoll and Fink (1996) raise the question as to whether the features of so-called effective schools are the cause of effectiveness, or only the results.

2. *Effective or ineffective schools*— Can a school be uniformly classified as effective or ineffective? Is the school effective for a particular individual pupil, but not for another? Hargreaves (1995) points out that research suggests, that the notion that schools can be placed on a continuum from effective to ineffective may be inappropriate, and that effectiveness itself may not be a unitary concept. Wyatt (1996, p. 3) argues, “there are questions as to whether schools are differentially effective for all of their pupils, whether they are equally effective across
all curriculum areas, and whether they remain effective over time.” Ouston (1999, p.168, 169) cites recent studies arguing that adjusted differences between schools are very small, and that the majority of schools cannot be distinguished from one another (Gray and Wilcox, 1995; Goldstein and Spiegelhalter, 1996; Croxford and Cowie, 1996). She thus reasons that if schools do not differ, or if the differences between them cannot be measured reliably, then the lists of effective school features that have been compiled have little justification.

3. Are there really common factors? Scheerens (1992) criticized the conclusion that research has come up with more or less similar effective factors, and claims that the empirical evidence regarding commonly identified effectiveness enhancing factors is indecisive. When reviewing case studies he found many inconsistencies. For example: some studies revealed that strong leadership was correlated with student achievement, whereas other studies failed to find such a relationship. Regarding the relationship between school factors and student achievement, using qualitative analyses, Scheerens found that there is solid empirical evidence, only for their conclusions that structured teaching and the effective use of teaching time, impact positively on student performance. These two factors are primarily related to the teacher or class level in schools. Bosker and Witziers (1996) analysed studies that examined the relationship between educational leadership and school effectiveness. They concluded that the studies show no empirical evidence for such a relationship – except for the United States, where a small effect size was found for leadership and achievement.
4. Are factors found to be effective in one school appropriate for all schools? — Slee et al. (1998) ask if the ten key characteristics of an effective school that were found to work in Birmingham, can be disseminated around the world as universal truths, disregarding the differences among schools as related to material and human resources, culture, ideology and history.

5. Change cannot be arbitrarily imposed on a particular school - Johnson (1990) argues that educational reform cannot be unilaterally imposed on teachers and schools. The teachers must endorse their new roles and responsibilities, and must be provided with time and resources to implement reforms. Schools depend on cooperation and interdependence among staff members, so plans for change must be consistent with the existing norms. In addition, there must be supportive conditions such as leadership among teachers and administrators and willingness on the part of the administrators to cede some of their authority to teachers.

5. Summary of School Effectiveness
Some of the major characteristics of school effectiveness research (Reynolds et al., 2001) are:

- Emphasizes the use of quantitative methods to show that schools do make a difference.
- It is primarily concerned with pupil academic and social outcomes (based on Edmonds et al. “all students can learn”).
- Processes within schools only have importance to the extent that they affect outcomes.
• Outcomes are a given with only a limited range, mainly academic achievement, with emphasis on the acquisition of basic skills.
• It is organizationally oriented – things that can be measured or quantified such as clear goals and high expectations and/or parental involvement and support.

Reezigt et al. (1999) claim that most effectiveness models do not take into account how individual factors interact with each other to influence achievement. They sum up effective schools research with the following pessimistic thoughts (Reezigt et al., 1999, p. 213):

“Once again it is clearly shown that the effectiveness of classrooms and schools is a very complex phenomenon, which cannot easily be explained. It would be naive to advise practitioners and educational policymakers, who have to deal with education and educational improvement from day to day, to wait until more and better explanations for effectiveness are available. What they can learn from this study is that effects on achievement are still not easily explained and cannot be brought about easily either. What works this time may therefore not work another time, what works for a certain school subject may not work for another school subject in exactly the same way, what works for one group of pupils may not always work for another group of pupils too. Effectiveness researchers will have to test their hypotheses again and again, and so will practitioners and policy makers.”

Although school effectiveness research has shown that schools do make a difference, it has also been pointed out that the magnitude of school effect lies somewhere in the region of 5 to 15%. In other words, with all other factors held constant, there is a 5 to 15 percent variance between more and less effective schools (Macbeath and Mortimore, 2001b). These researchers state, “while social background continues to play a
strong influential role, schools are not helpless in promoting educational and social mobility. In other words, there is a ‘school effect’" (ibid, p. 6). Thrupp (2002, p. 2) emphasizes the other side of the picture, and claims that the socio-economic background and social class have a greater impact on school success. Even if we accept the fact that schools can account for 15% of the variance in pupil achievement, this leaves 85% that is determined by sociological factors outside of the purview of the school. Thrupp further criticizes (ibid, p. 2) school effectiveness research and contends:

“The problem is not just that SER is seen as inadequate to bring about the fundamental changes which are needed to provide social justice in education but that it is seen to actively distract from larger agenda . . . It also distracts because despite the relatively modest claims for “the school effect” by many SER researchers, the preoccupation with particular kinds of school-based solutions leads researchers and practitioners to overemphasize the school in their discussion (hence ‘failure-free schooling’ and the like”).

Regardless of the above debate, it should be noted that disadvantaged pupils, who studied in effective schools, made more progress than disadvantaged pupils who attended less effective schools (Mortimore et al., 1988). The pupils studied in this research were classified as disadvantaged, making it all the more important to improve the effectiveness of the schools studied in this research.

As a result of effectiveness research, a general picture of an effective school has emerged. However, it is not sufficient to know what makes a good school. What should occupy our research efforts, is devising the means by which institutions can develop the desirable feature of an effective school. This question was dealt with by the school improvement practitioners. “Whereas school effectiveness seeks to tell
us the what of change, school improvement tells us the how of change” (Stoll and Fink, 1996).
The following section deals with school improvement practice and research.

**B. School Improvement**

In this section the reader will find a discussion of various theoretical aspects concerning the planning and implementation of school improvement programs, relevant school improvement strategies and programmes, and an overview of changing trends in response to voices of criticism. It includes the following sections:

1. School improvement theory
2. Developing concepts and trends in school improvement
3. School improvement strategies and programmes
4. Criticisms of school improvement

**1. School Improvement Theory**

**Defining “school improvement”**

A number of definitions of the concept “school improvement” can be found in the literature. Creemers and Reezigt (1997) describe school effectiveness as essentially being a research programme that tries to develop a knowledge base of what happens in education, and to support this knowledge base by empirical findings. On the other hand, school improvement is responsible for creating better schools, and cannot wait for a complete knowledge base. Hopkins et al. (1994, p. 68) define school improvement as “an approach to educational change that has the twin purpose of enhancing pupil achievement and strengthening the school’s capacity for managing change”. For this reason they feel that school improvement strategies should take into account all levels of
school activity (individual teachers, working groups, whole school, etc.), and should coordinate support across all levels.

Huber (1998, p. 13) thus concludes that: "School improvement is therefore about raising pupil achievement through focusing on the teaching-learning process and all those conditions which determine and support it within the school and its system."

The question arises as to how this can be accomplished. The following are some representative models of school improvement found in the literature.

**School improvement models**

Marsh (1994) described three major perspectives on change:

1. *Technological perspective* - Teaching is conceived as a technology, and therefore it can be improved simply by applying new techniques. This perspective has been dominant and continues to be supported by many individuals and groups. There is an implicit assumption that the teacher will both want and be able to implement new technologies in an effective manner. The emphasis is not on improving the methods and materials previously used, but on new technology that will solve the teacher’s problems. Technological thinking involves selecting the most efficient means towards a given end (House, 1979). This perspective may be of value when new technology is accompanied by detailed activities, materials and strategies.

2. *Political perspective* – This perspective focuses on the conflicts and compromises that occur among factional groups. Co-operation on school improvement projects can occur only through various processes of negotiation and compromise. Different groups reshape
the original plans for school improvement in order to adapt them to meet their own interests (mutual adaptation).

3. Cultural perspectives – This perspective reflects the different cultures or subcultures that operate in a school community. Norms and values may vary greatly among these groups, which in turn may lead to conflict. This view suggests that change is very difficult to bring about, and that teachers tend to maintain conservative and traditional approaches for as long as possible.

The following three school improvement models are based on the above described perspectives (Marsh, 1994):


Collaborative School Management Model
Caldwell and Spinks (1986) developed the Collaborative School Management (CSM) approach. In this model the emphasis is placed on planning, budgeting, defining roles for participants, collaborative management and systematic monitoring and evaluation.

CSM consists of the following six phases which are intended to operate as a management cycle:

1. Goal-setting and identification of needs.
2. Policy-making.
4. Preparation and approval of programme budgets.
5. Implementing.
Marsh (1994) comments on the Collaborative School Management approach to school improvement. He feels that this approach is a practical one since it seems to have positive results. It is possible to schedule the tasks over the school year, to suit the routines of administrators and teachers, and the six phases and their accompanying guidelines are logical and easy to follow. However, Marsh has some criticisms:

- Although the CSM cycle emphasizes collaborative and open discussion, the separation of the policy group from the project teams seems to cause hierarchical distinctions.
- The CSM approach is overly orientated towards rational/logical/ordered processes, and does not allow for spontaneity and wide-range discussions, which are common in schools.
- There appears to be an overemphasis on the financial aspects of school planning, since all input into policy and programme planning are expressed quantitatively, and often in financial terms.
- CSM appears to be very demanding on the energies of the school staff, due to the range and frequency of the activities required over the school year.

People-Centred Action Model

"People-Centred Action" (PCA) is an attempt to summarize into one category a number of related approaches to school improvement. It is very different from the CSM approach, even though the actual phases or processes may not appear to differ much (Marsh, 1994). This model has no normal hierarchy of policy makers, although it is assumed that support from the principal, parents and community groups is desirable.
In addition, external and internal change agents are often important to school improvement activities.

The following summarizes the important aspects of the PCA approach: (Loucks and Lieberman, 1983; Loucks-Horsley and Herget, 1985).

1. Planning of school improvement is important, but it is the interactions with participants that are crucial.
2. A person doesn’t have to have formal status to carry out school improvement. A lot of school improvement activities are generated informally by individuals with no formal status positions.
3. Most school improvement activities require the support of internal and external consultants and field officers from time to time.
4. Curriculum changes are a major focus for most school improvement activities.
5. Teachers undergo developmental stages in implementing new curricula. This is an important understanding for all school improvement efforts.
6. Teacher participation in school improvement activities is essential.
7. Various support initiatives (material, human, and peers) are needed to ensure that school improvement activities are successful.

Marsh (1994) states that the People-Centred Action approach emphasizes the implementation aspects of a school improvement project and ways to ensure that progress can be made. Especially important are face-to-face strategies for supporting, encouraging and training teachers to cope with new curricula. Informal meetings and open, flexible channels of communication are preferred rather than formal organization
structures and procedures. In addition, PCA includes various methods for evaluating curriculum packages and for relating these findings to individual school goals and improvement plans.

He puts forth the following criticism of PCA:

- This model may be appropriate for curriculum related school improvement but not for other projects.
- Very heavy reliance is placed upon internal and/or external consultants; schools may not have sufficient resources to employ them.
- Reliance on linkages among people and the development of positive relationships among them, while little attention is paid to the school board and senior staff. Although PCA acknowledges the power of the school principal and the need for planning groups to include parents and pupils whenever possible, little emphasis is placed on the manner in which formal structures and policies can direct or inhibit school improvement projects.

**Action Research Model**

Action research is known by many other names, including participatory research, collaborative inquiry, emancipatory research, action learning, and contextual action research. Action research is actually "learning by doing", whereby a group of people identifies a problem, does something to resolve it, sees how successful their efforts were, and, if not satisfied, tries again (O'Brien, 1998). Nunan (1993) sees the main benefit from action research in the improved practice of the teachers themselves. Hopkins (1993) sees the empowerment of teachers as researchers, in control of professional enquiry and innovation in teaching, as an
additional long-term aim, taking the place of the non-teaching academic experts and university researchers.

The SFA school improvement programme reflects a technological perspective, and contains elements of both the CSM and the PCA models as follows:

a. CSM:
   - Policy making, purpose and broad guidelines
   - Goal setting and identification of needs
   - Planning
   - Implementation

b. PCA:
   - Planning included interactions with participants
   - The programme involved the support of internal and external consultants.
   - Focus on curriculum changes.
   - Teachers were involved in the development and implementation.
   - Support initiatives were used to ensure success of school improvement activities.

2. Developing Concepts and Trends in School Improvement

School effectiveness research has focused on the system as a whole, and has been oriented towards macro-change strategies, whereas school improvement work has focused on the school and much more micro-change strategies (Riddell, 1998).
School improvement practice has undergone a number of changes over the years, and can be characterized by four major phases (Reynolds et al., 2001):

3. Linking of school effectiveness and school improvement (1990s).

"Top-down" approach
School improvement during the 1960’s and 1970’s in the United States and in the United Kingdom displayed a number of paradigmic characteristics associated with the empirical–analytic tradition (Reynolds et al., 1993), and improvement was based on a positivistic, quantitative evaluation of effects (Reynolds et al., 2001).

Improvement was associated with a technological view of improvement, in which innovations were brought to schools from the outside, and then introduced ‘top down’. The innovations were based upon knowledge gained by persons outside the school. The focus was on the school’s formal organization and curriculum, with emphasis on the adoption of curriculum materials. It was hoped that the curriculum reform movement would have a major impact on pupil achievement, “through the production and dissemination of exemplary curriculum materials” (ibid, p. 208). “The outcomes were taken as given, and the innovation was targeted at the school more than the individual practitioner” (Reynolds et al., 1993, p. 41).

Although the materials were often high quality, having been prepared by teams of academics and psychologists, they did not have a significant impact on teaching. The fact that teachers were not included in the production process, and that they simply took these materials and
integrated them into their teaching, is thought to be the main reason for lack of significant improvement (Reynolds et al., 2001). The failure of this technocratic approach, that did not include teachers, has been partly explained as due to "lack of teacher 'ownership'" (Reynolds and Stoll, 1996, p. 98) and a "lack of connection to the daily lives and concerns of schools and teachers" (West and Hopkins, 1996, p. 9). It became obvious that it was necessary to obtain teachers' commitment and to answer their needs for training, in order to enable implementation of improvements developed by outside academic professionals, who imposed a programme on a particular school (Huber, 1998).

"Bottoms-up" approach
Upon the recognition of the failure of the 'top down orientation', the 1980's introduced the new improvement paradigm, with it's 'bottom up' approach to school improvement. Under this approach there is a reversal in the direction of initiating change, with the target being on the individual teacher, groups and teams of teachers and the entire staff within the school. Thus, the improvement attempts are 'owned' by school level personnel, although outside school consultants or experts can offer knowledge for possible utilization. This new approach placed the practical knowledge of school practitioners above the theoretical knowledge of researchers. It focused on changes in educational processes, not on school management or organizational features. There was a change in emphasis - each school, after internal debate and discussion, would decide on the goals and methods of school improvement. They were not accepted as given, as in the 'top down' model. In other words, in order to bring about significant positive changes in a school, it is necessary to look at the school in its entirety. It
is not feasible to change one or two aspects in isolation, without relating to the entire school complex.

In summary, the new improvement approach was ‘whole school’ orientated and school based, rather than outside school or course based (Reynolds, 1988).

By the late 1980s, some proponents of the ‘bottom up’ approach began to realize that it did not succeed in generating significant school improvement. Reynolds (1990) believes that the best approach is a mixture of both paradigms: “School improvement practitioners should perhaps consider that their knowledge base should be drawn not either from one paradigm or an oppositional other, but from both one paradigm and the other at the same time” (ibid, p. 81-82).

A new approach emerged which encouraged schools to evaluate their own processes and outcomes. This approach was exemplified in the work of the OCED sponsored International School Improvement Project (ISIP) (Reynolds et al., 1993). School improvement received a new, revised definition, as follows: “A systematic, sustained effort aimed at change in learning conditions and other related internal conditions in one or more schools, with the ultimate aim of accomplishing educational goals more effectively” (van Velsen et al., 1985, p. 48).

This new way of thinking about school improvement emphasizes the outside academic development of strategies for educational change that strengthen the school’s organization (‘top down model’). It implements curriculum reforms decided upon within a particular school (‘bottom-up model’), with the aim of improving pupil achievement. A further development of this revised school improvement approach to education change was the call for links between school effectiveness and school improvement research. Stoll et al. (1996) argue that if practitioners can
see and make links between school effectiveness and school improvement, then it is time for researchers studying the two areas to do the same. Researchers should work with schools in order to develop a more meaningful understanding of research, and its implications for practice.

**Linking between school effectiveness and school improvement-1990s**

Reynolds et al. (1993, p. 37) advocate a linking of school effectiveness and school improvement research in order to enrich and help each other to "advance our knowledge of how to generate high quality schools for our children". They believe that both school improvement and school effectiveness research are deficient in areas that can be complimented by the other. School improvers are missing knowledge about factors within schools and classrooms that can be manipulated or changed. School effective researchers can provide that knowledge. School effectiveness theories need to be tested in actual situations by school improvement researchers. The inclusion of school effectiveness knowledge into school improvement programmes, and school practice, is comparatively rare (ibid). According to Huber (1998), although both traditions have brought about essential insights, however, each has weaknesses and limitations. Reynolds and Stoll (1996) stress the urgent need for combining both bodies of knowledge.

The following is a list of gaps found in school effectiveness and school improvement, and suggestions how cooperation might benefit each other (Reynolds et al., 1993):

1. Case studies of effective and ineffective schools to show how knowledge of school process variables can be transferred to improving schools.
2. School effectiveness studies usually capture one point in time, while school improvement needs to know how schools became effective (or ineffective) over time, in order to replicate the process. Thus, school effectiveness research needs to adopt a ‘change over time’ orientation.

3. School effectiveness studies for the most part neglected the variable of ‘head teacher’. Attempts to translate findings about effective factors into schools showed deficient knowledge regarding head teacher variables.

4. Future school effectiveness research should utilize a contextual model that includes factors such as: the SES background of parents; whether or not a school was equally effective for all students; and the geographical context of the school and its effect on the improvement plan.

5. School improvement needs knowledge about conditions outside the level of the school, while school effectiveness currently generates knowledge only about school level variables.

6. School effectiveness research generated long lists of organizational process factors within schools, while school improvers need to know which one or two factors should be changed.

7. School effectiveness knowledge is dated. Modern improvement schemes need to be based on knowledge generated from schools that reflect characteristics of schools in the 1990s, not 70s and 80s.

8. Ineffective schools may possess variables that do not exist in effective schools. This knowledge about ineffective schools is lacking.

9. School improvement practice and research, rarely measure the impact of changes in improvement programmes upon pupil outcomes.
10. School improvement needs to move away from “whole school” strategies and target different subsets of the population.

11. School improvement researchers have to focus more on outcomes and to understand why change has occurred.

12. School improvement research has to refocus, from emphasis only on school level, and include classroom level.

13. Practitioners should extend an invitation to school effectiveness researchers to come into their schools and to jointly plan an evaluation of school improvement efforts.

The voices calling for linking of school effectiveness and school improvement research did lead to a number of broader based school improvement projects having the following characteristics (Reynolds et al., 2001):

1. Key success criteria included academic achievement and often social areas, as opposed to measures related to teacher perceptions of the innovations. Outcomes were assessed by the use of hard quantitative data.

2. “Bodies of knowledge from school effectiveness, school improvement and school development are all used to resource programmes with a problem centred orientation . . about the nature of appropriate strategies are suspended in favour of a ‘what works’ approach” (ibid, p. 217).

3. Instead of the school being the sole focus as in previous programmes, the new approach targeted the learning level, the instructional behaviour of teachers and the classroom level.

Stoll et al. (1996) outline examples of projects that incorporate both concepts to a certain degree. The new efforts to synchronize resulted in the following:
• Operating simultaneously with different levels (classroom, school and outside school levels), but
• Focusing more closely on classrooms, including the level of learning and the instructional behaviour of teachers.
• Favouring a problem-orientated ‘what works approach’, without relating to which traditions the knowledge is derived from.
• Concern with relating the programmes to existing knowledge bases and to research findings.
• Focus on pupil outcomes instead of on teacher perception.
• Assessing outcomes using ‘hard’ quantitative data.
• Addressing ‘reliability issues’ and validity to ensure cohesion and consistency within the project.

Fig 2.4 compares three major phases of school improvement practice (Reynolds et al., 2001):
<table>
<thead>
<tr>
<th>Orientation</th>
<th>1960s</th>
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<th>1990s</th>
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<tr>
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<table>
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<table>
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<th>1990s</th>
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<tbody>
<tr>
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<td>Process based</td>
<td>Organization and process based</td>
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<thead>
<tr>
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<tr>
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<td>School process orientated</td>
<td>Academic + often social</td>
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<thead>
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<th>1980s</th>
<th>1990s</th>
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<tbody>
<tr>
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<td>Teacher</td>
<td>Classroom</td>
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<table>
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<th>1990s</th>
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<tbody>
<tr>
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<td>Qualitative</td>
<td>Quantitative or qualitative + qualitative</td>
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<table>
<thead>
<tr>
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<th>1980s</th>
<th>1990s</th>
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<tbody>
<tr>
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<table>
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<th>1980s</th>
<th>1990s</th>
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<tbody>
<tr>
<td>Part of school</td>
<td>Whole school</td>
<td>Whole school</td>
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</table>

Fig. 2.4: Comparison of the three major phases of school improvement (based on Reynolds et al., 2001).

A new definition of school improvement emerging from this linkage has been suggested by Robertson et al. (2001, p. 37): “… the process of enhancing the way the school organizes, promotes and supports learning. It is based on more than twenty-five years of research into school effectiveness and its means include changing the aims, expectations, organization, ways of learning, methods of teaching and institutional cultures of schools”.

117
New (Third) Wave Programmes of the 21st century – ‘context specificity’

The close of the 20th century and the opening of the 21st has seen a new trend in the ongoing efforts to improve schools. In addition to the collaborative approach, combining school effectiveness and improvement strategies and practices, the importance of tailoring programmes to the specific needs of each school has been recognized. The slogan for this new trend is context specificity.

Teddlie and Springfield (1993) pointed the way, when they urged school improvers to conduct a thorough context analysis of a school before attempting to institute a programme of change. Only upon completion of this analysis was a unique school improvement plan to be developed. This context analysis should include the following:

- The socio-economic status backgrounds of the parents.
- A differential analysis of the school’s effectiveness that includes the question: are some pupils adequately served while others are not?
- The school’s geographic context and its effect on the improvement plan.
- The grade organization of the school – the tracks, whether or not there is departmentalisation, the responsibilities of the teaching and administrative staff.
- Important sociological and historical factors that have had impact on the performance of the pupils.

Hopkins (1996) suggested three possible types of strategies for improving schools that are based on a combination of improvement and effectiveness practices.
1. Type I: strategies that help failing schools to become moderately effective. Since failing schools cannot help themselves, they require a high level of external support. These strategies should have a clear and direct focus on a number of basic curriculum and organizational issues.

2. Type II: strategies that help moderately effective schools to become more effective. The aim of these strategies is that the schools refine their development priorities to focus on specific teaching and learning issues and to build the capacity within the school to support this work. Although these strategies usually involve some external support, it is possible for schools in this category to improve by themselves.

3. Type III: strategies that help effective schools to remain effective. In this case, external support is not necessary, since the school searches out and creates its own support networks.

Another important development in this new trend, is the use of “off the shelf” models of improvement that do not require school invention or elaboration (Reynolds et al., 2001). Examples of “off the shelf models” include Slavins’ “Success for All” and the Coalition of Essential Schools.

Dimmock (2002) proposed a classificatory framework to help schools make more informed choices in selecting a school design from the growing and confusing array of models. By the beginning of the 21st century, school improvement programmes began to emphasize school design, implying that the focus is on schools and classrooms, in place of school restructuring of the 1990s. “Design” implies a deliberate, strategic intention, using a set of tenants or principles, to craft, plan or blueprint for changing the various interdependent elements that make up a school,
for achieving school improvement aims and objectives (Dimmock, 2000). By comparing and classifying the various designs and their respective characteristics, schools can select the design model most suited for them to bring about school improvement. Dimmock (2002, p. 142) lists the following ten criteria:

- Origin of the design – external or internal to the school.
- Goals of the school improvement intervention
- Targets of change in the schooling process
- Specification of the design
- Opportunity for learning by teachers
- Connectivity – consistency
- Implementation process
- Leadership, participation and control
- Outcomes and effects
- Match between design model and school context.

Reynolds et al. (2001, p. 231) summarize the present trend in school improvement: “It is worth noting, then, that ‘third wave’ contextually specific improvement programmes that blend together aspects of SER and school improvement research in ways appropriate to the context, effectiveness level, culture, capacity for improvement and personal characteristics of the staff employed at each school are likely to provide the way forward both for the generation of programmes which are ‘potent’ in affecting student outcomes, and for blends in practice of the two ‘effectiveness’ and ‘improvement’ paradigms that have formerly been separate but which will in future potentiate our understanding of both school effects and school change.”

* * * * * *
The SFA programme evaluated in this research contains elements of both school effectiveness and school improvement research that were incorporated into a school improvement project. This programme was a cooperative venture of town leadership, school officials, staff, parents and pupils, and was tailored to the specific needs of the school. SFA can be considered a context specific programme, in that the planning took into consideration the social and economic status of the parents, the schools’ geographical context and the sociological and historical factors that have had an impact on past performance of the pupils.

3. School Improvement Strategies and Programmes
Hopkins and Lagerweij (1996) claim that school improvement can be conceptualised as a ‘vehicle’ for planned educational change, that is particularly important in times of centralization and innovation. This change necessitates and offers some form of external support and enables a strengthening of the school’s capacity for change and for raising pupil achievement. There is an increased focus on the teaching-learning process. Hopkins et al. (1994) suggest that change strategies should differ for different schools. For some, change strategies should emphasize organizational development, while for other schools innovations in curriculum or instruction should be emphasized. The strategy chosen should depend on the developmental readiness of the school to take on that type of change.

Schools vary greatly in their ability to change and in their individual resources. For this reason, change capacities are central to Hopkins and Lagerweij’s (1996) framework for analysing school improvement. There are many factors within schools; each factor “contains building blocks
for the change-capacities of the organization as a whole” (ibid, p. 72). These factors include: The innovation policy of the school, the school culture, the pupil backgrounds and levels of development and the school’s internal and external support.

Shoemaker and Pecheone (1984) studied a sample of seven schools in Connecticut, USA, over a period of a year. The schools were located in diverse areas: three in large cities, two in small towns and two in rural areas. The following was found:

a. Changes are more likely to occur in curriculum development, home/school partnerships, principal behaviour, assessing pupil progress, and providing safety and security.

b. Changes are less likely to appear in teaching practices and teacher attitudes; classroom variables may be harder to change and take more time than school-based variables.

c. Changes are more likely to happen in schools where the intensity of school improvement efforts is greater.

Slavin (1997, p. 1) divides schools into three categories as to their readiness and appropriateness for various reform strategies on the road to school improvement:

a. “‘Seeds’ schools are ones capable of developing and implementing their own reform models, and only need general principles and support.

b. “Bricks” schools, a much larger category, are ones that would be unlikely to co-develop their own innovations, but are capable of faithfully and effectively implementing well-developed models created elsewhere.

c. “Sand” schools are ones incapable of either creating their own models or implementing externally developed models.”
Slavin describes the bricks' schools as having the following characteristics: a) the school staff would like to do a better job and are willing and able to engage in a reform process if they are convinced that it would work, b) good relations exist between staff and leadership, and c) there is a positive orientation to school change, although teachers in the school do not perceive the need or have the capability to develop new curricula, instructional methods or organizational forms. Therefore, the 'bricks' (of change) must be brought to the building site, and detailed comprehensive blueprints are needed to put them together. “However, once built, the structure may stand for many years with moderate efforts at maintenance” (Slavin, 1997, p. 5).

In contrast, “sand” schools are schools “in which even the most heroic attempts at reform are doomed to failure” (ibid, p. 6). Schools may fall into this category for several reasons; schools that: a) are complacent in that the staff feels as though it is doing a good job, b) have had bad experiences with innovations, c) have already adopted and poorly or partially implemented other innovations, which are usually a wide variety of unconnected programmes, d) are in turmoil or transition, such as having recently experienced changes of principals or other key staff or have lost funding, e) have poor relationships among staff and principals and f) have conservative, fearful or incompetent leadership. In order for a “sand” school to support any type reform, it must undergo fundamental changes.

The two comprehensive high schools that were studied in this research can be classified according to the “seeds, bricks and sand” model. The school that implemented the SFA school improvement project (the experimental school) can be considered a “bricks” school. The school had a positive orientation towards change. The staff agreed to participate
in a new programme, in the hope that it would lead to improvement, and the relationship between the principal and the staff was good. In contrast, the other secondary school in this town suffered from frequent principal turnover, poor relationships among the staff, and were in the process of implementing several school improvement programmes that were independent of each other. This school, although one of the original targets of the SFA programme, decided not to participate, and served as the control school for this research.

**School improvement strategies for low SES schools**

School improvement programmes for schools located in low socio-economic communities have to be designed differently from those used in middle socio-economic level schools. Staffs at low SES schools have to spend more time creating necessary components for school success such as safe and orderly climates, higher expectation levels for pupil achievement, as well as reward structures for academic success (Teddlie et al., 2000). These activities initially detract from other aspects of school improvement, such as long-term academic goals. These differences between schools in low SES and middle SES contexts necessitates an initial compensatory model for low socio-economic level schools, “in which deficit community resources are made up at the school, sometimes in conjunction with the home” (ibid, p. 171). Teddlie et al. assert that in low SES schools, change occurs in two phases that are often blended together: a compensatory phase, where certain baseline conditions are met, such as high expectations and a safe, orderly environment, and a long term phase that emphasizes systemic process changes on both the school and teacher levels. In middle SES schools, where baseline conditions have already been met, resources can be marshalled regarding long-term process change almost from the beginning.
Maintenance of change

Another aspect that needs to be addressed when instituting change in schools is the question of stability and durability of the proposed changes. Fullan (1990) addressed the question of the long-term effects of school improvement projects. He called this "long-range maintenance" or "institutionalisation". Miles (1986) divided the process that is associated with successful change into three stages, with their accompanying factors:

a. **Initiation** - Linked to high profile needs, clear model of implementation, one or more strong advocates and active initiation.
b. **Implementation** - Coordination, shared control, pressure support, ongoing technical assistance and early rewards for teachers.
c. **Institutionalisation** - Embedding, links to instruction, widespread use, removal of competing priorities and continuing assistance.

For change to take place, one must be highly motivated. Joyce et al. (1999) devote the dedication page of their book to: "Love. When you write about school improvement, you come to realize that no matter how good we get technically; it is love that makes the school improvement world go round. Love of children, primarily, but love of colleagues as well. Love is why we inquire into the inquiry that can create a luminescent education for all our children."

They made recommendations for the creation of an improved or 'evolutionary' school, whose focus is on learning and the continuous seeking for ways to do it better. These recommendations include: building time into the workplace for collective inquiry about pupil learning and bringing the community together for collective inquiry; ensuring that everyone has access to the accumulated knowledge in the profession about teaching, curriculum and technology; and embedding
staff development into the workplace and using it to support and develop new initiatives.

* * * * *

The following is a sampling of school improvement models and programmes that were undertaken in various countries. A review of these projects will help to gain a greater understanding of the “Success for All” school improvement programme under study in this research. They all have elements in common with the Israeli SFA programme, which was developed specifically to meet the needs of pupils in a development town, with a low-middle to low socio-economic standing.

Relevant School Improvement Programmes

a. Functional Models

1. Theodore Sizer’s Blueprint for School Improvement

Sizer (1984) strongly criticized the organizational and educational concepts underlying the American school system in the 20th century. For the past hundred years the basic organizational “law” was “one class, one teacher” (Sarason, 1982). Sizer wanted to change this and adopt the new system of school organization that was proposed by Clausmeyer and Filligreen in the 70’s. This programme seeks to: a) remove the organizational partitions which exist between teachers which prevents them from participating in meaningful team work, b) reduce the number of pupils per teacher, and c) ensure a continuity in the subject content and improve integration between subjects that are studied at the same time. His proposals for change are based on the motto “less is more”.

“Less is more” is defined by the following guidelines:

1. Fewer subjects should be taught simultaneously, to enable the pupils to concentrate their cognitive energies and attention. The
subjects that are taught should be organized as integrative unit blocks, stressing relevance for the pupils.

2. Fewer pupils in each learning institution, and/or in each organizational unit of the institution, in order to enable personal relationships with each pupil.

3. Fewer pupils per teacher each week, with a maximum of eighty pupils per teacher.

4. Less differentiation of subject matter. Wherever possible teach wide disciplines that have clear relevance to the pupils’ lives.

5. Less routine in the organization of the daily school schedule.

6. Less emphasis on written exams evaluating knowledge and understanding, and more emphasis on the pupils’ ability to use their knowledge, using this as a basis for evaluation.

Sizer feels that, when these principles are applied, learning will become more valuable for the pupils and they will become more emotionally involved in the learning process. When teachers are responsible for fewer pupils, they are able to have a more meaningful relationship with each one.

The situation prevalent in most Israeli schools today is the antithesis of the ‘less is more’ principle. The typical Israeli school combines a large number of subjects studied at the same time, with few weekly hours devoted to each. This leads to what teachers call “running with the material”, uniformity of teaching of all pupils, regardless of their abilities (“assembly line” teaching), and superficial learning, with teachers trying to cover as much material as possible (Sharan, et al., 1998, p. 40).

This approach assumes that more (in quantity) is better (in quality), (Sharan, 1993). Sizer’s suggestion is to decrease the number of courses studied each semester to three or four, and to integrate all related
disciplines in each course, leading to a programme that is both relevant and challenging to the pupils.

2. Slavin's "Success for All" Programme

'Success for All' (SFA) programme (Slavin et al., 1992; Slavin et al., 1996) is designed to comprehensively restructure elementary schools that serve children at risk of school failure. This programme organizes resources, to ensure that all pupils will reach the third grade, without being held back, with adequate basic skills. Slavin designed the 'Success for All' programme in 1988 as a pilot reading programme in one Baltimore school. Since then this programme and its companion approach, "Roots and Wings", have been adopted by over 1,130 primary schools in 44 states in the United States. The approach has also been adapted for use in Canada, Mexico, Australia, Israel and England (Slavin, 2000).

The main elements of this programme as outlined by Cooper, Slavin and Madden (1998) are:

1. Tutors: In Grades 1 through 3, specially trained certified teachers work one-on-one with pupils who fail to keep up with their classmates in reading. Tutorial instruction is closely coordinated with regular classroom instruction. It is scheduled for 20 minutes daily, but not during the classroom reading periods.

2. A school-wide curriculum: During reading periods, pupils are regrouped across age lines so that each class contains pupils on the same reading level. Use of tutors as reading teachers during reading time reduces the size of most classes to about 20 pupils.

3. Eight-week assessments: The reading progress of pupils in grades kindergarten through third is assessed every eight weeks. This information is used to indicate whether alternate teaching
strategies in the regular classroom, changes in reading group placement, or provision of tutoring services is necessary.

4. Preschool and kindergarten: SFA's preschools and kindergartens emphasize language development, reading readiness, and positive self-concept, in order to provide early intervention and avoid remediation.

5. Family support team: A family support team works in each school to help support parents in ensuring the success of their children. A team is composed of existing or additional staff, such as parent liaisons, social workers, counsellors, and vice principals. It focuses on parent education, parent involvement, attendance, and classroom management.

6. Facilitator: A programme facilitator helps teachers implement the reading programme, manages the 8-week assessments, assists the family support team, makes sure that all staff members are communicating with each other, and assists the staff in ensuring that every child is making adequate progress.

7. Buy-in: SFA only works in schools in which at least 80% of staff has voted by secret ballot to adopt the programme.

An important element of this programme is changing the mindset of educators and policymakers as to the ability of disadvantaged and minority children to learn. The programme stresses the necessity of identifying the cultural and personal strengths of every child, and building on them. Instead of thinking in terms of remediation or compensation, it is of utmost importance to insist on high-quality instruction that is sensitive to pupils' needs (Slavin, 1997/1998).

The “Success for All” reading school improvement programme was implemented, in September 1997, in a family of inner city primary
schools in Nottingham, England. Preliminary findings suggest the following (Hopkins et al., 1999, p. 30):

a. Pupils made as much progress in reading in one term as they normally would have been expected to make in one year.

b. There was an increase in pupils’ motivation, learning skills, and behaviour.

c. Teachers claim to have gained much from the programme, including cooperative-teaching strategies, more effective teaching of reading as well as their own professional development.

d. An excellent “fit” between Success for All and the British Government’s National Literacy strategy was identified.

Research on ‘Success for All’ programmes in 12 school districts in the United States has shown consistent positive effects of the programme. On the average, ‘Success for All” children are three months ahead in reading skills at the end of the 1st grade, as compared with matched control groups, and are more than a full year ahead at the end of 5th grade. That difference is maintained into middle school (Slavin et al., 1996). Most studies show that the pupils who benefit most are those who are at the highest risk: low achievers, special education pupils and non-English speakers.

Ross et al. (1999) examined the effects of the ‘Success for All’ programme (SFA) on elementary school reading achievement. The researchers compared two SFA schools and two matched control schools. They found that, on individually administered reading tests, minority (African-American) pupils in the SFA schools performed comparably to their non-minority counterparts at the four schools. At the same time they significantly outperformed the control schools’ minority children. SFA was also effective in a sub-sample consisting of the bottom twenty-five
percentile of achieving pupils. Four-year longitudinal studies showed that the benefits were stable for the lowest achievers, but that there was some decline in overall programme effects after the first two years.

The Israeli “Success for All” school improvement programme, that is the basis of this study, was developed for an entire high school curriculum. This programme is based on the belief that all children can succeed, and incorporates some of the features of Slavin’s programme, especially the use of tutors and the homeroom teacher as the facilitator.

The British researchers Brighouse and Woods (1999) outlined “critical interventions” that they believe can increase success in schools. Many of these proposals are similar to those found in the “Success for All” school improvement project in Israel, researched in this thesis. Brighouse and Wood’s critical interventions include:

1. Extending achievement: levering up curriculum provision through benchmarking, using standards maps.

   Critical steps:
   - Establish criteria and standards as benchmarks.
   - Audit present curriculum provision against those standards.
   - Create opportunities to extend and develop practices and policies.
   - Establish review teams to monitor practices and award standards.
   - Celebrate success and develop best practice even further.

2. Turning up the power: providing one-to-one learning opportunities when a child needs them. (“All children are
gifted...some just open their packages sooner than others” – Brighouse and Woods, 199, p. 128.)

Critical steps:
- Audit one-to-one learning opportunities in the school.
- Target particular pupils in need.
- Review the distribution of human resources.
- Introduce/increase peer tutoring.
- Introduce/increase business and community volunteers as helpers and mentors.
- Explore further provision of individual coaching through curriculum extension and extracurricular activities.

3. Unlocking the energy: participation in innovation and research.

Critical steps:
- A collective commitment to undertake reviews and publish active research.
- All staff to provide learning examples and annual learning plans.
- An annual learning conference.
- Accreditation of learning for everybody.
- Teaching and research partnerships with higher education.

4. Raising the standard: setting targets to improve pupils’ performance.

Critical steps:
- The school reviews and analyses achievement data and critically examines anomalies, patterns and trends.
• All staff agrees on whole school targets to raise achievement and targets for particular groups, as well as targets for individual pupils.
• The school produces an annual action plan to raise achievement, which is replicated in core areas in the primary school and all subject departments in the secondary school.
• All staff subscribes to targets to raise standards in literacy and numeracy with a commitment to whole-school policies and practices.
• Ongoing monitoring and evaluation strategies are built into the process.

5. Promoting a positive ethos: building self-esteem.

Critical steps:
• Establish Gardner’s (1991) work on the seven intelligences in “The Unschooled Mind” and Goleman’s (1996) work in “Emotional Intelligence” as a common language for all staff.
• Provide training opportunities to undertake these critical processes.
• In the light of the above, review the school’s personal and social education programme, which will include a strong element on citizenship.
• Provide leadership opportunities for pupils, with appropriate training if required.
• Consider the involvement of pupils at all levels of organizational, environmental and curriculum change as part of the overall school improvement strategy.
Brighouse and Woods (1999) feel that in order to improve processes in school, it is necessary to have well-defined interventions that will be able to affect the most processes. These researchers coined the phrase "butterflies", as small interventions, whose tiny differences in input can cause major changes in output. The best butterflies are those that "affect the most processes and make an immediate and disproportionate difference to the climate and culture of the school". Schools seeking improvement must collect butterflies, to be developed and shared effectively. Fig. 2.5 outlines the step by step process known as "the school butterfly effect" (ibid, p. 110):
The school butterfly effect

Describe and define what butterflies are to the staff and how they can effect change.

Design an appropriate pro forma to capture the essence of these small interventions relating their effect to the seven processes of school improvement and their impact on changing practices.

Initially ask all staff for three contributions that may affect teaching and learning practices.

Publish these as a collection for dissemination and debate and decide on those to be collectively implemented.

Build the collection of butterflies into the culture of the school by starting all staff meetings with the description of a butterfly, and asking for further contributions on specific themes such as raising achievement, and promoting a positive ethos.

Extend the process to include governors and the wider school community.

Evaluate the cumulative effect of these many small interventions on the effectiveness of the school.

Continue to publish and disseminate collections of new butterflies whilst reviewing, and if necessary modifying, those that are already being practiced.

Fig. 2.5: The “Butterfly Effect” (Brighouse and Woods, 1999, p. 110).

Brighouse and Woods (1999, pp. 162) outlined the following scheme for school improvement, based on the above-described ‘critical interventions’ (Fig. 2.6).
Effective Classrooms/Schools

ESTABLISHING A COMMON LANGUAGE
Principles, Processes and Purposes (Leadership, Management and Organization, Creating an Environment, Teaching and Learning, Staff Development, Collective Review, Parental Involvement)

CREATING THE CLIMATE
(Education Department Development Strategy and Initiatives; Guarantees of inputs, processes and targets of outcome, ‘Years of... University of the First Age, Children’s University, Success for Everyone)

MONITORING AND MEASURING ACHIEVEMENT
(Baseline Assessment, target setting, value added programme, benchmarking and family groups, monitoring standards over time, analysing achievement by race, gender and special educational needs)

NETWORKING SCHOOLS AND STAFF
(Professional development and management programme, ‘Butterflies’, Quality Development, Partnerships, Consortia, Databases of good practice, curriculum conferencing)

IMPROVING ON PREVIOUS BEST

Fig. 2.6: School improvement plan based on “critical interventions” (Brighouse and Woods, 1999, p. 162).
The highlights of the above-described theoretical models for school improvement are summed up in Fig. 2.7.

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<th>Brighouse</th>
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<td>according to level</td>
<td>School climate to encourage staff</td>
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<td></td>
<td>Smaller schools</td>
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<td>encouragement in setting up and carrying out</td>
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<td></td>
<td>Fewer pupils per teacher</td>
<td>Small classes of 20</td>
<td>program</td>
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<td>Special resources</td>
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<td>Mastery of basic skills</td>
<td>Establish standards and adjust curriculum</td>
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<td>Integrated subjects</td>
<td>Tutorial help for under-achievers</td>
<td>to meet them</td>
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<td></td>
<td>Continuity of subject matter</td>
<td>Frequent assessment</td>
<td>Target needy pupils</td>
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<td></td>
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<td>One on one peer tutoring</td>
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<td></td>
<td></td>
<td></td>
<td>Review and analyse achievement data</td>
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<tr>
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<td>Extracurricular activities at beginning and end of school day</td>
<td>Family support team</td>
<td>Extracurricular activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Community volunteers and helpers</td>
</tr>
<tr>
<td><strong>Motto</strong></td>
<td>“Less is More”</td>
<td>“Success for All”</td>
<td>Critical interventions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>– butterfly effect</td>
</tr>
</tbody>
</table>

Fig. 2.7: Highlights of three theoretical models for school improvement.
The SFA school improvement project under study in this research will be analysed and compared with the above three programs in the Discussion chapter, pages 358-363.

b. School Associations and Coalitions

School improvement efforts evolved from local isolated attempts to coordinated large groupings of schools. School associations and coalitions were formed, having common principals and guidelines. The following is a description of four such school improvement efforts.

1. Coalition of Essential Schools

Sizer's ideas led to a project that is known as "The Coalition of Essential Schools". The Coalition, founded in the US in 1984, was dedicated to strengthening learning by reforming priorities in schools through simplification of their structure (Papagianis, Easton and Owens, 1998). The Coalition was founded on the idea that every school, and each pupil, has a unique set of strengths and challenges, a unique job to do (Watkinson, 1999). Today, the coalition encompasses over a thousand associated schools – public and independent, large and small, conservative and liberal, parochial and non-sectarian, as well as the departments of education of a dozen states in the US. It is a national network of schools dedicated to educational renewal. Contrary to popular belief, Coalition Schools do not share a particular structure or curriculum.

Coalition philosophy is based on "Seven Correlates of Effective Schools" (Caledonia High School, 1999) and "Ten Common Principles", which schools adapt to their own situations (Ohio Coalition of Essential Schools, 1999). [Originally there were Nine Common Principles, but recently a tenth has been added.]
**Correlates of Effective Schools:**

1. Safe and orderly environment.
2. Clear and focused mission.
3. Strong instructional leadership.
4. Climate of high expectations.
5. Emphasis on basic skills (opportunity to learn and time on task).
6. Frequent monitoring of pupil progress.
7. Strong home/school relations.

**Coalition of Essential Schools Ten Common Principles:**

- **Principle One - Intellectual focus:** Helping pupils learn to use their minds well. It is important for the school to focus on helping the pupils learn to use their minds as well as possible. Schools should not attempt to be “comprehensive” if this claim is at the expense of the school’s central intellectual purpose.

- **Principle Two - Simple goals:** Less is more: Essential skills and areas of knowledge. The school’s goals should be simple: each pupil should master only a limited number of essential skills and areas of knowledge. Although these skills and areas will reflect the traditional academic disciplines, the programme’s design should be shaped by the intellectual and imaginative powers and competencies that pupils need, rather than by conventional subjects. “Less is more” should dominate: in other words curricular decisions should be guided by the aim of pupil mastery and achievement rather than by an effort to merely cover content.
• Principle Three - Universal goals: Goals apply to all pupils. The school’s goals should apply to all pupils, but the means to achieving these goals will vary according to the needs of the various pupils. School practice should be tailor-made to meet the needs of every group or class.

• Principle Four - Personalization: Personalized teaching and learning. Teaching and learning should be personalized as much as possible. Ideally, no teacher should have direct responsibility for more than 80 pupils. To capitalize on this personalization, decisions about the details of the course of study, use of pupils’ and teachers’ time and the choice of teaching materials and specific pedagogies must be placed solely in the hands of the principal and staff.

• Principle Five – ‘Pupil-as-worker’: Pupil-as-worker, teacher as coach. The motto of the school should be “pupil-as-worker” and not the usual “teacher-as-deliverer-of instructional-materials”. From this it follows that an important goal is to provoke pupils to learn how to learn and thus to teach themselves.

• Principle Six - Diploma by “exhibition: Graduation by exhibition. Pupils entering secondary level schools are expected to show competence in language and elementary mathematics. Pupils that are not on the appropriate levels will be provided with intensive remedial work to assist them in quickly meeting the expected standards. The final diploma should be awarded only upon successful demonstration of mastery before graduation – an “Exhibition”. Since the diploma is awarded only when earned, the school programmes proceed with no strict age
grading and with no system of "credits earned" for the "time spent" in class.

- **Principle Seven - Tone**: Tone of decency. The tone of the school should explicitly stress values of anxiety free expectations, trust and decency. In addition, parents should be treated as collaborators.

- **Principle Eight - Staff**: Teacher-as-generalist. The principal and teachers should perceive themselves first and foremost as generalists and only secondarily as specialists. Staff should expect multiple obligations (teacher-counsellor-manager) and a sense of commitment to the entire school.

- **Principle Nine - Budget**: Administrative and budget targets. Administrative and budget targets should include in addition to total pupil loads per teacher of no more than eighty pupils, enough time for collective planning by teachers, competitive salaries and a total per pupil cost not to exceed by more than ten percent that of traditional schools. In order to do this, it may be necessary to cut back on services traditionally provided to pupils in many comprehensive secondary schools.

- **Principle Ten - Democracy and Equity**: Non-discriminatory and inclusive policies, practices and pedagogues. The school should demonstrate non-discriminatory and inclusive policies, practices and pedagogues. It should model democratic practices that involve all who are directly affected by the school. The school should honour diversity and build on the strengths of its communities, deliberately and explicitly challenging all forms of inequity.

141
An evaluation of this programme has provided the following information (Anderson, 1998):

1. The number of schools involved in the Coalition increased from 56 in 1988 to 935 in 1995 (and to over 1000 schools today).

2. The following innovations emerged: higher expectations for pupils, in depth interdisciplinary studies, block scheduling, heterogeneous grouping, shared decision-making, rigorous and regular professional development for teachers and administrators.

3. Improvements reported by teachers and administrators: lower absenteeism, higher graduation rates, fewer disciplinary problems, more pupils going on to higher education, increased creativity, thoughtfulness and initiative by pupils and staff, and less tracking of pupils.

4. A review of the research showed measurable improvement in pupil learning, including higher test scores, regardless of gender, race, ethnicity or socio-economic status.

MacMullen, (1996) reviewed 149 studies of Coalition or like-minded schools and concluded that: “When the Common Principles are incorporated into the shared values and practices of a school community, the quality of pupil learning increases, (regardless of gender or ethnic and social backgrounds), and the school experience is perceived as more rewarding by both pupils and teachers” (ibid, p. 54). Data shows that although it is difficult, it is possible to translate the Common Principles into daily school practice.
Two studies showed significant advantages in achievement for restructured schools as compared to traditional schools. The first study of 11,000 8th–10th graders found that pupils in restructured schools had higher academic success across subject areas as compared to pupils in traditional schools (Lee and Smith, 1994). The second study examined the achievement of these same 11,000 pupils, now in the 12th grade. They found achievement gains ranging from 50-100% in the restructured schools as compared to traditional schools (Lee et al., 1995). Additional studies include that of Darling-Hammond et al. (1995) which analysed five Coalition schools, and concluded that pupils worked on much more complex tasks, with more out-of-school relevance and with greater success.

2. Improving the Quality of Education for All (IQEA) Project
The Improving the Quality of Education for All (IQEA) Project was developed in Britain by a team from the University of Cambridge. Their model is based upon a fundamental belief in the relationship between teachers’ professional growth and school development. It is felt that “schools are more likely to strengthen their ability to provide enhanced outcomes for all pupils when they adopt ways of working that are consistent both with their own aspirations as a school community and with the demands of external change” (Harris, 2000, p. 16). The overall aim of this project was to produce and to evaluate a model of school development, accompanied by a programme of support, in order to provide quality education for all its pupils (Hopkins et al., 1994)
Under IQEA, school effectiveness and school improvement paradigms were blended. This programme emphasized “the use of and work on improvement and change processes with input on school and classroom effectiveness and measures of outcomes” (Stoll et al., 1996, p. 119). Over
time an emphasis on enhancing classroom practice developed. Each school was allowed to select its own priorities for development and its own methods to achieve them. Special attention was paid to the "relationship between the conditions for a particular school, the way the individual school approaches the particular condition, and the impact of that condition on the school's capacity to establish a school culture that empowers all teachers in the school community" (Huber, 1998, p. 24).

Six conditions for the success of schools were identified in the IQEA project (Huber, 1998, p. 24):

1. Staff development - individual and collective development including chances for collaborative learning.
2. Involvement - of all stakeholder groups, especially of the pupils by using ways of working that make them feel involved.
3. Leadership and much empowerment - "as a function to which many staff contribute, rather than a set of responsibilities vested in a single individual" (Stoll et al., 1996, p. 120).
4. Co-ordination - communication about and co-ordination of all activities.
5. Enquiry and reflection - in order to "establish shared meanings around identified development priorities" (ibid, p. 120) and to monitor the outcomes for pupils.
6. Collaborative planning - in order to set priorities and to keep a focus on classroom practice.

The IQEA project began with nine schools in 1991, and by 1996 involved forty schools in England and in recent years has also expanded to Wales. The University of Nottingham is currently providing academic leadership and vision, and is a focal point for the project. The University involvement in the project signals that the school
improvement approach is primarily research driven and research based. In addition, the IQEA project is premised on teacher development, and the University can provide participating schools with additional forms of training and support (Harris and Young, 2000).

Under the IQEA programme, schools are encouraged "to move away from general goals such as 'to improve examination results' to specific and focused goals that are teaching and learning related" (Harris and Young, 2000, p. 38). Teachers select approaches that have been shown to have a positive impact upon pupil achievement, and incorporate these into their teaching repertoire (Hopkins et al., 1997). In addition, IQEA offers teachers opportunities to engage in professional development through systematic investigation of self and practice. It has been established that unusually effective schools incorporate a commitment to enquiry (Harris and Young, 2000).

Evaluation findings demonstrate the potency of IQEA's approach to school improvement. A chain reaction described by Earl and Lee (1998) as urgency, energy, agency and more energy characterizes this programme. Harris and Young (2000) feel that IQEA has successfully achieved this chain of improvement in many of their schools. They continue to say that IQEA is more than just a school improvement project. It also provides opportunities for teachers to form collaborative cultures, which have been shown to lead to improvements in teaching and learning.

After four years of implementation in Big Wood School in, Nottingham, OFSTED inspection judged that 97% of lessons were satisfactory or better, 64% were good or better and 28% were very good
or excellent. This is in contrast to 75% of lessons that were judged satisfactory and less than 30% were good or better, before the implementation of IQEA (Department for Education and Skills, 2001). Harris and Hopkins (2000, p. 9) sum up the success of IQEA as follows: “Over the last ten years the project has achieved demonstrable success in a diverse range of school contexts and is at the forefront of school improvement within the UK.”

3. The American National Study of School Evaluation

This programme provides schools with a comprehensive guide for school improvement planning, which focuses on pupil performance. The NSSE’s current scope of work includes a comprehensive series of publications and services, to support data-driven and research-based school improvement planning. These guidelines blend both the school effectiveness and school improvement concepts with the aim of improving pupil learning and strengthening the instructional and organizational effectiveness of schools (National Study of School Evaluation, 1999). This six part planning process consists of the following stages:

a. *Developing the profile* – gathering and analysing information in a variety of areas, in order to develop a comprehensive profile of the pupils and community served by a particular school.

b. *Defining beliefs and mission* – articulating beliefs and developing a mission statement that defines a compelling purpose for a particular school.

c. *Defining desired results for pupil learning* – analysing pupil learning needs and identifying goals for improving pupil learning.
d. *Analysing instructional and organizational effectiveness* – assessment of the quality of the school, as regards pupil learning, by reviewing research-based indicators of the work of high performing schools and examining the extent to which these best practices are reflected in the current work of the school.

e. *Developing the action plan* – determining the target goals for the school improvement plan, defining the action steps, developing the timeline, identifying resources required to support the plan, and assigning responsibilities for coordinating each of the action steps.

f. *Implementing the plan and documenting the results* – monitor of the implementation of the school improvement plan, collection of evidence of the achievement of the target goals for improvement, and the sustaining of the commitment to continuous improvement.

4. **Maryland 10 Step School Improvement Process** (School Improvement in Maryland, 2000)

The state of Maryland in the USA undertook a state-wide school improvement process. The following are ten steps for which guidelines are provided: understanding the process; analysing the data; setting priorities; clarifying the problem; identifying the goals; choosing strategies; implementing the plan; assessing the results; revising the plan; and managing change.

The tenth annual Maryland School Performance Report, released on December 1, 1999, shows that Maryland's schools are making steady and considerable progress toward meeting state standards. 43.8 percent of Maryland pupils achieved a satisfactory score on the Maryland school
performance assessment programme (MSAP) compared with 31.7 percent when the first test results were released in 1993. Gains have occurred in rural, suburban, and urban school systems and in large and small schools alike. Seventy-seven schools across Maryland recorded a composite score of 70 percent or better — seven times the number in 1993. Eight of the twenty-four school systems achieved composite scores above 50 percent, with one school system reaching 60 percent.

Another important finding is the trend in the dropout rate for grades 9-12. The dropout rate reflects the percentage of pupils in grades 9-12 leaving school before graduation or completion of a Maryland approved education programme. This rate decreased from 5.36 in 1993 to 4.16 in 1999 (Maryland School Performance Report, 1999). A continuing problem, identified by the 1999 MSPAP results, is the slow progress in middle schools, particularly in reading. Despite strong gains in third- and fifth-grade reading (10.6 and 16.7 point increases respectively) over the course of testing, progress remains slow in the eighth grade, where only 25.3 percent of pupils met the satisfactory standard.

The following lessons have been learned in Baltimore County where this school improvement process has been applied (School Improvement in Maryland, 2000):

- “Limit system goals to a few and maintain the same goals for several years. Baltimore County has had the same three broad goals for four years: to increase achievement for all pupils, to maintain safe and orderly schools, and to use resources effectively and efficiently.

- Align the components of the system around the goals. Make the goals the starting and ending point for every suggested initiative. As each new initiative is proposed, ensure that it will contribute significantly to the attainment of one of the goals.
• Develop mechanisms so that all central offices provide a consistent message to schools on assessment and instructional issues. Particularly in a large system and when dealing with rapidly emerging issues, this takes constant vigilance and continuing communication. The payoff, however, is powerful as schools see the entire system moving in the same direction and using the same language.

• Develop specific action steps to reach the goals. Publicize the steps and develop ownership of specific components of them.

• Provide feedback and ongoing and consistent support for schools through varied structures and processes. Each school is unique. Give schools a variety of ways to access and process school improvement information.”

5. Birmingham Map of School Improvement

“Success for Everyone” is the motto of citywide school improvement effort in Birmingham, United Kingdom (Birmingham City Council, 1996). To become a member of this coalition, there must be unforced agreement by a substantial majority of all those involved (staff, parents, governors, and pupils) to commit to the following goals (ibid, p.2):

• Promote learning for all members of the school community.

• Seek to minimize failure for individuals or groups that seemed at risk.

• Have a view of intelligence that is more widely drawn – for example to recognize the importance of motor, special musical, artistic and personal intelligences, as well as mathematical, linguistic and scientific intelligences.

• Be careful not to see intelligence as general, inherited and fixed.
• Seek to emphasise improvement against previous best, in order to reinforce legitimate self-confidence arising from achievement.
• Be wary of over-emphasising normative competition, especially among unequals, in order to avoid despair or complacency.

Birmingham tried to promote seven processes of school improvement (ibid, p. 3):

a. The exercise of leadership at all levels within the school.
b. The practice of management and smooth administration.
c. The creation of an environment most fit for learning.
d. The practice of collective review – whatever the local dialect, the staff should ask itself what the aim of a particular activity is, what is the alternative practice and what is the evidence as to effectiveness.
e. The practice of staff development – going beyond in-service courses by embracing social events, committee groups and retirement parties, not just staff.
f. Creating a continual focus on teaching and learning.
g. The practice of parental involvement.

The Birmingham map for school improvement suggests some key interventions to increase the success of the educational programme. These include: a) offering a residential experience for every youngster during their time in school, both primary and secondary; b) providing ‘one-to-one’ learning opportunities when a child needs it; and c) maintaining a home/school compact of learning, whereby each year will begin with a meeting of the class teacher/tutor, the pupil and the parent -
the aim being to establish goals of pupil learning for the year and the part that all three parties will contribute to that process.

Common elements found in the school improvement coalitions described in this section are:

1. Each school determines its specific goals based on its own needs and situation. These goals should be few and maintained for several years.
2. The school and its program are organized to meet these clearly defined goals.
3. There is frequent evaluation to see if the goals are being met.
4. There is constant revision of plans to adjust to the actual realities encountered in the implementation.

Some of the programs also include:

   a. A philosophy of educational priorities and values.
   b. Staff and pupil involvement in planning and implementation.
   c. Parental involvement.
   d. Pupil commitment.

The common elements that can be found in the school improvement project studied for this thesis include: determination of goals by a specific school, changes in school organization in an attempt to meet these goals, frequent evaluation, revision of plans as a direct result of actual realities encountered during implementation and staff and pupil involvement in planning and implementation. The discussion of the “Success for All” school improvement project will include the comparison of the planned elements of the project with what actually occurred during the project’s implementation, and with the elements described in other school improvement projects.
4. Criticisms of School Improvement

Criticisms of school improvement paradigms can be grouped under five main headings: 1) too much focus on staff development and not enough on pupils; 2) school improvement strategies in general do not affect school culture; 3) discrepancy between the ideal and reality; 4) trend to generate guidelines and 5) criticism of methodology.

1. *Too much focus on staff development and not enough on pupils* - the recent school improvement paradigm has often been blamed for placing too much focus on staff development and often neglecting the pupils (Huber, 1998). Huberman (1992) argues that changes must be followed to the ‘end of the chain’, to the level of the pupil, and have effects on each single child. Creemers (1996) agrees with this charge, and says that even when teaching methods and/or school organization is improved, the main issue is whether or not these changes bring about higher pupil outcomes. Hopkins and Lagerweij (1996, p. 80) feel that “the greatest impact upon pupil progress is achieved by those innovations or adaptations of practice that intervene in, or modify, the learning process”.

2. *School improvement strategies in general do not affect school culture* - Hopkins and Lagerweij (1996, p. 79-80) claim that most school improvement strategies fail in one degree or another to affect the culture of the school. They tend to focus on individual changes and individual teachers and classrooms, and not upon how these changes can fit in with and adapt the organization and ethos of the school.

3. *Discrepancy between the ideal and reality* - West and Hopkins (1996) speak of the “whole school illusion’ and the discrepancy between the ideal and reality. They claim that ‘whole school’ improvers are often too involved with staff to be open to
contradictory points of view. Along similar lines, Hargreaves et al. (1989) argue that the ‘top down’ approach overlooked the possible lack of connection to the daily lives of teachers and schools, while the ‘bottom up’ approach risks viewing schools through teachers’ or senior managements’ eyes (Huber, 1998). As to the impact of social class on school improvement efforts, Thrupp (1999) concluded that although schools can make a difference, “the impact of school mix will continue to undermine even our best efforts at school reform” (ibid, p. 196).

4. **Trend to generate guidelines** – there is a trend to generate guidelines. Huber (1998) feels that these guidelines tend to be more like ‘recipes’ than to offer concrete help, since they tend to neglect the specific contexts of each individual school. This in turn may lead to reluctance in transferring improvement strategies and experiences from one community to another.

5. **Criticism of methodology** - there has been some concern about methodology and methods applied in inquiries. Those researchers who come from a positivistic inference-statistic tradition find school improvers’ methodology to be vague (Huber, 1998, p.20). They rarely measure the impact of their strategies, do not actually investigate the potential causal links between the improvement process and school outcomes (pupil achievement) and seldom evaluate whether the change was successfully implemented.

* * * * *

A crucial factor in the success or failure of any attempt to improve schools is the person or persons responsible for overseeing and implementing the new programme. One of the tenets of the Israeli SFA programme was the importance of distribution of leadership and
responsibilities among the key players in this project, and the designation of homeroom teachers as leaders.

The next section deals with the importance of allocating the necessary authority and means to fulfil their leadership role not only to principals, but also to teachers.

C. Leadership in School Effectiveness and School Improvement

An important element in school effectiveness and school improvement is the issue of leadership. Successful leadership is widely accepted as being a key factor in achieving school improvement, and research has shown the important role of leadership in school development and change (Harris and Chapman, 2002). In order to sustain improvement, it is necessary for many in the school hierarchy to have leadership capability. In addition, "improvements in learning are more likely to be achieved when leadership is instructionally focused and located closest to the classroom" (Harris and Muijs, 2002b, p. 1).

There is little consensus as to precisely what leadership is, how, if at all, it can be instilled or taught, or even how important it is (Yukl, 1989; Grint, 1995; Connolly et al, 1998).

Effective leadership, especially that of the principal, has been found to have a strong influence on pupil achievement (Leithwood et al. 1999; Ribbins, 2000). Many studies have shown that the school principal plays a key role in determining the effectiveness of schools (see e.g. Edmonds and Frederikson, 1979; Lawrence, 1989). However, recent studies of effective leadership have also indicated that it is not necessary to concentrate the authority in one figure, but that it can be dispersed within the school (Ouston, 1999; Harris, 2002). Leadership is thus separated
from a specific person, role or status. It is primarily concerned with the relationships and connections among individuals within a school. This approach to leadership implies a redistribution of power within the organization, thus creating conditions where people work and learn together and where they construct and refine meaning, leading to a shared purpose or set of goals (Harris and Muijs, 2002a, p. 2). Under these conditions, it is possible for teachers to become leaders, and that leadership is a "shared and collective endeavour that can engage the many rather than the few" (ibid, p. 2).

**Definition of teacher leadership**

Various researchers have attempted to define the concept of "teacher leadership" while others prefer to leave a measure of ambiguity. The following is a sample of definitions and descriptions of teacher leadership:

1. "Teacher leadership is primarily concerned with developing high quality learning and teaching in schools. It has as its core a focus upon improving learning and is a mode of leadership premised upon the principles of professional collaboration, development and growth" (Harris and Muijs, 2002b).

2. Teacher leadership is "the ability. . . to engage colleagues in experimentation and then examination of more powerful instructional practices in the service of more engaged student learning" (Wasley, 1991, p. 170).

3. "Teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others towards improved educational practice" (Katzenmeyer and Moller, 2001).
4. “Leadership involves change, and change requires the ability to take others where they normally would not go” (Pellicer and Anderson, 1995, p. 17).

5. Sirotnik (1995, p. 236) feels that definition of leadership is very elusive, but that the concept includes three key words: exercise, significant and elusive: “Leadership is the exercise of significant and responsible influence”.

6. “Even if a uniform definition of teacher leader is accepted by both teacher educators and school administrators, individual differences in teacher beliefs, attitudes, needs and motivations are likely to produce unique iterations in behaviour” (Kowalski, 1995, p. 252).

**Teachers as leaders**

Hatfield et al. (1986) studied the characteristics, activities, responsibilities and organizational conditions that affect teacher leaders, and identified six skills and qualities: the ability to deal with people, the ability to communicate well, flexibility and patience, technical competence and the ability to be respected.

Harris and Muijs (2002b, p.2) describe teacher leadership through three main areas of activity: “the leadership of other teachers through coaching, mentoring, leading working groups; the leadership of developmental tasks that are central to improved learning and teaching; and the leadership of pedagogy through the development and modelling of effective forms of teaching”.

In analysing the leadership role of teachers, Harris (2002) identifies four main dimensions:

1. Brokering role – where teachers translate the principles of school improvement into practices in the classroom.
2. Participative leadership – where all teachers feel part of the change or development and have a sense of ownership.

3. Mediating role - where teachers are important sources of expertise and information.

4. Forging close relationships role – where relationships are formed between teachers through which mutual learning takes place.

**Principals as leaders**

Despite the importance of teacher leadership in school change, the role of the principal (head teacher) in school change is undisputed. Research has supported the importance of the principal in school improvement (see e.g. Leithwood and Montgomery, 1986; Hall and Hord, 1987; Trider and Leithwood, 1988).

Huber (1998, p. 15) gathered the following reflections on the importance of the principal as the key figure in an individual school, which can either block or promote the internal change process:

- In school improvement processes aiming at the ‘whole school’, the head is central for creating and maintaining a clear focus of activities, co-ordination of all that is involved, coherence and consistency of action (Stego at al., 1987).

- In order to enlarge the school’s learning capacity and to promote continuous development of the staff, the head is involved in creating and ensuring the conditions and the framework for this, as an essential contribution to enhancing the quality of education in general and of teaching in particular (Huber, 1998).

- The head also bears responsibility for fostering a co-operative and collaboration-friendly culture in the school (Caldwell and Spinks, 1992).
• The head-teacher relationship is seen as a model of either supportive, trusting, helpful co-operation or of suspicious and distant relations (Barth, 1990).

• "Whole school reform (...) changes the culture of the school and the nature of the teaching profession. Principals are front and centre in this transition which goes far beyond conceptions of principals as leaders of site-based management" (Fullan, 1996, p. 21).

• "If only the principal will grow, the school will grow. To change something, someone has to change first" (Barth, 1986, p. 92).

Ribbins (1999, p. 81) summarizes Hallinger and Heck’s (1996, 1999) papers that present a comprehensive view of research on principal effects:

1. "Leadership, as measured in the behaviours of school principals, does not exert a measurable direct effect on school effectiveness and pupil achievement.

2. Leadership, as measured in the behaviours of school principals, does exert a measurable indirect effect on school effectiveness and pupil achievement.

3. Leadership, as measured in the behaviour of school principals, is itself influenced by the context of the school and its environment." (Authors’ emphasis)

Connolly et al. (1998) separate the “school improvement journey” into three sequential stages: pre-acceleration, acceleration and post-acceleration. They state “the organizational leadership needs in those different stages are different and, in schools where change has been successfully engineered, is enacted differently with diverse themes emerging in different phases” (ibid, p. 2). This differentiation of stages
may serve to explain conflicting findings regarding the importance of leadership in school improvement. They feel that leadership is the most crucial during the first stage. “As schools enter the acceleration phase, having started its journey, does not require the same kind of push it needed in the pre-acceleration phase” (ibid, p. 9). The post-acceleration stage brings about further change in leadership behaviour, often in the context of enhanced staff autonomy, “although this new autonomy is framed by shared endeavour rather than isolated individuality, and with the heads of department (secondary schools) and curriculum coordinators (primary schools) now taking on a larger share of the leadership role (ibid, p. 11).

In spite of the importance of the principal, some researchers have recently rejected the overemphasis on the role of the head (leader) and top-down management (Ouston, 1999; Connolly et al., 1998). Harris and Muijs (2002a) feel that the top-down leadership model that dominates many schools is one of the main barriers to teacher leadership. They claim that in order for teacher leadership to become embedded, school heads must become ‘leaders of leaders’ by developing a relationship of trust with the staff, and by encouraging leadership and autonomy throughout the school.

In summary, school leader is not synonymous with principal or head teacher. Effective leadership entails allocation of leadership roles to other school personnel. In other words, the principal or head teacher is a ‘leader of leaders’. In Chapter Five, page 342, the reader will find a discussion of how the SFA project dealt with this issue.
D. School Effectiveness and School Improvement in Israel

In the previous sections the reader was provided with a survey of school effectiveness research and school improvement programs in a number of countries, with emphasis on the US and Great Britain as leaders in these fields. Israel, because of its unique 50 year history of being populated by waves of immigration from every continent, has constantly been faced with challenging educational problems. These immigrants came with different languages and customs, and often with a meagre educational background. A notable socio-economic gap developed between North African-Asian immigrants (Tunisia, Morocco, Egypt, Liberia, Iran, Iraq, Yemen, Syria, India), the European and American immigrants, and the established Israeli population. In an attempt to increase the number of people living in sparsely populated areas of Israel, most of the new immigrants from African-Asian countries were provided with government housing in development towns, far from the populated established cities. These towns were, and still are, characterized by high dropout rates and low achievement in school. This is due to the lack of qualified, experienced teachers, the cultural and language differences, and parents unable to help their children with schoolwork or to pay for extra tutoring (Schmida, 1987b).

Israel’s greatest social challenge is to create a society based on equality of opportunity, and the overcoming of cultural and socio-economic differences. The most logical place to begin to achieve this goal is the educational system, with the aim of providing equal opportunities for all to earn a matriculation degree which opens the way to higher education and better paying jobs.
As described in the Introduction chapter of this thesis (page 14), the Israeli educational system began to undergo major reform in the late 1960s. This process of creating 3 school levels: elementary school (grades 1-6), junior high school (grades 7-9) and senior high school (grades 10-12) was not completed until the 1990s. Educators had hoped that this new school division would solve many of the ills of the Israeli school system. It became apparent that this was not the case. In development towns, the percentage of pupils who passed their National Matriculation exams remained very low, in comparison to schools in more established cities that were populated by Israeli born citizens or by immigrants from European and American countries.

In the past twenty years, Israel has made numerous attempts to increase school effectiveness, especially in development towns, by implementing school improvement projects. Unfortunately, as of yet, the educational gap has not been bridged. The following brief survey of school improvement projects and research studies carried out in Israel in the last two decades, will provide the reader with the educational background and context of the SFA programme researched in this study.

a. School Improvement Projects

1. The Bashi Project

In the mid 1980s a major school intervention programme, known as the “Bashi Project”, was conducted in nine elementary schools in two development towns (Bashi and Shesh, 1989a). The aim of this project was to raise the academic achievement level of the pupils by applying the principles of school effectiveness. Reynolds et al. (1993) point out that Israel was the only country outside of North America where there was a systematic application of school effectiveness findings in school improvement programmes, such as in the Bashi project.
This project encompassed 2500 pupils and 150 teachers, and lasted for a period of three years. Prior to the intervention, new instruments of measurement were devised and administered to the pupils of the first, second, fourth and sixth grades, in order to determine a baseline of achievement that was to be compared with the test results obtained at the end of the project.

Two types of measurements were used in the follow-up phase: a) tests of minimum basic skills identified by the project leaders as being necessary for success in higher education and b) standardized achievement tests that measured reading comprehension and math skills. The test results of the Minimum Basic Skills given at the end of the first year of the project showed that over 50% of the pupils were categorized as failing. These test results were analysed diagnostically for each pupil and used as teaching tools for differential work. Achievement tests were administered every six weeks to monitor pupil progress. Bashi, the head of testing in the Ministry of Education, claimed that the project was a success. "Prior to the project the achievement level of the pupils in both towns was below the national average. As a result of the project a significant number of pupils tested slightly higher than the national norm" (Bashi, 1990).

A number of Israeli researchers were sceptical regarding the optimistic conclusions of Bashi. Professor Chen, head of the Tel Aviv University Department of Education stated, "there is no scientific evidence to support the assumptions made by the school effectiveness movement [in Israel]. It is not true that educational gaps can be narrowed so quickly. Bashi’s reports are unreliable " (Shibli, 1999, p. 330).

Pur, chairman of the Pedagogical Secretariat, also criticized the school effectiveness movement’s use of achievement measurements in reading and maths to assess learning. He claimed that the measurement of factual
material is not a measure of true learning. Another argument that he raised was that good pupils are neglected and that the focus was on the weak ones (ibid, p. 331).

In 1988, the Israeli Ministry of Education approved a recommendation to widen the movement for school effectiveness. The plan was to have one hundred schools adopt the Bashi model for school effectiveness. In reality, due to lack of resources, only twenty-five schools worked according to this model (Peled, 1989). In 2000, only a very small number of schools remain in this programme.

2. School-Based Management

Efforts to increase school effectiveness by giving individual schools greater autonomy received a boost in 1993, when a national steering committee for school-based management was formed. The committee recommended that elementary schools should be managed as a closed financed economy, based on a ‘pupil basket’ budget. In addition, recommendations were made concerning school activities and a differential budget that takes the needs of underprivileged children into consideration. The school will be able to plan its educational objectives, to set clear goals, to build a curriculum based on its needs and to receive feedback by flexible exploitation of its budget (Shibli, 1999, p. 331). In the second half of the 1995 school year the Israeli model of self-management was employed in nine schools. In 1997 another 34 schools joined, with the aim of including all Jerusalem schools in the future (Havinsky, 1997).

Research results, based on questionnaires and interviews during the 1997-1998 school year, showed that all the principals in the schools where self-management was enacted expressed satisfaction with the new system, and did not want to revert to the former one. The self-managed
schools focused their attention on the issue of leadership, with the image of the “ideal leader” being that of one who encourages cooperation between as many people as possible, in a commitment towards change. The changes reported were on two levels: a. Internal pedagogical organization and b. schools’ autonomy in the areas of personnel and budget. The principals reported a major change in their perceptions of their responsibility towards the school. The schools felt more independent than in the past, greater pride and a feeling of job satisfaction. The teachers were encouraged to initiate and carry out pedagogical goals that were important to them, together with increased responsibility for what goes on in the classroom and the school as a whole (Freidman, 1998).

After several years of implementation, researchers suggested the following new definition of a self-managed school: ‘a self-managed school’ is one whose focus for decision-making is internal, and its administrative culture adapts itself towards changes and new information in a short time. In addition, the self-managed school is responsible for reporting to the central authorities on its goals and outcomes (Toren et al., 1998).

3. Accelerated School Project
The Israeli secondary comprehensive school’s became the target for reform in 1991, when Israel’s Ministry of Education decided to restructure several comprehensive schools in development towns. The “Accelerated School Project” was chosen for this purpose. The ultimate goal of accelerated schools is to eliminate ‘at-risk situations’ and to prepare all pupils for the educational mainstream (Levin, 1996). To achieve this goal, the internal culture of an accelerated school is
transformed so that it creates stimulating educational experiences that fit the needs of all pupils (Finnan, 1994).

A conventional school can be restructured into an accelerated school by adhering to three guiding principles (Gaziel, 2001):

1. Establishing unity of purpose (vision).
2. Creation of school site empowerment through decision making and responsibility for results (school based-management).
3. Development of a unique instructional approach that builds on the strengths of pupils, teachers, administrators and parents.

Four public secondary comprehensive schools, located in Israeli development towns, were chosen for restructuring following the above principles. The schools underwent restructuring between 1992-1995. The following changes were introduced (Gaziel, 2001)

- In-service training for school staff during the first two years of the project. Topics included participative decision-making, teamwork, pupil evaluation, school-based curriculum development and working with parents.
- Changing the school structures from top-down management to school-based management.
- Change from the principal’s personal vision dictating the school’s direction to one where the entire school community (in every school in the sample) worked together.
- Teachers were empowered to take risks and to experiment with innovative approaches to teaching and learning.

In the fourth and fifth year of the project, all schools were asked to introduce the following changes:

- To carry out a special mission that had been decided and accepted by all partners in the school.
• To establish an accountability system.
• To develop an incentive system of public awards and praise, bonuses for personnel and additional resources for school programs.

Results of the Accelerated School Project show that it had a positive effect upon perceived staff empowerment, teaching practice, perceived school culture and collaboration between school and home. The main result was that greater numbers of pupils returned to study at their local school, the pupil dropout rate decreased significantly, and there was a significant improvement in pupil successes in the national matriculation exams. This success in matriculation exams opens the door to higher education for at-risk pupils (Gaziel, 2001, p. 24).

4. Individualized Approach Programme
A different school improvement programme aimed at enhancing the academic and social achievement of diverse pupil populations, “the Individualized Approach Program” (IAP), was implemented in selected elementary school districts in Israel. This programme aimed to adapt the educational environment of the school and the classroom to individual differences among pupils, by providing each child with an opportunity to learn through various individual and cooperative learning processes. It emphasized the importance of the school as the unit of change and offered fundamental changes in the instructional and organizational aspects of schooling. An evaluation done 13 years after the implementation of IAP, showed that the academic achievements of the pupils participating in the reading comprehension, maths and English programme were significantly higher than control classes (Levin et al., 1988).
5. Evaluation of an Entire Local Education System

In an attempt to evaluate the effectiveness of an educational system from a holistic point of view, a group of researchers from Ben-Gurion University in Israel designed a research program that examined whether, and to what extent, the classic findings about effective individual schools are relevant when trying to determine the effectiveness of an entire local education system (Ackerman et al., 1989). For this purpose they chose a development town with a population of approximately 30,000, having ten elementary schools, three junior high schools and two high schools. This town was founded to help absorb the wave of immigration of North African and Asian Jews in the 1950s and its ethnic composition had remained mostly unchanged over the years.

The town’s educational system was considered to be innovative and had a positive educational image, as compared to other development towns. At the beginning of the 1980s, this image began to deteriorate and was a factor in the town’s loss of population. Teacher turnover, that was always relatively high, reached major proportions. In addition, one of the junior high schools experienced serious conflict within the teaching staff. The university research group was approached to evaluate the town’s entire educational system and to set up an intervention project. Their proposed intervention strategy was based on the assumption that “the aims of an educational intervention must not be pre-set, but rather should flow from the results of a preliminary evaluation of the system, both with regards to its outputs (pupil achievement, etc.) and its processes” (Ackerman, et al., 1989, p. 347).

The researchers believed that an effective local education system would help to promote city growth, be successful in enlisting local support for itself and enhance the value of education in general. To achieve these
goals, the education system must consider the following factors (ibid, p. 349): the system’s image, the existence of “special” innovative educational institutions, the ability of the system to cater to the special needs of specific populations, the contribution of the system to promoting and maintaining social harmony, attractiveness for investors, the system’s holding power, the extent to which the system is a focus for the cultural activities for the entire community, the degree to which the system encourages parental involvement and the degree to which the system provides opportunities for lifelong learning.

In an attempt to answer the question, as to whether or not the characteristics of an effective local education system are related to the defining characteristics of individual effective schools, the following were examined:

1. The relationship between achievement scores in the individual schools and the overall local school system’s image: The researchers stressed that the relationship between image and achievement was not very strong, as can be seen from the findings that the town’s educational image decreased, despite the absence of objective findings of a drop in achievement. They even found that the scores in reading comprehension, in the low status junior high school, were the same or better than those in the other two junior highs.

Despite this, they feel that high achievement scores in schools lead to a general positive image; information on satisfactory achievement is passed on by parents and functionaries to the entire population, thus helping to create a positive image for the entire system. Moreover, Ackerman et al. (1989) suggest that a positive image will also be created if only one or two schools attain
impressive scores. In this case, the effective schools become the "dominant feature of the system in public consciousness" (ibid, p. 350). Thus pupil achievement can influence a system's image through two different mechanisms – exceptional achievement in one or two schools or reasonable achievement in all schools. Each of these mechanisms leads to a different type of intervention strategy in the local system.

2. School achievement and attracting investors: Investors are usually attracted to school systems that can boast of its effective schools in the traditional sense.

3. School dropout and local system out-migration: A high dropout rate is one of the characteristics of ineffective schools. Dropping out is a sign that the school cannot deal with its more problematic pupils. The researchers feel that ineffectiveness at the local school level does not necessarily lead to out-migration. This is especially true if the local system provides various educational options for different populations.

4. Effective schools and the enlisting of local support for education: Parents belief that even one of the schools (elementary, junior and senior high) that their children attend is ineffective, it will have a negative effect on their support of and faith in the local school system. On the other hand, one positive experience might be enough to reinforce their belief in the importance of education in general, that education can be of a high standard, and that it is worthwhile to support efforts for the improvement of educational standards. This leads to the support of the local education system. Ackerman et al. (1989, p. 351) conclude "the above examples emphasize the difference between effectiveness at the individual school and local system levels. We see that the local education
system is not simply an aggregate of separate schools, but is rather a new entity whose output variables do not derive directly from those of the individual school. If this is so, perhaps the two levels are more closely linked with regards to their process variables."

b. School Effectiveness and Improvement Research
Chen (1991) compared effective and ineffective schools in Israel using some of the concepts of the effective schools movement developed in the USA. 1,730 sixth grade pupils, from 15 primary schools in an industrial city in Israel, participated in the research. Fourteen variables were chosen as factors discerning between effective and ineffective schools. These variables were divided into five categories: social background, achievement scores, teaching factors, learning and organization, pupil characteristics and attitudes. Results showed that achievement varied greatly among the schools in the city. A strong correlation was found between school effectiveness and class effectiveness. The variables that discern, retrospectively, between effective and ineffective schools are pupil background information, achievement variables, class or school organizational variables, percentage of pupils from the religious stream and the tendency to use group work. Classroom factors such as ethnic integration, homogeneous classrooms according to ability, heterogeneous classes according to ethnic background and ability grouping were found to have negative effects on the effectiveness of achievement.
Yair (1997) undertook a study that assessed several policy implications of within-school variability between classrooms of varying pupil achievement. The three level study included pupils, classrooms and schools, thus allowing an appropriate estimate of the variations between these three educational components. The findings show that between-classroom variability of pupil achievement is consistently greater than
the estimated variation between schools. These findings contrast with traditional school-level analyses that usually ignore within-school variability.

Bershadasky (1999) studied the effectiveness of three new schools. All three schools had similar resources within the same city and the same education supervisory board. The researcher looked for the following five main elements of effectiveness: culture of expectation, strong leadership, school climate that encourages learning, emphasis on academic, social and educational achievements as a central goal and a system for assessment and evaluation. The results show that in one school two elements were found: culture of expectation and a school climate that encourages learning. In the second school, three elements were found. In addition to the two elements in the first school, he also found an emphasis on academic achievement and social/educational values as central goals of this school. In the third school all five elements of effectiveness were found. This study then tried to determine how significant each of these elements were in the schools’ functioning. Although the school showing all five elements of effectiveness was considered the leading school in the city, as measured by the enrolment figures, the findings were not conclusive. Bershadsky (1999) concluded that human resources were responsible for most of the differences between schools. Leadership and administration during the initial stages of the establishment of a new school are crucial to its future growth and development.

Gaziel (1997) studied the impact of school environmental factors on the effectiveness of secondary schools with disadvantaged students in Israel. His aim was to determine to what extent effective schools differed from ‘average’ schools, and what the contribution of each variable was in explaining differences in performance. His findings indicate that
academic emphasis, norms of orderliness, continuous school improvement, teamwork and adaptation to customers' demands were related to the mean scores of students in mathematics, English and Hebrew over two subsequent years. Furthermore, academic emphasis proved to be the variable that best predicted the differences in effectiveness across schools.

**Summary**

As can be seen from the above survey, efforts to identify and implement key factors of school effectiveness were made in Israel in the past two decades. Unfortunately, there was very little coordination among the various research projects. In addition, due to financial limitations and political considerations many of these intervention projects were short lived and inconclusive. Today, in Israel, isolated projects are being carried out. Most of these improvement efforts are based on school-based, bottoms up approaches, and have local effects rather than nationwide influence.

**E. Summary of Chapter Two**

The significant gap in educational achievement, between the privileged classes and the disadvantaged in the US in the 1960s, led to the Coleman assessment of the level of equality of educational opportunity. If the conclusions of the Coleman Report that schools do not influence achievement were correct, it would have negated future attempts to improve the educational achievement of minority pupils as well as other disadvantaged groups in society. Fortunately, concerned educators in a number of countries challenged this pessimistic conclusion. Studies and programmes were developed to improve schools and to raise the level of
achievement, especially of pupils coming from lower socio-economic groups in society.

The programs that came under the heading of the Effective Schools Movement varied greatly in their theoretical and methodological assumptions, structures and organizational strategies. Some programs emphasized effective teaching practices and changes in school organization. Some adopted a focused achievement approach, while still others believed that self-knowledge values and emotional growth should be primary goals. Since there was no consensus on the definition of the effective school, nor on the specific goals to be achieved, it was difficult for educational researchers to arrive at clear, proven conclusions regarding the feasibility and the ways to improve the educational achievements of the disadvantaged low-achiever. A further problem relates to the time element involved in the studies. Was it sufficient to study one year’s achievement to determine if a school had become more effective, or was it necessary to employ a multi-year longitudinal study? Finally, validity studies have shown that the various methods of measuring effectiveness have low correlation with one another, and that the same school might be classified as effective or as ineffective, depending upon the method used.

In spite of these reservations and criticisms, MacBeath and Mortimore, (2001b, p. 2): believe that we can confidently state that school effectiveness and school improvement research and practice has taught us the following:

1. School education cannot compensate for society, and that in making high demands of teachers and raising our expectations of schools, we must have respect for the evidence on socio-
economic inequality and the changing nature of family and community life.

2. Schools can make a difference, and being in a more effective school can be crucial in determining life chances.

3. The ‘effects’ are complex and multi-layered, and although schools can make a difference, there are even more significant effects at the level of department and classroom.

4. Children experience schools differently. Achievement is subject to ebbs and flows over time, in response to the influence of the peer group, and pupils’ own expectations on the basis of gender, race and social class.

5. The context of national culture is a powerful determinant of parent, student and teacher motivation. School improvement requires more than simply borrowing remedies from other countries.

6. A salient dimension of school improvement is helping schools to be more confident in the use of their own and other data, more skilled in the use of research and evaluation tools and more self-critical.

7. Dramatic advances in educational improvement will only be made when there is a deeper understanding of how people learn and how we can help them to learn more effectively.

8. We are learning, and still have a lot to learn, about how schools improve.

Creemers et al. (1998) presented the following programme for future research and studies at the Tenth International Congress for School Effectiveness and Improvement, which took place in Manchester in January 1998.
1. Outcomes to be measured:
   a. *Pupil outcomes*: Further studies should be done wherein pupil skills and complex-task performance are measured, as opposed to knowledge content. It is also necessary to take pupils' perspectives more into account.
   b. *Learning*: The need to study the implications of constructivist perspectives on learning, and to generally study learning more and teaching less. A recommendation was made to focus on the early years, where the educational effects seem to be larger.
   c. *Teacher effectiveness*: When compared with the United States, in Britain little research has been done on teacher effectiveness.

2. Research theory:
   a. *Theory generation*: There is a need for further development in theory generation. In order to link together the findings of empirical studies, it is necessary to engage in qualitative, in-depth studies, focusing on school and classroom life.
   b. *Comparative research*: The importance of context was stressed, and the need for national, international and comparative research.
   c. *Interaction with other bodies of knowledge*: It was suggested that school effectiveness research has reached a plateau. In order to give this research an intellectual push, it may be wise to interact with other bodies of cognitive knowledge, such as cognitive psychology.

3. New learning and communication technologies: Attention should be given to the new learning and communication technologies.
These have not yet appeared within mainstream school effectiveness research.

Improvement (ibid, p. 131-132)

1. Theory:
   a. The need for a re-conceptualisation of the nature of ineffective schools was stressed. These schools should not be viewed as the opposite of effective schools, but as distinct, requiring distinct interventions for improvement.
   b. The need to better define the concept of ‘leadership’ and its role in school improvement.
   c. The cost effectiveness of different types/models of school improvement should be examined in depth.

2. Practice:
   a. The need to focus on the individual teacher within the school context, in order to better understand the obstacles in implementing research knowledge in schools.
   b. The need to focus more on District or LEA influences.
   c. The need to have school improvement at school level impact upon the classroom experiences of pupils.
   d. The need to move beyond simplistic ‘one size fits all’ improvement programmes.

The educational status of disadvantaged pupils in Israel in the 1990s, was similar to that found in the 1960s in the US, when the Coleman Report was published. The public clamour to raise the achievement level of the disadvantaged pupil population in development towns in Israel, led to the program being researched in this thesis. This multi-faceted program was based on earlier US programs, especially the Theodore Sizer School
Improvement Project that carries the motto of smaller classes and "Less is More", and Slavin’s "Success for All" programme that emphasized the importance of changing the low expectations of educators regarding the ability of the disadvantaged to learn and succeed, with the help of tutors and family support. The Israeli SFA programme was essentially a fusion of school effectiveness and school improvement theory and know-how.
Chapter Three – Methodology

This chapter presents the general philosophies of research design, methodological tools, issues and considerations, and specific details of this research study. The chapter is organized as follows:

A. Details of this Research Investigation
B. Research Designs and Approaches
C. Research Tools
D. Ethics in Educational Research
E. Summary of Chapter Three

A. Details of this Research Investigation

This study is a critical evaluation of a school improvement project implemented in the experimental school that was designed first and foremost to raise achievement test scores on national matriculation exams. In addition to dealing with actual test results, this study attempted to identify the causal relationship between the various elements of the programme and the test results. The effects of the SFA on dropout rate and public school-image were also examined.

The focus of this research is on:

a) An overall analysis of the SFA programme and its implementation.

b) An evaluation of the outcomes as compared to the stated goals in the following areas:
   1. Level of success on tenth grade matriculation exams.
   2. Pupil dropout rate from the 10\textsuperscript{th} to 11\textsuperscript{th} grades.
   3. Pupil educational self-image.
   4. Pupil motivation.
   5. Public image of the school.
The other comprehensive high school from the same town, henceforth – the control school, that did not implement the SFA programme, was monitored for the same parameters as in the experimental school. When this research was designed, the control school also planned to implement the “Success for All” project. Due to factors that are discussed in the Chapter Five, pages 366-367, this school decided to drop out of the project in its early stages. Hence, it was logical that with its very similar student population, it become the “control school” (see Chapter One, page 7).

The following is an outline of the methodological considerations of this research. The aims, objectives and research hypotheses are also presented in Chapter One, pages 8-10.

**Broad Aims:**

1. To examine how the SFA school improvement programme was adopted and implemented in a high school in a development town in Israel.
2. To evaluate the effects of the SFA on pupil achievement and other pupil school behaviours.
3. To identify causal factors that contributed to observable changes.

**Specific Objectives:**

1. Evaluation of the “Success for All” school improvement project:
   a. An examination of theoretical basis of the proposed programme.
   b. Critical discussion of the implementation of the programme.
2. Examination of the results of the project and identification of causal factors:
a. Pupil success on the 10th grade matriculation exams.
b. Pupils remaining in the high school.
c. The effect of the programme on the school’s image in the eyes of the pupils and parents.

3. Evaluation of the programme by participants: pupils, teachers and parents.

Research Questions:
1. Will the implementation of the SFA programme in the experimental school increase the number of tenth grade pupils who pass their matriculation exams in the year 2000, as compared to previous years?
2. In the year 2000, will the results of the 10th grade matriculation exams in the experimental school be show greater success than those in the control school?
3. Will the implementation of the school improvement programme in the experimental school keep all tenth grade pupils in school for the eleventh grade in the year 2000?
4. Will the implementation of the SFA programme in the experimental school raise the image of the school in the eyes of its pupils, as compared to the image of the control school in the eyes of its pupils?
5. Will the implementation of the SFA programme raise the image of the experimental school in the eyes of the parents?
6. Will the experimental school pupils’ educational self-image be heightened at the end of the 1999-2000 school year, while there will be no change in the educational self-image of the control school pupils?
7. Will teachers in the experimental school express increased belief in their pupils’ ability to succeed in their matriculation exams, as compared to teachers in the control school?
8. Will the pupils in the experimental school express increased motivation towards learning, as compared to pupils in the control school at the end of the 1999-2000 school year?

Research Hypotheses:

1. Following the implementation of the SFA programme there will be an increase in the number of tenth grade pupils who will pass their matriculation exams in the experimental school, as compared to the number of pupils who passed their exams in previous years.

2. In the year 2000, more tenth grade pupils from the experimental school will pass their matriculation exams as compared to the control school.

3. In the year 2000, no tenth grade pupils will drop out of school and not continue on to the 11th grade.

4. The implementation of the SFA programme in the experimental school will raise the image of the school in the eyes of its pupils, while there will be no change in the image of the control school in the eyes of its pupils.

5. The implementation of the SFA programme in the experimental school will raise the image of the school in the eyes of the parents.

6. As a result of the new programme, the experimental pupils' educational self-image will be heightened, while the control school pupils will not express any positive change in their educational self-image at the end of the 1999-2000 school year.

7. As a result of the new programme, teachers in the experimental school will express increased belief in their pupils' ability to succeed, while the teachers in the control school will not show such a similar increase.
8. As a result of the SFA programme, the pupils in the experimental school will express increased motivation towards learning, as compared to pupils in the control school at the end of the 1999-2000 school year.

Research Population:

Pupils:
1. Sixty 10\textsuperscript{th} grade pupils, studying in three classes, in one comprehensive high school in a development town in Israel – the experimental school. This school implemented the "Success for All" program.
2. Twenty-five 10\textsuperscript{th} grade pupils from another high school located in the same town – the control school.
Both schools had the same population mix, therefore enabling comparison (see Chapter One, page 7).

Teachers and Administrators:
Experimental school: Eight teachers (including three homeroom teachers), one vice-principal (in charge of the project) and the principal.
Control school: Four homeroom teachers and one principal.

Parents:
Sixty parents (one representative per family) of 10\textsuperscript{th} grade pupils in the experimental school.
Research Instruments

To gauge the effects of SFA, questionnaires, interviews and documentary analysis tools were used. Teachers, pupils and parents were asked to fill out questionnaires (Appendix I, page 383); both principals and the vice-principal of the experimental school were interviewed, both at the beginning and at the end of the 1999-2000 school year (Appendix II, page 393). Internal school records of attendance and external 10th grade matriculation scores were examined. The following are details of the research instruments:

1. **Pupil Questionnaires**

These questionnaires consist of 21-23 items in the form of closed statements to be answered on a four choice Likert Scale, and are based on the questionnaire prepared by the Israeli Association of Community Centres, Ltd., Jerusalem (1997). Chronbach’s reliability coefficient: $\alpha = 0.79$. The pre-test consists of 21 items and the post-test of 23 items. It examines the following factors:

a. Pupil motivation  
b. Pupil’s educational self-image  
c. Pupil’s image regarding teachers’ belief in their ability to succeed  
d. Pupil’s image regarding parents’ belief in their ability to succeed  
e. Pupil’s image regarding friends’ belief in their ability to succeed  
f. Pupil effort  
g. Teacher effort  
h. School image  
i. Peer cooperation
The questionnaires were answered voluntarily (see page 218), and anonymously (see page 216).

2. **Teacher Questionnaires**
   These questionnaires consist of 35-37 items in the form of closed statements to be answered on a four choice Likert Scale, and are based on Gaziel (1992). Chronbach’s reliability coefficient: \( \alpha = 0.91 \). The pre-test consists of 33 items and the post-test of 36 items. It examines the following factors:
   a. Attitude towards their school climate
   b. Attitude towards school organization and policy
   c. Belief regarding pupils’ ability to succeed
   d. School satisfaction
   e. Perception of principal as educational leader
   The teachers answered the questionnaires voluntarily, and rejected the option of anonymity. (See pages 217).

3. **Parent Questionnaires**
   These questionnaires consist of 28-30 items in the form of closed statements to be answered on a four choice Likert Scale, and are based on Peres and Pasternak (1994). Chronbach’s reliability coefficient: \( \alpha = 0.83 \). The pre-test consists of 28 items and the post-test of 30 items. It examines the following factors:
   a. Attitude towards school
   b. Attitude towards teachers in general
   c. Attitude towards homeroom teachers
   d. Attitude towards child’s achievement
   e. Involvement in school
   f. Satisfaction with school
The questionnaires were answered voluntarily, and anonymously.

4. Semi-structured Interviews (Appendix II, page 393)

Principals of both schools and the vice-principal of the experimental school were interviewed. All the interviews were carried out by the writer of this thesis, with the aid of 12 guiding questions. These questions served as a basis for further comments and clarifications on the part of the interviewees. Each interview session lasted approximately one hour.

5. Documentary Analysis

a. Documents prepared by the Israeli Association of Community Centers regarding the proposed project, including theory and practice.

b. Matriculation grades in both the experimental and the control school for the years 1998-1999 (prior to project implementation) and for the year 2000 (after implementation).

c. Dropout rates from 10th to 11th grade in both the experimental and the control school:
   1. In the experimental school for the years 1993-2000.
   2. In the control school for the academic year 1999-2000.

d. Home room teachers’ job description prior to and during project implementation.

The above served as a basis for the critical evaluation of the SFA programme:

a. Strengths and weaknesses of the SFA programme.

b. Implementation according to the proposed outline.

c. Conclusions based on the results of 10th grade national matriculation exams, interviews and pupil, teacher and parent questionnaires.
d. Recommendations for a modified SFA programme.

Research Schedule
Outlined below is the research schedule followed during the 1999-2000 school year. Note that the principal of the control school did not give permission to interview his vice-principal or parents from his school. He only allowed four 10th grade homeroom teachers, and twenty-five pupils from one 10th grade class to respond to questionnaires. (For more details see page 218).

1. Semi-structured interviews - Principals from both the experimental and the control schools were interviewed twice – once at the beginning, and again at the end, of the school year. The vice-principal from the experimental school, who was directly in charge of the project’s implementation, was also interviewed at the beginning and end of the school year.

2. Questionnaires - (See Appendix I, page 383)
   a. Experimental School: Two questionnaires were given to the pupils, teachers and parents – one at the beginning and the second at the end of the school year. These questionnaires were filled out by sixty 10th grade pupils, three homeroom teachers and five subject matter teachers (of the 10th grade); also by sixty parents of the 10th grade pupils. The parent questionnaires were distributed at parent meetings, at which time they were instructed that the same parent fill out both questionnaires.
   b. Control School: The same questionnaires were used in the control school as in the experimental school, both at the beginning and at the end of the school year. They were filled out by twenty-five 10th grade pupils and four 10th grade
homeroom teachers. Due to the decision of the control school principal, no parent questionnaires were filled out. In both schools all the questionnaires were anonymous, and were answered voluntarily; however, teachers in both schools waived their right to anonymity.

B. Research Designs and Approaches
This section will discuss the theoretical philosophical basis of the research, showing that although it was basically positivistic in nature, it contained important phenomenological components.

1. Philosophies of Research Design
There are two major traditions that serve as a basis for research in the social sciences. These philosophies are known as positivism and phenomenology. There is an ongoing debate as to which of these two philosophies should serve as a basis for research design. Each is associated with assumptions and methodological implications, but it is difficult to identify any one philosopher or researcher who subscribes to all aspects of one particular view. The trend in the last decade has been away from positivism towards phenomenology, but many researchers deliberately combine methods drawn from both traditions (Easterby-Smith et al., 1994). The following is a summary of these two traditions as outlined by Easterby-Smith, et al.

**Positivism:** The central idea of positivism is that “the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition. Knowledge is only of significance if it is based on observations of this external reality” (ibid, p. 77). The ideas presented
below have come to be associated with the positivistic research viewpoint.

a. Independence: the observer is independent of what is being observed.
b. Value-freedom: objective criteria should guide the choice of topics to be studied and methods used in the study, and not human beliefs and interests.
c. Causality: the aim of the social sciences should be to try and identify causal explanations and basic laws that explain regularities in human social behaviour.
d. Hypothetico-deductive: research in science is based on a process of hypothesizing laws and then deducing the kinds of observations necessary for testing them.
e. Operationalization: it is necessary to operationalize concepts so that they could be measured quantitatively.
f. Reductionism: it is easier to understand problems if they are reduced to the simplest possible elements.
g. Generalization: samples tested must be sufficiently large to enable generalizations about regularities to be made.
h. Cross-sectional analysis: such regularities can most easily be identified by comparing variations across samples.

Phenomenology: The central idea of phenomenology is the view that the “world and ‘reality’ are not objective and exterior, but that they are socially constructed and given meaning by people. . . . Phenomenology is not derived from positivism in any way” (Easterby-Smith et al., 1994, p. 78). The basic implication of this philosophy, for research methods, is that the role of the researcher is not merely to gather facts and then measure patterns. It is up to the researcher to “appreciate the different
constructions and meanings that people place on their experience. One should therefore try to understand and explain why people experience the same things differently, rather than search for external causes and fundamental laws to explain their behaviour. Human action arises from the sense that people make of different situations, rather than as a direct response from external stimuli” (ibid, p. 78). Figure 3.1 compares the positivistic and phenomenological paradigms (Easterby-Smith et al., 1994, p. 80).

<table>
<thead>
<tr>
<th>Basic beliefs:</th>
<th>Positivist Paradigm</th>
<th>Phenomenological Paradigm</th>
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<tbody>
<tr>
<td>The world is external and objective.</td>
<td>The world is socially constructed and subjective.</td>
<td></td>
</tr>
<tr>
<td>Observer is independent.</td>
<td>Observer is part of what is observed.</td>
<td></td>
</tr>
<tr>
<td>Science is value-free.</td>
<td>Science is driven by human interests.</td>
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<th>Researcher should:</th>
<th>Positivist Paradigm</th>
<th>Phenomenological Paradigm</th>
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<tbody>
<tr>
<td>Focus on facts.</td>
<td>Focus on meanings.</td>
<td></td>
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<tr>
<td>Look for causality and fundamental laws.</td>
<td>Try to understand what is happening.</td>
<td></td>
</tr>
<tr>
<td>Reduce phenomena to simplest elements.</td>
<td>Look at the totality of each situation.</td>
<td></td>
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<tr>
<td>Formulate hypotheses and then test them.</td>
<td>Develop ideas through induction from data.</td>
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<tr>
<th>Preferred methods include:</th>
<th>Positivist Paradigm</th>
<th>Phenomenological Paradigm</th>
</tr>
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<tr>
<td>Operationalizing concepts so that they can be measured.</td>
<td>Using multiple methods to establish different views of phenomena.</td>
<td></td>
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<tr>
<td>Taking large samples.</td>
<td>Small samples investigated in depth over time.</td>
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Figure 3.1: A comparison of positivistic and phenomenological paradigms (Easterby-Smith et al., 1994, p. 80).
This study combines both the positivistic and the phenomenological approaches. Some of the research tools are objective - positivistic in nature (scores on national matriculation exams, number of pupil dropouts), while others are subjective – phenomenological (interviews, questionnaires). There is an attempt to show causality; certain changes that were made under the SFA programme were designed to lead to specific results (positivistic approach). For example, added class time, semester organization and marathons are positivistic, objective factors. However, teacher attitudes regarding their pupils, and the educational self-image of pupils, are phenomenological factors.

2. Prospective vs. Retrospective Method in Effective Schools Research

The difference between prospective and retrospective research is in the sequence of steps taken to identify a factor that is hypothesized to contribute to higher than expected educational outcomes. According to the prospective approach, the first step of research is formulation of a hypothesis concerning the possible contribution of a certain educational innovation to improving achievement. The hypothesis must be based on theoretical considerations or on empirical findings, or on both. The second step is the implementation of the innovation in schools or in classrooms. The third step is the choosing of the representative population of schools or classrooms, taken from the experimental population (where the innovation was introduced) and the control population (where the innovation was not introduced). The fourth step is comparison of achievement of both groups. If a statistically significant advantage is found in favour of the experimental group, the educational
innovation is declared effective and is recommended for implementation in the educational system (Chen, 1995).

The retrospective approach is carried out from the opposite direction. It begins with a question, such as which schools have higher than expected achievement, and how they are different from other schools (Weber, 1971). The first step is the identification, after the fact, of the schools on the same socio-economic level that are successful and those that are not. The second step consists of the compilation of a list of the organizational, pedagogical and behavioural variables that distinguish between successful and non-successful schools. These variables are considered to contribute towards achievement, and are then recommended for implementation in the educational system (Chen, 1995).

The weakness of the retrospective approach, is its lack of control over variables that could be contributors to success, and are not visible to the researcher. The most serious drawback, is the lack of control of the selection and placement of pupils, which occurred before the research began. Despite these limitations, retrospective research enjoys considerable support, mainly because it is cheap, very fast and highly relevant to the question being studied. However, Mantel and Haenszel (1956) claim that it is necessary to carry out prospective research to confirm retrospective findings.

Few retrospective studies have been carried out in Israel. These studies include identification of “excellent” teachers (Adar, 1969), characteristics of schools that had high achievement for low-socioeconomic pupils (Chen et al., 1984), and schools that received higher scores on standard comparative exams (Chen and Adi, 1992). On the other hand, many studies attempting to identify factors related to achievement were carried out, following the prospective methodology (Freidman et al., 1988). Several effective school movement researchers have conducted
prospective studies in attempts to validate retrospective research findings (e.g. Bashi et al., 1989b and Bashi, 1990).

This research is based on prospective methodology. The first stage was the hypothesis that the “Success for All” school improvement program, (that was based on both theoretical and empirical findings), contained elements that would lead to an increase in the number of pupils passing their National matriculation exams and decrease the dropout rate. The second stage was the implementation of the program in a certain school. The third stage was the choosing of the representative population (10th grade) in a certain school (the experimental school), and comparison with a similar population (10th grade) in another school where the innovation was not introduced (control school). The fourth stage was the comparison of the achievement and dropout rate (and other factors) of both groups.

3. Considerations within Research Design

The purpose of the research design is to organize the research activity and data collection, in the manner best suited for achieving the aims of the research. Easterby-Smith et al., (1994, p. 84) describe the following choices of research design:

- *Researcher is independent vs. researcher is involved* – this choice depends on one’s philosophical view - whether or not it is possible for a researcher to remain independent and detached from the phenomena being observed. In traditional scientific research, the view has been that the researcher must remain independent if the results were to be valid; more recently it has been seen that this is not always possible. *Action research* is an attempt to overcome this problem. Action research
assumes that social phenomena are not static, and that action research and the researcher are seen as part of the change process itself. In this research, although a staff member of the experimental school, I was independent of the actual school improvement project being implemented. However, as an observer from "inside", I was in the unique position of monitoring all stages of implementation; the first staff meetings discussing the possibility of implementation, as well as the day-to-day process of implementation. As a "known face" in the school, my presence did not hamper the true monitoring of the process in any way, and did not bring about any artificial behaviour that is often associated with outside observers.

- **Large samples vs. small numbers** – this design choice is whether to investigate a large number of organizations or situations, or to focus on a small number and investigate over a period of time. Easterby-Smith et al., (1994, p. 85) argue that this is basically a choice between cross-sectional and longitudinal design. In cross-sectional research, different organizations are selected, and then various factors are investigated as to how they differ in the different contexts. The advantage of cross-sectional designs, especially when questionnaires and survey techniques are used, is the ability to examine large numbers, in an economic manner. The disadvantages of this type of design are a) the results do not explain why correlations exist and b) they have difficulty in eliminating all the external factors that might have caused the observed correlation.

Longitudinal research, that studies a small number of organizations over a long period of time, can overcome these disadvantages (Pettigrew, 1985). This type of research focuses on change processes within the broader contexts surrounding each organization, and gathers data over longer periods of time. The main advantage of longitudinal research is
that it can produce significant data from a few cases, thus simplifying the process of sampling. The disadvantages are that it is very time consuming and the complexity of the data requires special skills from involved researchers (Easterby-Smith et al., 1994, p. 86).

This research can be likened to a cross-sectional research, where two organizations (schools) are compared, using survey techniques as to various contexts. A continuing study based on longitudinal research would have been worthwhile, but was not possible; the project was discontinued after one year.

- **Testing theories vs. generating theories** – this parameter concerns the problem of what should come first: the theory or the data. It reflects the conflict between the positivist and phenomenological paradigms. One view is that a researcher should start with a theory or hypothesis, and then seek data to confirm or disprove that theory. The other view is that data should first be collected, and then a theory formulated based upon the findings.

The advantage of beginning with a hypothesis is that there is clarity about what is to be investigated, and thus information can be collected efficiently and quickly. This clarity also makes it easier for other researchers to replicate the study, and enables public scrutiny of the research findings. On the other hand, the contribution of the research results might not be significant, in that they may only be confirming what is already known. If the results are inconclusive or negative, this research design does not provide enough information as to the reasons for this. In contrast, the generating of theories or the “grounded approach” is more flexible and can provide both information and new insights. Disadvantages of this approach include a) it may take more time and b) there is a lack of clarity and standardization of methods. Easterby-Smith et
al., (1994, p. 87) comment that this last concern "stems largely from a positivist perspective on the importance of ‘finding the truth’".

This research examines a school improvement project, “Success for All”, that was designed based on both positivistic and phenomenological research. The positivistic (mostly “effective school research”) provided lists of factors that were seen to contribute to school effectiveness, and the phenomenological (mostly “school improvement research”) provided ideas about what “works” and what “doesn’t work” in schools.

- **Experimental design vs. fieldwork methods** – Experimentation is a basic element of the scientific method, but is not necessarily essential to positivist methods. In the classic experimental method, subjects are assigned at random to either an experimental or a control group. The conditions for the experimental group are then manipulated in order to compare the two groups. However, it is often difficult to find a volunteer population willing to be manipulated. Researchers working within the positive paradigm have recognized the difficulties of producing pure experimental designs, and have developed ‘quasi-experimental designs’, the most common being the ‘pre-test/post-test comparison design’.

The alternative to experimental and quasi-experimental designs is *fieldwork*, which studies real organizations or social settings. Fieldwork may involve positivist methods that use quantitative techniques, or it can be open-ended and phenomenological.

Ethnography is a phenomenological research style. In this method the researcher becomes part of the group that is being studied, in an attempt to understand the meanings that people put on the behaviour of others. Outsiders, new to an organization, will encounter things they do not
understand, since they did not share experiences with others in the organization. These unshared experiences are called ‘breakdowns’ and represent something unique about the organization that was previously unknown by the researcher. Only when the researcher understands these unknown situations will he be able to resolve the breakdown. The ethnographer, who actually becomes part of the group, is more able to generate new insights into conventional behaviour (Easterby-Smith et al., 1994, p. 87-88).

This research, in addition to including an experimental design, included “fieldwork”: day-by-day observation of all aspects of project implementation; informal conversations with pupils, teachers and parents; and formal semi-structured interviews with the principals of both schools. An advantage to my being a senior staff member (over 20 years tenure) at the experimental school, is my knowledge and familiarity with all aspects of school life, including staff personalities, pupils and their families, the community and school setting. This familiarity also includes the staff of the control school; it is the only other comprehensive secondary school in the community and we have shared many extracurricular activities over the years. My long tenure as an educator in this town enabled me to be knowledgeable regarding the pupils of the control school; their socio-economic background is similar to that of the pupils in the experimental school.
4. Research Approaches
Research can be approached in several ways. Many research designs include more than one approach in a single study. The following is a list of the main approaches (Johnson, 1994).

- **Survey approach** – eliciting information from an identified population (ibid, p. 13).
- **Case study approach** – inquiry that uses multiple sources of evidence. It investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident (ibid, p. 20).
- **Experimental approach** – formulation of a hypothesis of causal relationship between variables. Planning and carrying out an experiment to collect evidence to show the effect of one variable upon another (ibid. p. 28).
- **Documentary analysis** – use of available printed data as a source of evidence (ibid, p. 25).

The Survey Approach
Surveys have been used throughout the last century in efforts to elicit information from an identified population. The word “survey” is used to describe a method of gathering information from a sample of individuals (Kalsbeek, 1995).

Information is collected by means of standardized procedures so that every individual is asked the same questions in more or less the same way. The intent of the survey is not to describe particular individuals who happened by chance to be a part of the sample population, but to obtain a composite profile of the entire population under study (Kalsbeek, 1995). This information can be of many types, including
facts, attitudes or opinions of the person surveyed at a particular time (Johnson, 1994). Techniques range from the use of simple scales and the analysis of variation of results under different conditions, through regression analysis and the analysis of paths between constructs, to the use of techniques that analyse measurement models and structural models simultaneously (Newsted et al., 1998).

The survey approach has several strengths that make this type of research popular. The main one, is the ability to approach a relatively large number of respondents, with a standardized questionnaire or interview schedule that is simple to score and code. Responses can be generalized to other members of the population studied and often to other similar populations. A large amount of factual information can be obtained and cross-tabulated, thus providing a wealth of information. Surveys can easily be reused, and provide an objective way of comparing responses of many different groups, in different times and places. In addition, surveys can help confirm and quantify the findings of qualitative research (Johnson, 1994; Newsted et al., 1998).

**Case study approach**

The case study is a relatively formal analysis of an aspect of classroom life (Hopkins, 1993, p. 143). This approach usually uses several research tools to accumulate data, such as interviewing and observation. Brady (1999, p. 118) defines a “case”, in teacher education, as “a real account of a problematic experience in a school or classroom that is written to facilitate teaching/learning” and is crafted from information gathered from interviews and document examination. Yin (1993, p. 3) states that case study is the method of choice “when the phenomenon under study is not readily distinguishable from its context”. The phenomenon under study may be a program or a project that is to be evaluated. In many
cases the definition of these programs or projects is problematic, as for example, in determining when a particular activity started or ended.
The inclusion of the context, as a major part of the study, usually means that the study will likely have more variables than data points; the study cannot rely on a single data collection method; and even if all the relevant variables are quantitative, distinctive strategies will be needed for research design and analysis (ibid, p. 3). Case studies can be considered as a method implying either quantitative or qualitative data collection (Yin, 1984; 1989).
Case studies are concerned with the interaction of factors and events over a period of time (Johnson, 1994), and do not require an experimental situation (Denzin, 1978). They provide a database for analytical description of components and processes and for model building (Kogan et al., 1984). The use of case studies in classroom research has the advantage of being a simple way of plotting the progress of a course or a pupil’s or group’s reaction to teaching methods. Since case studies draw on data gathered by many methods, the information gained will tend to give a more accurate and representative picture than the use of any other single research method. They enable interpretations of other similar cases, even though full generalisability cannot be claimed (Johnson, 1994). However, case studies must be fairly exhaustive to be of value; as such they are usually time consuming and feedback is delayed.
The main criticism levelled at the case study approach is the lack of “scientific rigour” (Johnson, 1994). There is no set of rules for the design, and interpretation of data is mostly subjective. Brady (1999) states that the format of a typical case study is the two to three page third person narrative, with or without commentaries. Less common formats include the moral dilemma story, that presents a tightly structured, open-
ended conflict that has to be resolved and the case narrative or first person account of a scenario.

Shulman (1992, p. 17) sees case studies as advantageous; “The beauty of cases is their potential for reinterpretation and multiple representation”. He claims that despite variations, cases have the following shared characteristics: they are situated in an actual context and time frame; are specific and particular; observe a definite sequence of events; report the workings of minds, motives, frustrations and misconceptions; and reflect the social and cultural context in which events occur.

According to Yin (1993), in the classic case study, the phenomenon (project) is not readily distinguishable from its context. However, in this research, the SFA programme under study was a newly introduced programme, and was therefore clearly distinguishable from the previous school context. Thus, this study was not a classical case study, where one studies a particular school or classroom in general detail to gain some insights. It was a study based on a specific research design, and clearly defined variables, of a school improvement programme.

**Experimental approach**

Experimental designs are useful in addressing evaluation questions about the effectiveness and impact of programs. By placing an emphasis on the use of comparative data as a context for interpreting findings, experimental designs increase our confidence that observed outcomes are the result of a given program or innovation, and not a function of extraneous variables or events (Gribbons and Herman, 1997).

Experimental designs specify from whom information is to be collected and when it is to be collected. There are three general categories of experimental design:
• **Pre-experimental designs**: designs in which there is no control group and/or have comparison groups that are formed non-randomly, thus yielding results that are difficult to interpret (Huck and Cormier, 1996). Campbell and Stanley (1966) present three major pre-experimental designs:

a. **The one shot case study** – a single group is studied only once after a treatment is applied. Campbell and Stanley (1966) state that the total lack of control renders these designs as having almost no scientific value.

b. **The one group pre-test-post-test design** – a single group is studied twice – once prior to intervention and again following intervention. The major problem with this design is the amount of time that may elapse between the two observations. The longer the time lapse, the greater the possibility that other factors influence the results (history). Other flaws include the possible maturation of participants, the possibility that participants do better on the post-test as a result of already taking the pre-test, the measuring instrument may have changed over the course of study and that certain participants may have selectively dropped out of the study (maturation) (Dawson, 1997).

c. **The static-group comparison** – a post-test is administered to two groups, where one group having undergone some type of intervention, and the other not (control group). A problem with this design is the unknown status of the two groups prior to the intervention, since the participants are not randomly assigned to the two groups (Dawson, 1997).

• **True experimental design**: research following this design includes more than one purposely-created group, common
measured outcome(s) and random assignment. The strongest comparisons come from studies where subjects are randomly assigned to program and comparison groups. True experimental designs yield results that are trustworthier than the pre-experimental designs, due to the random assignment, which reduces the amount of potential threats to internal validity (Huck and Cormier, 1996). If there are a sufficient number of subjects, randomisation helps to ensure that the two groups are comparable, or equivalent, in terms of characteristics that could affect any observed differences in post-test scores. A pre-test may be used to assess or confirm whether the two groups were initially the same (such as in pre-test-post-test, control group designs), but is many times unnecessary when randomisation is used and large numbers of pupils and/or teachers are involved. However, pre-testing may be advisable when studying smaller samples (Gribbons and Herman, 1997).

Types of true experimental design:

a. **Pre-test-post-test control group design** – in these designs, random assignment is employed in both experimental and the control groups. Both are given a pre-test; one group is administered an “intervention”, the other is not. A comparison of the post-tests elucidates any effect of the intervention. In this design, some of the previous discussed internal threats to validity are accounted for. History effects, the threats of maturation, testing and mortality would be similar for both groups (Campbell and Stanley, 1966).

b. **Post-test only, control group** – this differs from the above-described designs in that subjects are randomly assigned to one of two groups, without a pre-test. One group undergoes the
experiment and the other serves as a control. Due to random assignment, the internal validity of this design is basically solid (Dawson, 1997); the main weakness concerns the external validity, i.e. the interaction of selection and treatment (Campbell and Stanley, 1966). It is not known whether the results of such a study would generalize to another population (Heppner et al., 1992). The absence of a pre-test is a problem too. It is employed to reduce variability, in the dependent variable, and is usually made up for by random assignment. Huck and Cornier (1996) claim that random assignment is not always random, because many researchers have a very loose definition of what randomisation is, and true randomisation carries with it very stringent criteria, which not many are aware of.

c. The Solomon four-group design- this design is a combination of the pre-test-post-test control group design (the first two groups), and the post-test-only control group (the last two groups) (Dawson, 1997). Its purpose is to account for potential effects of the pre-test on the post-test, and lend some degree of future replicability. The main problem with this design is the amount of time, energy and resources necessary.

- **Quasi-experimental design:** this type of design is usually used, where it is not possible, or practical, for a researcher to use random assignment. Examples for this: intact groups are already formed; treatment cannot be withheld from a group; or no appropriate control or comparison groups are available (Dawson, 1997). The major difference between true and quasi-experimental designs is the random assignment of participants (Heppner et al., 1992).
Therefore, the internal validity of the quasi-experimental design is higher than that of the pre-experimental design, but lower than the true experimental design (Huck and Cormier, 1996). Two types of quasi-experimental designs are non-equivalent group designs and cohort designs.

a. Non-equivalent-group designs are the most frequently used. They are similar to the pre-test-post-test control group experimental design. The difference is the non-random assignment of subjects to their respective groups in the quasi-experimental design (Dawson, 1997, p. 8). A problem with this type of design is the false belief of many researchers, that the administration of a pre-test, remedies the non-random assignment of participants.

b. Cohort designs – these designs are stronger than non-equivalent groups, due to the fact that cohorts are more likely to be more equally matched at the beginning of the experiment (Heppner et al., 1992). In this design, a post-test is administered to one cohort, while a following post-test is administered to a second cohort. Even though the post-tests occur at different points in time, they do occur in the same point in the progression of the cohort (Cook and Campbell, 1979). Flaws in this design are the passage of time between the two cohorts, and the non-random assignment of participants to the cohort (Dawson, 1997).

In summary, this study of the effectiveness of a school intervention project included a variety of approaches. Unlike a pre-experimental design, where there is no control or comparison group, this research had a control group to compare results with (the control school). It did not have a true-experimental design; the groups involved in the study were
already formed (the 10th grades in both high schools) and the pupils were not randomly assigned. Thus, this study was based on a quasi-experimental design since the groups were not randomly assigned. However, while in the usual quasi-experimental design there is a lack of a comparison group, this study had one. Ordinarily, one is not able to withhold treatment from the control group (since it is already formed), but in our case, the withdrawal of the control high school from the SFA programme gave us the opportunity to use them as a comparison, thus, raising the validity of the results, assigning the cause of change to the treatment given only to the experimental school.

There was also an equivalent to a pre-test; it enabled the comparison of the 10th grade national matriculation results on the 2000 exams with the results of 1999, in both schools. The post-test matriculation exams were the exact same exams, given at exactly the same time, to both schools. In addition, pre-test and post-test data were obtained from questionnaires and interviews in both schools, both before the implementation of the SFA project, and after one school year of its implementation.

This study also had elements of a cohort design, where results of matriculation exams for 10th graders in 2000 were compared with results of corresponding groups of 10th graders in both schools, for the years 1998 and 1999.

The main tools employed in this study are interviews and questionnaires. These are discussed in detail beginning on page 211.

5. Criteria for Choice of Research Design
Easterby-Smith et al., (1994, p. 89) list three criteria for choice of research design:

a. The personal preference of the researchers themselves.
b. The aims or context of the research.

c. The question of whether the research will stand up to outside scrutiny - validity, reliability and generalisability. The meanings of these three terms differ between the positivist and phenomenological viewpoints. Figure 3.2 from Easterby-Smith et al., (1994, p. 90) compares the three terms in the context of these two research philosophies.

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<th>Positivist Viewpoint</th>
<th>Phenomenological Viewpoint</th>
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<tbody>
<tr>
<td><strong>Validity</strong></td>
<td>Does an instrument measure what it is supposed to measure?</td>
<td>Has the researcher gained full access to the knowledge and meaning of informants?</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>Will the measure yield the same results on different occasions (assuming no real change in what is to be measured?)</td>
<td>Will similar observations be made by different researchers on different occasions?</td>
</tr>
<tr>
<td><strong>Generalizability</strong></td>
<td>What is the probability that patterns observed in a sample will also be present in the wider population from which the sample is drawn?</td>
<td>How likely is it that the ideas and theories generated in one setting will also apply in other settings?</td>
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Fig. 3.2: Comparison between positivist and phenomenological viewpoints (Easterby-Smith et al., 1994, p. 90)

**Internal vs. external validity**

As seen in Fig. 3.2, according to the positivistic viewpoint, "validity" refers to whether or not you measure what you intend to measure. There are two types of validity: internal and external. Internal validity refers to whether or not the effects you obtain in your study are due to your conceptual variable. If there are alternative explanations to your
data then the study does not have internal validity. External validity refers to whether or not the results can be generalized to people and situations outside of the specific participants and situations of the research.

**Internal validity** – An experiment is internally valid to the extent that it shows a cause-effect relationship between the independent and dependent variables. (Athabasca University, 1998). If the error variance is not controlled, the researcher cannot definitely conclude that the observed outcome is due to the independent variable(s) (Parker, 1993).

Campbell and Stanley (1966) list eight major pitfalls to internal validity: a) history – the environmental events that occur between the first and second observations in addition to the independent variable; b) maturation – the psychological and/or biological processes that take place as a function of the passage of time, and are nor attributable to the independent variable(s); c) testing – the sensitisation to the post-test as a result of having completed the pre-test; d) instrumentation – the deterioration or changes in accuracy of the instruments used to measure the dependent (outcome) variable; e) statistical regression – when subjects in a study are selected as participants because they scored extremely high or low on a test, retesting will almost always produce a different distribution of scores, and the average for the new distribution will be closer to the population’s; f) selection – the factors involved in placing certain participants into certain groups (treatment or control); g) mortality – the loss of participants and their data due to death or sickness; and h) interactions of previous threats with selection (e.g. different maturing rates of experimental groups).

Cook and Campbell (1979) identified another factor that adversely affects internal validity: the ambiguity about the direction of casual
influence - if A causes B or B causes A. A further threat to internal validity is experimenter bias. Expectations of an outcome, by persons running an experiment, may significantly influence that outcome (Athabasca University, 1998).

External validity – External validity refers to the extent to which a study’s results can be generalized or applied to other people or other settings. Group research that employs randomisation will initially possess higher external validity than will studies that do not use random selection/assignment (Huitt, 2001).

Campbell and Stanley (cited in Isaac and Michael, 1971) identified four factors that adversely affect a study’s external validity: a) a possible interaction between how the subjects were selected and the treatment, especially if the subjects are not randomly selected; b) the use of pre-tests may cause the subjects to react more/less strongly to the treatment than they would have, had they not experienced the pre-test; c) the experimental setting may have an effect on performance, e.g. subjects who know they are being observed may act differently than normal and d) studies that use multiple treatments/interventions may have limited generalisability because the early treatments may have had a cumulative effect on the subject’s performance.

None of the major pitfalls to internal validity mentioned in the above summary by Campbell and Stanley (1966) and by Cook and Campbell (1978) are applicable to this research.

The key question regarding internal validity in any research is whether the results obtained are due to the conceptual variable studied, and not to other possible causes. In this study, the conceptual variable was the SFA school improvement programme. This was the only known factor of change that took place before or during the school year in the
experimental school. Internal validity of this research was also based on the comparison of results obtained in the experimental school with the results of the control school that did not implement the concept variable (SFA). Furthermore, in earlier studies, elements introduced in the SFA programme were found to be factors in increasing school effectiveness. Therefore, it is logical to conclude that the results measured at the end of the school year can most likely be attributed to the SFA programme.

The question of the applicability of the results of this study to other school settings, the external validity, is of course a legitimate one. This research was based only on a small sample (60 tenth grade pupils in the experimental school, and 25 in the control school) and for a short period (one school year). However, this study can reinforce a number of hypotheses in the research literature regarding school effectiveness.

C. Research Tools

In this section the reader will find a theoretical discussion of the research tools used in this thesis: semi-structured interviews, questionnaires and analysis of documentary evidence.

1. Interviews

There are three major categories of interviews (Wragg, 1999, p. 114):

a. *Structured interviews* – based on yes/no, either/or, multiple choice type items, etc.

b. *Semi-structured interviews* – prepared written questions are asked of each interviewee, together with probes and open-ended questions to encourage a certain amount of natural conversation. Classroom researchers usually prefer this type of interview, since in addition to raising key questions the observer and
teacher have an opportunity to have some natural conversation about events.

c. *Unstructured interviews* (also known as specialized interviews)—based on free-ranging conversation.

Johnson (1994) provides a comparison of the above three categories. Structured interviews are characterized by consistency, which is obtained through the application of a standardized stimulus to the respondent, with the interviewer measuring and recording responses. Large-scale surveys usually use this form of interviewing. Semi-structured interviews place less emphasis on a standardized approach, while still attempting to glean information that is uncontaminated, by subtle differences in the way it is asked. In this case, a more flexible style is used, which is adapted to the personality and circumstances of the person being interviewed. Specialized interviews, as opposed to semi-structured interviews, do not necessarily cover the same ground with each interviewee. The aim here is mainly to acquire complementary information that rounds out data already available from other sources.

In this research, semi-structured interviews were carried out by an observer (myself). The principal and vice-principal from the experimental school, and the principal from the control school were interviewed. A semi-structured interview was chosen to allow natural conversation about the intervention project, while eliciting specific information at the same time. This natural conversation enabled the persons interviewed to volunteer opinions and ideas, and to raise issues that hadn’t been thought of when designing the interview questions.
2. Questionnaires

A questionnaire is "a self-report instrument used for gathering information about variables of interest to an investigator" (Wolf, 1988).

The main difference between an interview and a questionnaire is that the questionnaire is in the hands of the respondent, and is completed by him or her, while the interview (which is similar in format) is completed on the basis of information provided by the person interviewed (Johnson, 1994). Respondents may read all the questions before completing any, may complete and return the questionnaire when convenient for them, or may not complete the questionnaire at all, unless asked to complete and return on the spot. In addition, some of the questions may be answered partially, or not at all. In an interview situation, the interviewer has more control over the research encounter. Johnson (1994, p. 38) lists four things that are essential to the effective use of a questionnaire as a research tool: ensuring that the questionnaire will be clear and comprehensible to desired respondents; getting the questionnaire into the hands of the appropriate respondent; motivating the respondent to complete and return the questionnaire; and making effective administrative arrangements for the return of questionnaires.

Questionnaires have several advantages. They allow respondents the time to give a considered reply to questions (Wragg, 1999). Questionnaires facilitate systematic collection of large quantities of data in a short time at reduced cost; permit contact with a larger population (over a wider geographic area) than interviews; facilitate access to respondents who may not be available by other means; respondents can answer without worrying about the interviewers reaction to their answers; permit economy of effort/scale: a single questionnaire can be printed and distributed to numerous respondents, producing a large quantity of data; can obtain data difficult to collect by other means; the
fixed format eliminates variations in approaches to different respondents; respondent can choose exactly when to reply to the questionnaire, and how long to take replying; and the definition of questions forces the researcher to define the problem, research lines, etc. (McCarthy, 2000, p. 1).

Disadvantages of questionnaires include: the investigator does not have personal contact with respondent; respondents cannot clarify ambiguous questions with the researcher; poorly worded questions often produce incorrect answers, sometimes without the researchers awareness of the problem; questionnaires can reveal a primary layer of factual and attitudinal information, but usually cannot define causes or motives; opinionated respondents are more likely to return questionnaires; some respondents may dislike questionnaires, failing to fill them out correctly or completely; it is usually impossible for the researcher to go back to check the accuracy of the response; persons with low educational level or persons for whom the language of the questionnaire is their second language may not reply, or may reply incorrectly (McCarthy, 2000, p. 2).

In this research, questionnaires used a four point Likert Scale. The possible responses were: strongly disagree, disagree, agree and strongly agree. The questions were for the most part self-perceptional, and the respondents were asked to subjectively rate the given statements. The use of questionnaires enabled the gathering of information from a relatively large number of people (total of 314 questionnaires), and enabled protecting the anonymity of those who wished. Information obtained from the interviews served to confirm or to clarify issues that remained unclear or questionable. The questionnaires were given both at the beginning and the close of the school year to parents, teachers and pupils.
in the experimental school, and to teachers and pupils in the control school.

3. Documentary Analysis

Documentary research relies mainly on printed data as a source of evidence. Since these documents provide information from the past, all documentary research is retrospective to some degree (Johnson, 1994). Scott (1990) classifies documents by authorship as being either personal or official (may be private or state), and as to their access. Access may be closed, restricted, open-archival or open-published. Documentary research is usually done in conjunction with other research approaches. Research solely based on documents usually relates to a remote time period.

The advantages of documentary research include the following: relatively low cost; brings together previously unrelated material to illuminate a topic; enables inquiry into past events or issues where types of other access are not available; brings to light material not previously widely known; can be unobtrusive (done without other’s knowledge); supplements data obtained by other means (Johnson, 1994, p. 26-7). Documentary research has several weaknesses such as the authenticity, credibility and representativeness of a document as a source of evidence (Scott, 1990). In addition, most documents were prepared for purposes unlike those of the researcher and many administrative documents are not neutral reports of events (Johnson, 1994).

Documents analysed in this study included: national matriculation scores, school attendance records and documents pertaining to the SFA programme.
D. Ethics in Educational Research

Cavan (1978, p. 810) defines ethics as “a matter of principled sensitivity to the rights of others. Being ethical limits the choices we can make in the pursuit of truth. 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”. The ethical cornerstone on which this research is based, is the belief that individuals cannot be used as a means to an end, but must at all times be respected as persons. This in turn places a number of limitations on social research that deals with real life situations. The ethical considerations have an impact both on the information gathering process and on the publication of the research findings. This section is divided into two main areas: 1) considerations in planning research and ethical pitfalls, and 2) key components to ensure protection of participants – informed consent, anonymity and confidentiality.

1. Considerations in planning research

a. Permission to do research - Permission to carry out an investigation must always be sought at an early stage (Bell, 1987). This researcher, prior to the launching of this research, obtained permission from the city municipality where the two comprehensive schools are located (see Appendix V, page 415).

b. Cultural sensitivity - it is important that the researcher should be familiar with the cultural milieu of the subjects being studied. Weis (1992) discusses this problem and recommends that the researcher know who he/she is, before going into the field. He claims that one should not impose one’s definitions when studying a different culture; the researcher is entering their culture, they are not entering his.
I was fortunate that I am familiar with the culture of the pupils who were the subjects of this research, and their home environment. This helped me to avoid imposing any personal cultural bias.

c. Risk of harm – Ethical standards require that researchers do not put participants in a situation where they might be at risk of harm, physical or psychological, as a result of their participation (Trochim, 1999). Psychological harm includes embarrassment, humiliation, being put under stress or being prompted to act in ways that violate the subjects’ usual standards of conduct (Berger and Patchner, 1994). Surveys asking respondents to reveal attitudes, behaviour, beliefs and personal information may be harmful in that they cause respondents to feel uncomfortable or anxious.

Careful consideration relating to “risk of harm” was necessary, to ensure that none of the participants (school, principals, teachers, pupils, parents, community) would be negatively affected by this research study or its outcomes. Public knowledge of the data used in this research, as well as the results that were arrived at, could be harmful to reputations and to the public image of all involved. Examples include: the achievement on matriculation exams in the town studied as compared to other towns in Israel; comparison of matriculation results in the experimental school with the control school; attitudes of administrators, teachers, pupils and parents regarding their school and each other.

Another consideration was the risk of stepping on the toes of teachers. Hitchcock and Hughes (1989) note that “doing participant observation or interviewing one’s peers raises ethical problems that are directly related to the nature of the research technique employed. The degree of openness or closure of the nature of the research and its aims is one that directly faces the teacher researcher”. In this research, special care was taken on
two ethical issues that were specific to this research. Firstly, in the interviews of the principals of both schools, all questions that could have bearing on the behaviours and capabilities of teachers in the school were avoided. No evaluation of specific teachers or governors was called for. It was important that the principals and teachers not feel threatened by the research. Secondly, during teachers meetings concerning the project, this writer was only a passive listener, and did not actively participate in any of the discussions.

When preparing the written questionnaires and the questions for the semi-structured interviews, the issue of psychological harm was taken into account by the careful wording of questions.

2. Ensuring protection of participants

a. Confidentiality - Confidentiality means that information about an individual is kept private, unless the investigator has obtained the explicit permission of the subject to do otherwise (Berger and Patchner, 1994, p. 95). Simons (1984, p. 88) states, “confidentiality is necessary to protect individuals from inappropriate use of information which is private to them. Rules of access and consultation give individuals opportunities to decide what to share, to reflect on what they have shared, to edit or comment upon their information in context: to control, in other words, the use of their own information”.

One way of ensuring confidentiality is the safeguarding of the information collected. In this research thesis, pupil and parent questionnaires were anonymous, and thus there was no way to determine the attitudes of a specific respondent. This served to protect the subjects’ privacy, but it prevented the “matching” of pre-test and post-test questionnaires. Matching would have
enabled comparing a particular individual’s responses at the beginning and at the end of the school year, and not just the comparison of average scores, as was the case in this research. When designing this research, I decided that protecting the respondents’ rights was more important than the ability to match pre-test and post-test questionnaires. A code system was rejected, due to its lack of practicality in these particular school settings. All teachers who participated in this study (from both schools) waived their right to anonymity. They claimed that they had nothing to hide, and were interested in knowing the results of the study.

Confidentiality is also an aspect of data dissemination.

b. Informed consent and anonymity - Smith (1980, p.193), stated that "the two most important operating principles in maintaining respect for the persons involved in one's study are informed consent and anonymity of participants." Informed consent is the process in which individuals are given the choice whether or not to participate in the study prior to their actual participation, after they have been completely informed of any possible harmful effects of the research, and are made explicitly aware that they can discontinue their involvement in the research at any time (Berger and Patchner, 1994). All the ethical codes that govern research, involving human subjects, require that the participation of individuals be completely voluntary. Burgess (1989) states that informed consent occupies a central place in ethics' literature. He claims that this term is relevant not only to field relations in ethnographic work, but also applies to survey work, statistical investigation and action research. Sabar (1998) goes beyond the idea that simple informed consent is all that is necessary in the
relationship between research participants and researchers. She argues that respondents should get information, power, and the tools to use that power, in saying how the information should be used (Halasa, 2000).

Permission to carry out this research was obtained from the educational representative of the town’s municipality, with the provision that the results remain confidential and unpublished, other than for the purpose of obtaining an academic degree (Appendix V, page 415). All participants (pupils, teachers and parents) were given the choice of whether or not to participate in the study. All questionnaires were filled out voluntarily. Interviews with the principals of both schools were conducted with their full awareness of the purpose of this research.

However, adhering to informed consent led to one of the methodological drawbacks of this research. The principal of the control school was reluctant to allow his school to participate in this study. This may be due to the fact that he was very ambivalent about implementing the project in his school right from the beginning. Whatever his reason or reasons might have been, he refused to give permission for the parents of pupils in his school to fill out questionnaires, and qualified his school’s participation in the research by allowing only four homeroom teachers and one 10th grade class of twenty-five pupils to respond to questionnaires. These restrictions, unfortunately, reduced the sample size of the control group, and eliminated a control group for parents. Ethics requires consent; in the case of the control school, the principal did not allow access to the parents in order to obtain their consent.

Once consent was obtained from the other participants, it was important to take all possible measures to preserve anonymity. Anonymity is necessary for ensuring confidentiality; it is achieved when the investigator cannot associate collected information with particular
subjects. To ensure anonymity, this study avoided mention of any details that could be used to identify the development town, the schools and the principals. Only pertinent information was presented, in order to lay the groundwork for understanding the context and the importance of this study.

c. Data dissemination - Key issues of data dissemination include: confidentiality, reporting back, use of data by policy makers and in educational practice (Burgess, 1989). Cohen and Manion (1994, p. 359) state “social researchers must take into account the effects of the research on participants, and act in such a way as to preserve their dignity as human beings”. I will take every measure possible to prevent the dissemination of data from having any repercussions on those involved.

E. Summary of Chapter Three

This research was by-and-large an objective study based on the positivistic paradigm, but also included phenomenological elements. At the outset of this chapter the methodological details were presented: the aims, objectives, research questions and research hypotheses, population, tools and research programme. This was followed by a discussion of various theoretical aspects of research methodology, and its relevance to this study. Finally, ethics in educational research was discussed, along with the measures taken by the author to preserve a high ethical standard.

* * * * *

The following chapter presents the data collected by the various tools described in this chapter: semi-structured interviews, questionnaires and documentary analysis.
Chapter Four – Findings Concerning Research Questions

Introduction

This chapter presents the findings related to the research questions, and an analysis of the results obtained from the research tools used. The focus of this research was the “Success for All” school improvement programme, implemented during the 1999-2000 school year, in the 10th grade of a religious comprehensive high school in a development town in Israel. The aims of the improvement project were: to increase the percentage of pupils who pass the national matriculation exams, to raise the pupils’ educational self-image, and to keep them in school until the end of the 12th grade in order to achieve a matriculation certificate.

To evaluate the degree of success of the SFA programme in the 10th grade, matriculation exam results of the year 2000 in the experimental school were compared with: a) the 10th grade matriculation exam results in previous years (1998 and 1999) in the experimental school, b) 10th grade matriculation exams in the control school (a secular high school in the same town), in the years 1998, 1999 and 2000, c) national 10th grade norms for the years 1999 and 2000.

Data regarding matriculation exam scores, and responses on questionnaires were compared using statistical analysis techniques. The most common test used to compare two groups was the independent groups t-test between means. A probability of less than or equal to 0.05 (p) shows that there is a significant difference between the two groups. In addition to matriculation data, this chapter examines other issues relating to the SFA improvement program.
A. Sitting for and Passing National Matriculation Exams

Introduction
As stated above, the major aim of the “Success for All” school improvement project was to increase the number of pupils eligible for a National Matriculation Certificate. This certificate enables its bearer to continue studies on a post-secondary level. It is awarded upon successfully passing exams in required subjects and in a few electives. In this section, results of national matriculation exams, that were taken by the tenth graders attending the two comprehensive high schools under study in this research, are presented and compared. Data was obtained by examining internal records from the archives of the two schools and official documents of the Israeli Ministry of Education. These results were also compared to the national percentages for these exams for the years 1999 and 2000 (Israeli Ministry of Education, 2001).
Pertinent information regarding the public availability of national matriculation exam scores in Israel

Prior to the school year 1996-1997, national matriculation exam scores for each particular exam were not made public. Each high school received a confidential report with the exam results of its pupils. Statistics pertaining to the percentage of 12th grade pupils eligible for a national matriculation certificate, and the percentage of pupils passing each specific exam in a particular school, city and nationwide were not available. Due to increasing public awareness of the linkage between matriculation results and school improvement, beginning in 1997, matriculation results listing the number and percentage of 12th grade pupils eligible for a national matriculation certificate per city, were available on the internet. From 1999, information regarding national percentages of sitting for, and passing, specific exams was publicized. Data regarding individual schools remains confidential. For the purpose of this research only, both the experimental and the control schools allowed examination of this data, beginning with the 10th grade matriculation exams of 1998.

At the end of the 1999-2000 school year, tenth grade pupils in the control school sat for two exams, Hebrew Language and History. The pupils in the experimental school, a religious comprehensive high school, took four exams during the tenth grade – Hebrew language and Oral Law at the end of the winter session (January); History and Bible at the end of the spring session (June-July) (see Chapter One, page 40). Until the implementation of the “Success for All” school improvement project all four subjects were studied for two semesters and all four exams were taken at the end of the spring session. This testing schedule is the common one in comprehensive high schools in Israel, both religious and secular. The main difference in the organization of Matriculation exams between Religious and Secular schools is that Religious schools teach some subjects that are not taught in Secular
schools. Thus, tenth graders in most Religious Comprehensive high schools take four matriculation exams in a few short weeks in the months of June and July, while pupils in Secular Comprehensive schools take only two exams in this same period.

This section examines the number of tenth grade pupils in the experimental school who sat for and the number who passed the national matriculation exams as compared to: a) the national average, b) previous years in the same school and c) the control school.

1. Sitting for National Matriculation Exams
a. Percentage of pupils sitting for matriculation exam in Hebrew Language

The percentage of pupils passing matriculation exams in a specific school is related to the number allowed to sit for these exams. In most schools in Israel, including the control school and the experimental school prior to the implementation of the school improvement program, many pupils were not encouraged to sit for one or more exams, due to a failing record in the course (Pur, 1989; Gozansky, 2002). Due to a change in policy in this development town, beginning with the academic year of 1998-1999, all pupils were allowed to sit for all matriculation exams, regardless of previous achievement in the subject. Many pupils didn’t take advantage of this opportunity, therefore, one of the aims of the SFA programme was that all pupils take all matriculation exams. To achieve this goal, pupils were actively encouraged by the staff to sit for the exams, and several phases of SFA were designed to raise the pupils’ motivation and self-image (see Chapter One, page 44). These aspects will be discussed in Chapter Five.
Figures 4.1 and 4.2 compare the percentage of 10th grade pupils sitting for the Hebrew language matriculation exam in the experimental and control schools in the years 1998-2000, and the national average. It can be seen that in 1998, only approximately 70% of the pupils sat for this exam. In 1999 there was a significant increase in the number of pupils sitting for the exam in the experimental school, probably as a result of the policy change. In 2000, another significant increase was measured, where 100% of the pupils sat for this exam (p=0.0415).

When comparing the experimental and control schools, it can be seen that for both 1999 and 2000, significantly more pupils sat for this exam in the experimental school than in the control school (p=0.001 and p=0.0148, respectively).

Comparing the experimental school and the national average shows that while in 1999 the national average (90%) was similar to that of the experimental school (93.2%), comparison with the national average in 2000 (Fig. 4.4, p. 228) shows that significantly more pupils in the experimental school took the Hebrew exam (100%; p=0.010).
<table>
<thead>
<tr>
<th>Year</th>
<th>Experimental</th>
<th>Count</th>
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<th>% within year</th>
</tr>
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<tr>
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<table>
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<th>% within year</th>
</tr>
</thead>
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</tr>
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<td></td>
<td>Population</td>
<td>6192</td>
<td>55736</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

T test 1999-2000 for experimental school: 2.059 132 0.0415*
T test 1999 for experimental and control schools: 4.111 157 0.0001*
T test 2000 for experimental and control schools: 2.463 163 0.0148*
T test 2000 experimental school and national average: 2.582 61986 0.0100*

* Statistically significant where p<0.05.

Fig 4.1: Comparison of the percentage of pupils taking the Hebrew language matriculation exam in the experimental and control schools from 1998-2000, and national average in 2000.
Fig. 4.2: A three-year comparison of the percentages of pupils taking Hebrew Language matriculation exam in the experimental and control schools and the national norm.

b. Percentage of pupils sitting for matriculation exam in history

Figures 4.3 and 4.4 compare the percentage of 10th grade pupils sitting for the history matriculation exam in the experimental and control schools in the years 1998-2000, and the national average. It can be seen that in the experimental school, the percentage of pupils taking the history matriculation exam significantly increased each year, going from 77.8% in 1998 to 100% in 2000 (p=0.005 from 1999-2000). (Policy changes in the school were factors in this increase – see Chapter Five, page 320.)

Comparison of the percentages of pupils who took the exams in the experimental and control schools in 1999 does not show any significant differences (p=0.2161). However, in 2000 there was a significant difference between the two schools: 100% took the exam in the experimental school compared to 89.5% in the control school (p=0.010).

Comparing the experimental school and the national average shows that while in 1999 the national average was higher (88%) than the experimental school (81.1%), in 2000 this was reversed; in the experimental school 100% took the history exam while the national average was 88% (p=0.0043).
Percentage of pupils sitting for History matriculation exam in the experimental and control schools and population

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<thead>
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<th>Year</th>
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<th>Yes</th>
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<td></td>
<td>% within year</td>
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<td>Control</td>
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<td>95</td>
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<td></td>
<td>% within year</td>
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<td></td>
<td>% within year</td>
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<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
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<td>Control</td>
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<td></td>
<td>% within year</td>
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<td>% within year</td>
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<td>T test 1999 for experimental and control schools</td>
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<td>0.2161</td>
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<td>T test 2000 for experimental and control schools</td>
<td>2.598</td>
<td>163</td>
<td>0.0102*</td>
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<tr>
<td>T test 2000 experimental school and national average</td>
<td>2.860</td>
<td>43669</td>
<td>0.0043*</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Fig. 4.3: Comparison of the percentage of 10th grade pupils taking the history matriculation exam in the experimental and control schools in the years 1999-2000, and national norm in 2000.
c. **Percentage of pupils sitting for matriculation exam in Bible**

Fig. 4.5 compares the percentage of 10th grade pupils sitting for the Bible matriculation exam in the experimental school in the years 1998, 1999 and 2000. It can be seen that while in years 1998 and 1999 less than 80% of the pupils sat for the exam, in 2000, (year of the SFA programme), 100% of the pupils sat for it. Significantly more pupils took the exam in 2000 than in 1999 (p=0.0001).

The Bible Matriculation Exam was not given in tenth grade in the control school; therefore data from the experimental school was compared only with the national average. In 1999 the number of pupils in the experimental school who sat for the Bible exam was below the national average (75.7% vs. 86%) and in 2000 more pupils sat for the exam than the national average (100% vs. 87%) (p=0.0028).
### Percentage of pupils sitting for the Bible matriculation exam in the experimental school and population

<table>
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<tbody>
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<td></td>
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</tr>
<tr>
<td>1998- Experimental</td>
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<td>42</td>
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<tr>
<td></td>
<td>% within year</td>
<td>22.2%</td>
<td>77.8%</td>
</tr>
<tr>
<td>1999-Experimental</td>
<td>Count</td>
<td>18</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td>24.3%</td>
<td>75.7%</td>
</tr>
<tr>
<td>2000-Experimental</td>
<td>Count</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td>0</td>
<td>100.0%</td>
</tr>
<tr>
<td>2000 - Population</td>
<td>Count</td>
<td>6797</td>
<td>45487</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td>13%</td>
<td>87%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>T test 1999-2000</td>
<td>4.104</td>
<td>132</td>
<td>0.0001*</td>
</tr>
<tr>
<td>T test 2000</td>
<td>2.994</td>
<td>52342</td>
<td>0.0028*</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Fig. 4.5: Comparison of the percentage of pupils taking the Bible matriculation exam in the experimental school in the years 1998-2000, and national average in 2000.

### d. Percentage of pupils sitting for matriculation exam in Oral Law

Fig. 4.6 compares the percent of 10th grade pupils sitting for matriculation exams in the experimental school in Oral Law for the years 1998, 1999 and 2000. In 1998 only 55.6% of the pupils took the exam. This increased to 83.8% in 1999, and in 2000, (year of the SFA programme), 100% sat for the oral law exam. Significantly more pupils took the exam in 2000 than in 1999 (p=0.0014).

The pupils in the control school did not take this exam. In addition, the Oral Law exam is not a nationally standard exam; each individual school composes it. For this reason a national average regarding this exam is not compiled.
### Percentage of pupils sitting for the Oral Law matriculation exam in the experimental school

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
<th>% within year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>24</td>
<td>44.4%</td>
<td>54</td>
</tr>
<tr>
<td>1999</td>
<td>12</td>
<td>16.2%</td>
<td>74</td>
</tr>
<tr>
<td>2000</td>
<td>0</td>
<td>0</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
<th>% within year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>30</td>
<td>55.6%</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>62</td>
<td>83.8%</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>60</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.267</td>
<td>132</td>
<td>0.0014*</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Fig. 4.6: Comparison of the percentage of pupils taking the Oral Law matriculation exam in the experimental school from 1998-2000.

**Summary of percentage of pupils sitting for 10th grade matriculation exams**

In the experimental school, in the year 2000, all the tenth grade pupils sat for all four matriculation exams. In all four exams there was a significant increase in the number of pupils who sat for each exam from the year 1999 to 2000: Hebrew language – 93.2% vs. 100% (p=0.0415); history – 81.1% vs. 100% (p=0.0005); Bible – 75.5% vs. 100% (p=0.0001); Oral Law – 83.3% vs. 100% (p=0.0014). When comparing the experimental and control schools regarding the two common exams, Hebrew language and history for the year 2000, significantly more experimental school pupils sat for both of these exams: Hebrew language – 100% vs. 90.5% (p=0.0148); and history– 100% vs. 89.5% (p=0.0102). In addition, in the year 2000, significantly more pupils from the experimental school took the Hebrew language history and Bible exams, with a significant increase in the percentage of pupils sitting for each exam from 1999 to 2000.
matriculation exams (p= 0.010, p=0.0043 and p=0.0028, respectively), than the national average.

2. Passing National Matriculation Exams

This section presents achievement data of 10\textsuperscript{th} grade pupils in the experimental and control schools, on their national matriculation exams, for three academic years, 1998-2000. Pupils in the control school took two matriculation exams in the 10\textsuperscript{th} grade: Hebrew language and history.

Results of the Hebrew language and history exams in the experimental and control schools are compared for statistical significance. National norms for the year 2000 are presented, and compared with the results in the experimental and control schools.

Figures 4.7 to 4.15 present the number of pupils who passed and failed each exam. The number of pupils who failed includes those that did not take the exam. It does not matter if they failed the exam or that they simply did not sit for it; they are not eligible for a National Matriculation Certificate.

a. Passing the matriculation exam in Hebrew language

Fig. 4.7 shows that in 1998 and 1999 in the 10\textsuperscript{th} grade in the experimental school, there was no significant difference in the percentage of pupils passing the Hebrew Language matriculation exam: 55.6\% in 1998 and 62.2\% in 1999 (p=0.4541). However, in 2000, a significant increase was observed; 95\% of the pupils passed the exam (p=0.000).

The experimental school shows a general trend of increase in the number of pupils passing the Hebrew language exam over three years. To test if the increase from 1999-2000 is simply part of the general trend, the Chi-Square Goodness of Fit Test was performed. This test compares the observed result with the expected result. The general trend from 1998-1999 shows an increase of 6.6\%. If this same increase continued we would expect a result of 68.8\% passing the exam in 2000. The actual result obtained is 95\%. The Chi-Square Goodness of Fit Test shows a significance of 0.000; the results in
2000 are more than expected if the general trend from the previous year continued.

Figure 4.7 and compares the percentage of 10th grade pupils passing the Hebrew language matriculation exam in the experimental and control schools in the years 1998-2000. It can be seen that although there was a significant increase in both schools between 1999 and 2000, significantly more experimental school pupils passed the Hebrew language exam in 2000 than control school pupils (p= 0.0004).
<table>
<thead>
<tr>
<th>Year</th>
<th>School Type</th>
<th>Count</th>
<th>Failed</th>
<th>Passed</th>
<th>Total</th>
<th>% within year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>Experimental</td>
<td>24</td>
<td>30</td>
<td>54</td>
<td></td>
<td>44.4%</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>51</td>
<td>44</td>
<td>95</td>
<td></td>
<td>53.7%</td>
</tr>
<tr>
<td>1999</td>
<td>Experimental</td>
<td>28</td>
<td>46</td>
<td>74</td>
<td></td>
<td>38.7%</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>58</td>
<td>36</td>
<td>94</td>
<td></td>
<td>61.7%</td>
</tr>
<tr>
<td>2000</td>
<td>Experimental</td>
<td>3</td>
<td>57</td>
<td>60</td>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>75</td>
<td>105</td>
<td></td>
<td>28.6%</td>
</tr>
</tbody>
</table>

Value df  p

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-test 1998-1999 for experimental school</td>
<td>0.751</td>
<td>126</td>
<td>0.4541</td>
</tr>
<tr>
<td>T-test 1998-1999 for control school</td>
<td>1.122</td>
<td>187</td>
<td>0.2631</td>
</tr>
<tr>
<td>T-test 1999-2000 for experimental school</td>
<td>4.479</td>
<td>132</td>
<td>0.000*</td>
</tr>
<tr>
<td>T-test 1999-2000 for control school</td>
<td>5.231</td>
<td>197</td>
<td>0.000*</td>
</tr>
<tr>
<td>T-test 1999 for experimental and control schools</td>
<td>3.077</td>
<td>166</td>
<td>0.0024*</td>
</tr>
<tr>
<td>T-test 2000 for experimental and control schools</td>
<td>3.644</td>
<td>163</td>
<td>0.0004*</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Fig. 4.7: Comparison of the percentage of pupils passing the Hebrew language matriculation exam in the experimental and control schools from 1998-2000.

Figure 4.8 compares the experimental and control schools and the national norm for the year 2000. It can be seen that there was no significant difference between the experimental school and the national norm (p=0.0815). This is in contrast to 1999, when considerably less experimental school pupils
passed the Hebrew language exam than nationally (62.2% vs. 87.71, p=0.000).

<table>
<thead>
<tr>
<th>SUBJECT – Hebrew Language</th>
<th>Year- 2000</th>
<th>Failed</th>
<th>Passed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>Count</td>
<td>30</td>
<td>75</td>
<td>105</td>
</tr>
<tr>
<td>% within school</td>
<td>28.6%</td>
<td>71.4%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>experimental</td>
<td>Count</td>
<td>3</td>
<td>57</td>
<td>60</td>
</tr>
<tr>
<td>% within school</td>
<td>5.0%</td>
<td>95.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>population</td>
<td>Count</td>
<td>7698</td>
<td>54230</td>
<td>61928</td>
</tr>
<tr>
<td>% within school</td>
<td>12.43%</td>
<td>87.57%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-test experimental school and population</td>
<td>1.744</td>
<td>61986</td>
</tr>
<tr>
<td>T-Test control school and population</td>
<td>5.013</td>
<td>62031</td>
</tr>
<tr>
<td>T-test experimental and control schools</td>
<td>3.644</td>
<td>163</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Fig. 4.8: Comparison of the percentage of pupils passing the Hebrew Language matriculation exam in 2000 in the experimental and control schools and the total population.

Figure 4.9 graphically compares the percentages of pupils passing the Hebrew language matriculation exams for three years, and the national norms for 1999 and 2000. National data for 1998 was not available.
b. **Passing the matriculation exam in history**

Figure 4.10 compares the percentage of 10th grade pupils passing the history matriculation exam in the experimental and control schools in the years 1998-2000. The data shows that in the experimental school, there was no significant difference between the percentage of pupils passing this exam between 1998 and 1999: 51.9% and 63.5% of the pupils in the experimental school passed this exam, respectively (p=0.196). However, between 1999 and 2000, a significant increase was observed; 95% of the pupils passed the exam in 2000 (p=0.0001).

The experimental school shows a general trend of increase in the number of pupils passing the history exam over three years. To test if the increase from 1999-2000 is simply part of the general trend, the Chi-Square Goodness of Fit Test was performed. This test compares the observed result with the expected result. The general trend from 1998-1999 shows an increase of 11.6%. If this same increase continued we would expect a result of 75.1% passing the exam in 2000. The actual result obtained is 93.3%. The Chi-
Square Goodness of Fit Test shows a significance of 0.0001; the results in 2000 are more than expected if the general trend from the previous year continued.

<table>
<thead>
<tr>
<th>Year</th>
<th>Group</th>
<th>Count</th>
<th>Failed</th>
<th>Passed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998- Experimental</td>
<td></td>
<td></td>
<td>26</td>
<td>28</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td></td>
<td>48.1%</td>
<td>51.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>1998-Control</td>
<td></td>
<td></td>
<td>65</td>
<td>30</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td></td>
<td>68.4%</td>
<td>31.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>1999-Experimental</td>
<td></td>
<td></td>
<td>27</td>
<td>47</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td></td>
<td>36.5%</td>
<td>63.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>1999-Control</td>
<td></td>
<td></td>
<td>46</td>
<td>48</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td></td>
<td>48.9%</td>
<td>51.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>2000-Experimental</td>
<td></td>
<td></td>
<td>4</td>
<td>56</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td></td>
<td>6.7%</td>
<td>93.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>2000-Control</td>
<td></td>
<td></td>
<td>26</td>
<td>79</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>% within year</td>
<td></td>
<td>24.8%</td>
<td>75.2%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

| T-test 1998-1999 for experimental school | 1.316 | 126 | 0.1906 |
| T-test 1998-1999 for control school    | 2.537 | 187 | 0.0120*|
| T-test 1999-2000 for experimental school | 4.066 | 132 | 0.0001*|
| T-test 1999-2000 for control school    | 4.558 | 197 | 0.0000*|
| T-test 1999 for experimental and control schools | 1.610 | 166 | 0.1094 |
| T-test 2000 for experimental and control schools | 2.898 | 163 | 0.0043*|

*Statistically significant where p<0.05.

Fig. 4.10: Comparison of the percentage of pupils passing the History matriculation exam in the experimental and control schools from 1998-2000.
Figure 4.11 compares the experimental and control schools and the national norm for the year 2000. It can be seen that significantly more experimental school pupils passed the history exam than nationally (p=0.0137). This is in contrast to 1999, when considerably less experimental school pupils passed the history exam than nationally (63.5% vs. 80%, p=0.000).

When comparing the experimental and control schools in 2000, it can be seen that although there was a significant increase in both schools between 1999 and 2000, significantly more experimental school pupils passed the history exam in 2000 (p= 0.0043).

<table>
<thead>
<tr>
<th>SUBJECT – History</th>
<th>Year - 2000</th>
<th>Failed</th>
<th>Passes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>Count</td>
<td>26</td>
<td>79</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>% within school</td>
<td>24.8%</td>
<td>75.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>experimental</td>
<td>Count</td>
<td>4</td>
<td>56</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>% within school</td>
<td>6.7%</td>
<td>93.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>population</td>
<td>Count</td>
<td>8422</td>
<td>35239</td>
<td>43661</td>
</tr>
<tr>
<td></td>
<td>% within school</td>
<td>19.29%</td>
<td>80.71%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-test experimental school and population</td>
<td>2.471</td>
<td>43719</td>
<td>0.0137*</td>
</tr>
<tr>
<td>T-Test control school and population</td>
<td>1.429</td>
<td>43764</td>
<td>0.1534</td>
</tr>
<tr>
<td>T-test experimental and control schools</td>
<td>2.898</td>
<td>163</td>
<td>0.0043*</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Table 4.11: Comparison of the percentage of pupils passing the history matriculation exam in the experimental and control schools and the total population in 2000.

Figure 4.12 graphically compares the percentages of pupils passing the history matriculation exams for three years, and the national norms for 1999 and 2000. National data for 1998 was not available.
c. Passing the matriculation exam in Bible

Fig. 4.13 presents the percentage of 10th grade pupils from the experimental school who passed the Bible matriculation exam for the years 1998-2000, and the percentage who passed the exam from the total population. The Bible matriculation exam was not given in tenth grade in the control school, therefore data from the experimental school was compared only with the national norm.

It can be seen that there was a significant increase in the percentage of experimental school pupils passing the exam in 2000, as compared to 1999 (p=0.000). This is in contrast to the previous year, where no significant improvement was measured between 1998 and 1999.

The trend from 1998-1999 shows an increase of 1.2%. If this same increase continued we would expect a result of 58% passing the exam in 2000. The actual result obtained is 93.3%. The Chi-Square Goodness of Fit Test shows a significance of 0.000, showing that the results in 2000 are more than expected if the trend from the previous year continued.
When comparing the results of the experimental school pupils with the national average, we can see that a significantly higher percentage of pupils from the experimental school passed this exam in 2000, as compared to the total population (p=0.0004). This is in contrast to 1999, where significantly fewer experimental school pupils passed the exam than pupils nationally (56.8% vs. 86.2%, p=0.000).

<table>
<thead>
<tr>
<th>Percentage of pupils passing the Bible matriculation exam</th>
<th>Failed</th>
<th>Passed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998 – Experimental school</td>
<td>Count</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>% within year</td>
<td>44.4%</td>
<td>55.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>1999 – Experimental school</td>
<td>Count</td>
<td>32</td>
<td>42</td>
</tr>
<tr>
<td>% within year</td>
<td>43.2%</td>
<td>56.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>2000 – Experimental school</td>
<td>Count</td>
<td>4</td>
<td>56</td>
</tr>
<tr>
<td>% within year</td>
<td>6.7%</td>
<td>93.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>2000 – Total population</td>
<td>Count</td>
<td>16935</td>
<td>45349</td>
</tr>
<tr>
<td>% within year</td>
<td>27.19%</td>
<td>72.81%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T-test 1998-1999 Experimental school</th>
<th>Value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.135</td>
<td>126</td>
<td>0.8927</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T-test 1999-2000 Experimental school</th>
<th>Value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.740</td>
<td>132</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T-test 2000 Experimental school and population</th>
<th>Value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.566</td>
<td>62342</td>
<td>0.0004*</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05

Fig. 4.13: Comparison of the percentage of pupils passing the Bible matriculation exam in the experimental school from 1998-2000, and nationally in 2000.

d. Passing the matriculation exam in Oral Law

Fig. 4.14 compares the percentage of 10th grade pupils passing the Oral Law matriculation exam from the years 1998-2000. Results show a significant
increase in the number of pupils passing the exam in 2000, as compared to 1999 (p=0.0428).

The Oral Law matriculation exam is prepared by each individual school, and is therefore not uniform for the entire country, as was the case for the three previously described matriculation exams. In addition, this exam is not given in the control school. For this reason, the experimental school data was not compared to other schools.

<table>
<thead>
<tr>
<th>Percentage of pupils passing the Oral Law matriculation exam</th>
<th>Failed</th>
<th>Passed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998 – Experimental school</td>
<td>Count</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>% within year</td>
<td></td>
<td>44.4%</td>
<td>55.6%</td>
</tr>
<tr>
<td>1999 – Experimental school</td>
<td>Count</td>
<td>12</td>
<td>62</td>
</tr>
<tr>
<td>% within year</td>
<td></td>
<td>16.2%</td>
<td>83.8%</td>
</tr>
<tr>
<td>2000 – Experimental school</td>
<td>Count</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>% within year</td>
<td></td>
<td>5%</td>
<td>95%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-test 1998-1999 Experimental school</td>
<td>3.506</td>
<td>126</td>
</tr>
<tr>
<td>T-test 1999-2000 Experimental school</td>
<td>2.045</td>
<td>132</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Fig. 4.14: Comparison of the percentage of pupils passing the Oral Law matriculation exam in the experimental school from 1998-2000.
e. Summary of passing 10th grade national matriculation exams

Figure 4.15 compares graphically the percentage of pupils passing the national matriculation exams in the experimental school in the years 1998-2000. Figure 4.16 summarizes the percentages of the 10th grade experimental school pupils passing the four matriculation exams and as compared with the control school and the national average.

![Comparison of the percentage of pupils passing the national matriculation exams in the experimental school in 1998-2000](image)

- **Fig. 4.15**: Comparison of the percentage of pupils passing the national matriculation exams in the experimental school from 1998-2000.
<table>
<thead>
<tr>
<th></th>
<th>Experimental school with itself</th>
<th>Experimental school with control school</th>
<th>Experimental school prediction based on Goodness of Fit test</th>
<th>Experimental school with national average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hebrew Language</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison of 1998 and 1999</td>
<td>No significant change</td>
<td>Experimental significantly higher than control</td>
<td></td>
<td>Experimental significantly lower than national in 1999</td>
</tr>
<tr>
<td>Comparison of 1999 and 2000</td>
<td>Significant increase</td>
<td>Experimental significantly higher than control</td>
<td>Higher than the expected trend</td>
<td>No significant difference (experimental school average higher than national) in 2000</td>
</tr>
<tr>
<td><strong>History</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison of 1998 and 1999</td>
<td>No significant change</td>
<td>No significant difference</td>
<td></td>
<td>Experimental school significantly lower than national in 1999</td>
</tr>
<tr>
<td>Comparison of 1999 and 2000</td>
<td>Significantly higher</td>
<td>Experimental significantly higher than control</td>
<td>Higher than the expected trend</td>
<td>Experimental significantly higher than national in 2000</td>
</tr>
<tr>
<td><strong>Bible</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison of 1998 and 1999</td>
<td>No significant change</td>
<td>Not applicable</td>
<td></td>
<td>Experimental significantly lower than national in 1999</td>
</tr>
<tr>
<td>Comparison of 1999 and 2000</td>
<td>Significantly higher</td>
<td>Not applicable</td>
<td>Higher than the expected trend</td>
<td>Experimental significantly higher than national in 2000</td>
</tr>
<tr>
<td><strong>Oral Law</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison of 1998 and 1999</td>
<td>Significantly higher</td>
<td>Not applicable</td>
<td>Statistically non-applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Comparison of 1999 and 2000</td>
<td>Significantly higher</td>
<td>Not applicable</td>
<td>Statistically non-applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Figure 4.16: Comparison of the success on 10th grade matriculation exams.
It can be seen that in the experimental school there was a significant increase in the percentage of pupils passing all four exams in the year 2000, as compared to 1999. This is in contrast to the previous year, where no significant increase was observed between 1998 and 1999 for any of the three standardized matriculation exams, Hebrew language, history and Bible.

When comparing the experimental and control schools in 2000, in the two exams taken by both the experimental and control school pupils, Hebrew language and history, the percentage of success in the experimental school was significantly higher than in the control school. In 1999 there was no significant difference between schools in the history exam, but a significantly higher percentage of experimental school pupils passed the Hebrew language exam than the control school pupils.

When comparing the experimental school with the national average, in 1999, a significantly lower percentage of experimental school pupils passed all three standardized exams (Hebrew language, history and Bible). However, in 2000, a significantly higher percentage of experimental school pupils passed the Bible and history exams than the national average; results of the Hebrew language exam compared favorably with the national norm.

### 4. Summary of Findings Regarding Matriculation Exams

This section presented data for the years 1998-2000, regarding the percentage of pupils who sat for and the percentage of pupils who passed national matriculation exams in four subjects: Hebrew language, history, Oral Law and Bible. The Hebrew language and history exam results from the experimental school were compared with the control school and the national average.

The data shows that in the year 2000, following the implementation of the SFA project, 100% of the 10th grade experimental school pupils sat for all
four of their matriculation exams, and there was a higher than 93% rate of passing in each exam. When compared to the control school, a significantly higher percentage of pupils in the experimental school passed both the Hebrew language and the history exams.

It can be seen that in the experimental school there was a significant increase in the percentage of pupils passing all four exams in the year 2000, as compared to 1999. This is in contrast to the previous year, where no significant increase was observed between 1998 and 1999 for any of the three standardized matriculation exams, Hebrew language, history and Bible. When comparing the experimental and control schools in 2000, it can be seen, that in the two exams taken by both the experimental and control school pupils, Hebrew language and history, the percentage of success in the experimental school was significantly higher than in the control school. In 1999 there was no significant difference between schools in the history exam, but significantly more experimental school pupils passed the Hebrew language exam than in the control school.

When comparing the experimental school and the national average in 1999, a significantly lower percentage of experimental school pupils passed the three standardized exams (Hebrew language, history and Bible). However, in 2000, a significantly higher percentage of experimental school pupils passed the Bible and history exams than nationally, and the percentage of experimental school pupils passing the Hebrew language exam compared favorably with the national norms.
B. Dropout Rate

Introduction

School dropout is an important issue in Israeli schools. Religious schools commonly have higher dropout rates than secular schools (Sprinzak et al., 2001). The religious high school studied in this research experienced a very high dropout rate from the 10th to 11th grade, of more than 30%, in the school years 1993-1994 and 1994-1995.

Changes in school policy aimed at keeping pupils in school brought about steady improvement, so that in the 1997-1998 school year this dropout rate was down to less than 10%. The key policy change that contributed to the significant lowering of the dropout rate was the abolishment of vocational tracks in the town’s two high schools. In the 1995-1996 school year, all pupils began to study in academic-matriculation tracks. A further policy change took place beginning in the 1998-1999 school year, when all pupils were allowed to sit for matriculation exams, regardless of their class average in the subject. This probably further reduced the dropout rate (see Fig. 4.17).

One of the aims of the SFA programme was to keep all pupils in school until graduation, at the end of the 12th grade. It was surmised, that in order to maintain a low dropout rate, it was crucial that weaker pupils be helped in order to pass their matriculation exams. If pupils failed their matriculation exams, they would lose interest in staying in school; the high dropout rates of the first half of the 1990s would return.

This section examines the following hypothesis: In the year 2000, no 10th grade pupils will drop out of school and not continue on to the 11th grade, because of failure on exams.
Comparison of 10\textsuperscript{th} to 11\textsuperscript{th} grade dropout rates in the experimental school, the control school, and national rates

Figures 4.17 and 4.18 present the dropout rate of pupils from the experimental school at the end of the 10\textsuperscript{th} grade, for the years 1994-2000. Each line of the table represents a group that began its studies in the 10\textsuperscript{th} grade, and then continued on to the 11\textsuperscript{th} grade in the same school.

It can be seen that following the implementation of the SFA programme in the experimental school, all sixty 10\textsuperscript{th} grade pupils continued on to the 11\textsuperscript{th} grade (Fig. 4.17). The positive trend in reducing the dropout rate in the school reached the ultimate goal of zero percent. This compared very favorably with a 7.62% dropout rate in the control school and 11.5% nationally (Fig. 4.19). Dropout rates in the control school for years prior to 2000 were unavailable, so a comparison with previous years could not be made.

<table>
<thead>
<tr>
<th>School</th>
<th>Year Sept.</th>
<th>No. pupils in 10\textsuperscript{th} grade</th>
<th>Year Sept.</th>
<th>No. pupils in 11\textsuperscript{th} grade*</th>
<th>No. dropouts from 10\textsuperscript{th} – 11\textsuperscript{th} grade</th>
<th>% dropout from 10\textsuperscript{th} to 11\textsuperscript{th} grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>1993</td>
<td>77</td>
<td>1994</td>
<td>53</td>
<td>24</td>
<td>31.17</td>
</tr>
<tr>
<td>Experimental</td>
<td>1994</td>
<td>79</td>
<td>1995</td>
<td>50</td>
<td>29</td>
<td>36.71</td>
</tr>
<tr>
<td>Experimental</td>
<td>1995</td>
<td>54</td>
<td>1996</td>
<td>47</td>
<td>7</td>
<td>12.96</td>
</tr>
<tr>
<td>Experimental</td>
<td>1996</td>
<td>77</td>
<td>1997</td>
<td>65</td>
<td>12</td>
<td>15.58</td>
</tr>
<tr>
<td>Experimental</td>
<td>1997</td>
<td>65</td>
<td>1998</td>
<td>60</td>
<td>5</td>
<td>7.69</td>
</tr>
<tr>
<td>Experimental</td>
<td>1998</td>
<td>66</td>
<td>1999</td>
<td>64</td>
<td>2</td>
<td>3.03</td>
</tr>
<tr>
<td>Experimental</td>
<td>1999</td>
<td>60</td>
<td>2000</td>
<td>60</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* No new pupils were admitted to the school in 11\textsuperscript{th} grade

Fig. 4.17: Percentage of 10\textsuperscript{th} grade dropouts in the experimental school for the years 1994-2000.
Fig. 4.18: Percentage of 10th grade dropouts in the experimental school, 1994-2000.

Fig. 4.19: Percentage of 10th grade dropouts in the experimental and control schools and total population in the year 2000.

In summary, these findings show that the hypothesis was confirmed: In the year 2000 no tenth grade pupils will drop out of school and not continue on to the 11th grade.
C. School Image

Introduction

Although the aims of the “Success for All” school improvement project were to increase the number of pupils passing their matriculation exams and to keep all pupils in school until graduation, it was also suggested that the implementation of this program would raise the school image as perceived by the teachers, pupils and their parents. School image has been defined by Renihan and Renihan (1988, p. 82) as “the sum of subjective opinions about the quality of the learning and social environment....the collective ‘feeling’ developed by the various publics as a result of their observations and experiences of the school.”

Lack of success on national matriculation exams lowers school image in the eyes of parents, pupils and teachers. The school is blamed for the poor rate of success; this leads to the transfer of pupils to other schools. It was hypothesized that the new program, with all its effort to raise achievement and to involve parents, would bring about an improved school image. This would encourage the top pupils to remain in school, thus raising the future overall level of achievement in the school.

Information regarding school image was obtained from questionnaires given to pupils and parents both before and after implementation of the SFA project (at the beginning and at the end of the 1999-2000 school year). Respondents were asked to rate statements on a four-point scale – strongly disagree (1), disagree (2), agree (3) and strongly agree (4). The ratings for each statement were tallied, and the average rating was calculated - the higher the score the more agreement with the statement. In the following figures, the average (mean) score is presented for each statement, together with the standard deviation. T-tests were performed to determine if there was a significant difference between the responses of two groups: pre and
post for a particular school; pre-pre comparing both schools; post-post comparing both schools.

This section is divided into two parts:

1. School image in the eyes of the pupils
2. School image in the eyes of the parents as reflected by their satisfaction with the school.

School image in the eyes of the pupils was compared at the beginning and at the end of the 1999-2000 school year, for both the experimental and control schools. All sixty 10th grade pupils attending the experimental school, and a random sample of 25 10th grade pupils from the control school filled out questionnaires at the beginning and end of the 1999-2000 school year.

School image, in the eyes of the parents of all 60 pupils in the experimental school, was compared at the beginning and end of the 1999-2000 school year. Parents from the control school did not participate. The control school decided not to implement the “Success for All” program, and did not want to involve parents in filling out any questionnaires (see page 187).

1. **School image in the eyes of the pupils***

School image in the eyes of the pupils was examined by statement 21 on the pupil questionnaire: “This school is a good place in which to learn”. The results are presented in Figures 4.20 and 4.21.

*School image in the eyes of the teachers can be found in Section F.*
Fig. 4.21: Comparison of the school image in the eyes of the pupils from the experimental and control schools.

Fig. 4.20 compares the school image at the beginning and end of the school year for both schools. It can be seen that pupils in the experimental school expressed a significantly higher appraisal of their school at the end of the year, than they did at the beginning, prior to the program's implementation (p=0.00). This is in contrast to the control school, whose pupils did not show any significant change regarding school image (p=0.060).

At the beginning of the school year, the pupils from both schools expressed similar attitudes regarding their school (p=0.484). However, by the end of the school year, a significant gap emerged between the two pupil populations (p=0.000); the experimental school rated their school much higher than did the pupils in the control school. This gap is depicted graphically in Figure 4.21.
2. School image in the eyes of the parents

One of the hypotheses of this research was that the implementation of the school improvement program would raise the school's image in the eyes of the parents. This factor was considered important: a higher school image would prevent parents of stronger pupils from sending their children to schools outside their hometown, thus contributing to a higher level of achievement in the schools in their home town (see Chapter One, page 4). To measure school image, questionnaires were given to parents of all 60 pupils in the experimental school to determine the level of their satisfaction with the school. The following statements examined the school image in the eyes of the parents:

a. I am satisfied with the level of achievement in the school (statement 21).
b. I am satisfied with the quality of discipline in the school (statement 23).

c. I am satisfied with the attitude of the teachers towards my child (statement 9).

d. Teachers do all they can to ensure my child’s success (statement 27).

<table>
<thead>
<tr>
<th>I am satisfied with the level of achievement in the school (statement 21)</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Stdv.</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>60</td>
<td>2.10</td>
<td>0.510</td>
<td>-2.605</td>
<td>0.0086*</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>2.36</td>
<td>0.581</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Fig. 4.22: Satisfaction of parents in the experimental school as to level of achievement.

Fig. 4.22 shows that although there was a significant increase at the end of the school year, as compared to the beginning (p=0.0086), parents were still not satisfied with the level of achievement in the school.

<table>
<thead>
<tr>
<th>I am satisfied with the quality of discipline in the school (statement 23)</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>60</td>
<td>2.42</td>
<td>0.65</td>
<td>-5.019</td>
<td>0.000*</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>2.97</td>
<td>0.55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Fig. 4.23: Parents’ satisfaction with the quality of discipline in the school.

Fig. 4.23 shows that there was a significant increase in parental satisfaction with the quality of discipline at the end of the school year, as compared to the beginning of the school year (p=0.000).
c. *I am satisfied with the attitude of teachers towards my child (statement 9)*

<table>
<thead>
<tr>
<th>I am satisfied with the attitude of the teachers towards my child (statement 9)</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>60</td>
<td>2.20</td>
<td>0.78</td>
<td></td>
<td>-11.880</td>
<td>0.000*</td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>3.63</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Fig. 4.24: Parents' satisfaction regarding the attitude of the teachers in the experimental school towards their child.

Fig. 4.24 shows a significant increase in parental satisfaction with the attitude of the teachers at the end of the school year, as compared to the beginning of the school year (p=0.000).

d. *Teachers do all they can to ensure my child's success (statement 27)*

<table>
<thead>
<tr>
<th>Teachers do all they can to ensure my child's success (statement 27)</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>60</td>
<td>2.60</td>
<td>0.76</td>
<td></td>
<td>-7.341</td>
<td>0.000*</td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>3.47</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Fig. 4.25: Parents' belief that teachers in the experimental school do all they can to ensure their child's success.

It can be seen from Fig. 4.25 that there was a significant increase in the belief of parents, at the end of the school year, as to the efforts of the teachers to ensure their child's success, when compared with the beginning of the school year (0.000).

In summary, Figure 4.26 compares graphically parental perception of factors concerned with school image. It can be seen that at the end of the year parents had a higher image of the school than at the beginning. Despite their increased satisfaction with the level of achievement, they were still not satisfied. All increases were statistically significant (see above tables).
Summary of school image

This section examined school image in the eyes of pupils in both schools and of parents in the experimental school. Pupils in the experimental school expressed a significantly higher evaluation of their school at the end of the year, than they did at the beginning, prior to the program’s implementation. This is in contrast to the control school, whose pupils did not show a significant change regarding school image.

Parents in the experimental school expressed a significant increase in their satisfaction with the level of achievement, the quality of discipline, the attitude of the teachers and the efforts of the teachers to ensure their child’s success, when compared to the beginning of the school year. They were satisfied with discipline, teacher attitudes and effort, but were still not satisfied with the level of achievement in the school.

Chapter Five, page 336 discusses the possible effects of the SFA programme on the improved school image.
D. Educational Self-image and Perception Regarding
Success

Introduction

One of the hypotheses of this thesis was that the “Success for All” school improvement program would heighten the pupils’ educational self-image at the end of the school year, as opposed to the beginning of the school year. This is compared to the educational self-image of pupils in the control school, who did not experience this new program. Educational self-image is an important factor in the pupil motivation to succeed. When pupils perceive that they lack the capability to succeed, they usually don’t try very hard, and it becomes a self-fulfilling prophecy. Since they feel that they have no chance of passing the National Matriculation Exams, they do not try very hard (Chaim, 2000).

An important element in the SFA programme was the teachers’ belief in their pupils’ ability to succeed. This program was based on the assumption that all pupils can succeed, a point constantly stressed by all teachers involved in the project (see Chapter One, page 30). In addition, pupils received individual attention, in an effort to bring out the best in each one. It was hypothesized that these actions would serve to bring about an increase in the pupils’ self image, thereby raising motivation, thus increasing efforts to succeed, and finally bringing about a higher percentage of success on the matriculation exams.

This section includes:

1. Pupils’ educational self-image
2. Teachers’ perception of pupils’ ability
1. Pupils' Educational Self-image

Assessment of the pupils' educational self-image was comprised of two basic components:

a. Pupils' perception of their own self-image – this category includes 4 statements: I believe that I will succeed in my matriculation exams (statement 1); I am sure that I will take all my exams (statement 13); I have been successful in my exams in the past (statement 2) and I feel that I will receive high grades (statement 12).

b. Pupils' perceptions of how others assess their chances for success

1. Pupils' perception of how their teachers perceive their chances for success: My teachers believe that I will succeed in my exams (statement 8).

2. Pupils' perception of how their parents perceive their chances for success: My parents believe that I will succeed in my exams (statement 10).

3. Pupils' perception of how their friends perceive their chances for success: My friends believe that I will succeed in my exams (statement 4).

Sixty 10th grade pupils attending the experimental school, and twenty-five 10th grade pupils from the control school, filled out questionnaires at the beginning and at the end of the 1999-2000 school year.
a. **Pupils perception of their own self-image**

This category examines responses to four statements on the pupil questionnaires.

1. **I believe that I will succeed in my matriculation exams (statement 1)**

<table>
<thead>
<tr>
<th>I believe I will succeed in my matriculation exams (statement 1)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exp</td>
<td>Pre</td>
<td>60</td>
<td>3.22</td>
<td>0.67</td>
<td>-2.473</td>
<td>0.015*</td>
</tr>
<tr>
<td></td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.48</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Pre</td>
<td>25</td>
<td>3.48</td>
<td>1.12</td>
<td>0.905</td>
<td>0.370</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Post</td>
<td>25</td>
<td>3.28</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exp. Control - Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.579</td>
<td>0.122</td>
</tr>
<tr>
<td></td>
<td>Exp. Control - Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.126</td>
<td>0.269</td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.27: Comparison of pupils' belief as to their likelihood to succeed on matriculation exams, in experimental and control schools.

Figure 4.27 shows that pupils in both the experimental and the control schools believed that they would succeed in their matriculation exams. This was true both at the beginning and at the end of the school year.

There was no significant difference between the two schools, both at the beginning and at the end of the school year (p=0.122 and p=0.269, respectively).

At the end of the school year, in the experimental school there was a significant increase in the pupils' belief of success (p=0.015). In the control school there was no significant change (0.370). However, this did not result in a significant difference between the two schools.
2. I have been successful in my exams in the past (statement 2)

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp Pre</td>
<td>60</td>
<td>3.10</td>
<td>0.681</td>
<td>-2.920</td>
<td>0.004*</td>
<td></td>
</tr>
<tr>
<td>Exp Post</td>
<td>60</td>
<td>3.43</td>
<td>0.563</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Pre</td>
<td>25</td>
<td>3.32</td>
<td>0.690</td>
<td>1.619</td>
<td>0.122</td>
<td></td>
</tr>
<tr>
<td>Control Post</td>
<td>25</td>
<td>3.00</td>
<td>0.707</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td>-1.344</td>
<td>0.186</td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Post</td>
<td></td>
<td></td>
<td></td>
<td>2.725</td>
<td>0.010*</td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.28: Comparison of pupils' responses as to their success on past exams (non-matriculation) in experimental and control schools.

Figure 4.28 shows that at the beginning of the school year, pupils in both schools agreed that they had been successful in their exams in the past, and no significant difference was measured between the two schools. However, at the end of the year, in the experimental school pupils expressed a significant increase in this belief (p= 0.004), while control school pupils did not; there was a significant difference between the two schools (p=0.010).

3. I am sure that I will take all my exams (statement 13).

<table>
<thead>
<tr>
<th>I am sure that I will take all my exams (Statement 13)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp Pre</td>
<td>60</td>
<td>3.52</td>
<td>0.70</td>
<td>0.435</td>
<td>0.013*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp Post</td>
<td>60</td>
<td>3.78</td>
<td>0.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Pre</td>
<td>25</td>
<td>3.44</td>
<td>0.77</td>
<td>1.816</td>
<td>0.076</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Post</td>
<td>25</td>
<td>3.04</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.43</td>
<td>0.669</td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.457</td>
<td>0.000*</td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.29: Comparison of pupils' belief as to their taking all their exams, in experimental and control schools.
Based on Figure 4.29 it can be seen that pupils in both schools believed that they would take all their matriculation exams. This was true both at the beginning and at the end of the school year. At the end of the school year, when compared to the beginning, the experimental school showed a significant increase in the pupils’ belief that they would take all exams (p=0.013); in the control school there was no significant change (0.076).

While there was no significant difference between the two schools at the beginning of the school year (p=0.669), at the end, the pupils in the experimental school expressed a significantly stronger belief that they would take all their exams than did the pupils in the control school (p=0.00).

4. I feel that I will receive high grades (statement 12)

<table>
<thead>
<tr>
<th>I feel that I will receive high grades (statement 12)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp Pre</td>
<td>60</td>
<td>3.28</td>
<td>0.585</td>
<td>-1.708</td>
<td>0.902</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp Post</td>
<td>60</td>
<td>3.45</td>
<td>0.502</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Pre</td>
<td>25</td>
<td>3.36</td>
<td>0.638</td>
<td>1.526</td>
<td>0.134</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Post</td>
<td>25</td>
<td>3.08</td>
<td>0.909</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td>-0.517</td>
<td>0.608</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Post</td>
<td></td>
<td></td>
<td></td>
<td>1.917</td>
<td>0.065</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.30: Comparison of pupils’ belief as to their likelihood of receiving high grades on their matriculation exams, in experimental and control schools.

Figure 4.30 shows that both at the beginning and the end of the school year, pupils in both schools felt that they would receive high grades; there was no significant change over the year. In addition, no significant difference was measured between the two schools.
b. Pupils’ perceptions of how others assess their chances for success

This category examines pupil responses regarding teachers, parents and friends.

1. Pupils’ perception of how their teachers perceive their chances for success.

*My teachers believe I will succeed in my matriculation exams.* (Statement 8)

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
<td>Pre</td>
<td>60</td>
<td>3.28</td>
<td>0.61</td>
<td>-1.395</td>
<td>0.166</td>
</tr>
<tr>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.43</td>
<td>0.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
<td>25</td>
<td>2.80</td>
<td>0.76</td>
<td>0.866</td>
<td>0.391</td>
</tr>
<tr>
<td>Control</td>
<td>Post</td>
<td>25</td>
<td>2.60</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.809</td>
<td>0.004*</td>
</tr>
<tr>
<td>Exp. Control-Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.436</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05

Figure 4.31: Comparison of pupils’ belief, as to their teachers’ belief, as to their likelihood to succeed on matriculation exams, in experimental and control schools.

Based on Figure 4.31, we see that pupils in the experimental school felt strongly, both at the beginning and end of the school year, that their teachers believed they would succeed in their matriculation exams. This is in contrast to pupils of the control school, who expressed a significantly lower assessment of their teachers’ belief in their success, both at the beginning at the school year (p=0.004) and at the end of the school year (p=0.00).
2. Pupils’ perception of how their parents perceive their chances for success

*My parents believe I will succeed in my matriculation exams (statement 10)*

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
<td>Pre</td>
<td>60</td>
<td>3.67</td>
<td>0.5</td>
<td>-2.552</td>
<td>0.01*</td>
</tr>
<tr>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.88</td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
<td>25</td>
<td>3.6</td>
<td>0.57</td>
<td>0.693</td>
<td>0.492</td>
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<tr>
<td>Control</td>
<td>Post</td>
<td>25</td>
<td>3.52</td>
<td>0.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.197</td>
<td>0.846</td>
</tr>
<tr>
<td>Exp. Control-Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.649</td>
<td>0.013*</td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.32: Comparison of pupils’ belief as to their parents’ belief as their likelihood to succeed on matriculation exams, in experimental and control schools.

Figure 4.32 shows that at the beginning of the school year, pupils in both the experimental and the control schools, expressed the belief that their parents believed they would succeed on their matriculation exams. At the end of the school year, experimental school pupils expressed an even stronger assessment of their parents’ belief in their success, than was expressed at the beginning of the year (p=0.01). This is in contrast to control school pupils where there was no change. Thus, at the end of the school year, pupils in the experimental school expressed a significantly greater assessment of their parents’ belief in their success, than did the pupils in the control school (p=0.013).
3. Pupils' perception of how their friends perceive their chances for success.

*My friends believe I will succeed in my matriculation exams (statement 4).*

<table>
<thead>
<tr>
<th>My friends believe I will succeed in my matriculation exams (Statement 4)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exp</td>
<td>Pre</td>
<td>60</td>
<td>3.12</td>
<td>0.67</td>
<td>-3.100</td>
<td>0.002*</td>
</tr>
<tr>
<td></td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.47</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Pre</td>
<td>25</td>
<td>3.24</td>
<td>0.78</td>
<td>1.526</td>
<td>0.134</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Post</td>
<td>25</td>
<td>2.97</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.693</td>
<td>0.492</td>
</tr>
<tr>
<td></td>
<td>Exp. Control-Post</td>
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<td></td>
<td></td>
<td></td>
<td>3.452</td>
<td>0.001*</td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.33: Comparison of pupils' belief, as to their friends' belief, as to their likelihood to succeed on matriculation exams, in experimental and control schools.

Figure 4.33 shows that at the beginning of the school year, pupils in both schools expressed the belief that their friends believed they would succeed on their matriculation exams. No significant difference between the two schools was measured (p=0.492).

At the end of the school year, pupils in the experimental school expressed a significantly greater belief, that their friends believed they would succeed on their matriculation exams (p=0.002).

In contrast, there was no significant change in the control school between the beginning and the end of the school year. Thus, experimental school pupils expressed a significantly greater belief that their friends believed they would succeed on their matriculation exams at the end of the school year as compared to the control school (p=0.001).

**Summary**

Pupils' educational self-image is divided into two parts: a) pupils' belief that they would take and pass all matriculation exams; and b) pupils' perception of
teachers', parents' and friends' assessment of their chances for success on the exams.

An analysis of the responses to the questionnaire statements shows that at the end of the SFA school year, the experimental school pupils expressed significantly stronger beliefs in their likelihood to succeed on three of the four statements related to their educational self-image, and on two of the three statements as to their perception of how others perceive their chances for success. Their perception of teachers' belief in their success did not change and was similarly high, both at the beginning and end of the year. This was also true regarding the statement, "I believe that I will receive high grades". In contrast, there was no significant change in any of the control school pupils' questionnaire responses at the end of the year, as compared to the beginning.

At the beginning of the year, there was a significant difference between the pupils in both schools, only relating to what they think of their teachers' perception as to their chances for success is; experimental school pupils expressed a significantly higher perception than control school pupils. This difference remained significant also at the end of the school year.

2. Teachers' Perception of Pupils' Ability

This section examines the following hypothesis concerning teachers: As a result of the new programme, teachers will have increased belief in their pupils' ability to succeed (hypothesis 9).

This hypothesis was tested by the following four statements on the teacher questionnaires:

- a. I frequently feel that I am wasting my time trying to work as a teacher (statement 4).
- b. Most of my pupils are not capable of understanding the material I teach (statement 5).
c. The attitudes and learning habits that my pupils bring from home hamper their chances for success in school (statement 6).

d. I feel that I am successful in imparting my educational perceptions to my pupils (statement 3).

Eight teachers, three of who were homeroom teachers, from the experimental school, and four 10th grade homeroom teachers from the control school, filled out questionnaires twice - once at the beginning of the 1999-2000 school year, and once at the end of that school year.

a. *I frequently feel that I am wasting my time trying to work as a teacher* (statement 4).

<table>
<thead>
<tr>
<th>I frequently feel that I am wasting my time trying to work as a teacher (statement 4).</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviati</th>
<th>Pre-</th>
<th>Sig. (2-</th>
<th>(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>Pre</td>
<td>8</td>
<td>1.88</td>
<td>0.354</td>
<td>3.00</td>
<td>0.020*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>Post</td>
<td>8</td>
<td>2.63</td>
<td>0.518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
<td>4</td>
<td>2.50</td>
<td>0.577</td>
<td>^</td>
<td>^</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Post</td>
<td>4</td>
<td>2.50</td>
<td>0.577</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.987</td>
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<tr>
<td>Exp. Control-Post</td>
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<td></td>
<td></td>
<td>0.366</td>
<td>0.115</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistically significant where p<0.05.

^ Not able to compute where stdv.=0.

Figure: 4.34: Comparison of the feeling of teachers in the experimental and control schools as to their wasting their time trying to work as a teacher.

From Figure 4.34 we see that teachers from both schools did not agree that they were wasting their time trying to work as teachers at the beginning of the school year. However, in the experimental school there was a significant change in the belief of the teachers, as to their wasting their time trying to work as teachers, from the beginning of the year as compared to the end of the year, when teachers came closer to agreeing with this statement (p=0.020).
This runs counter to what the improvement project tried to accomplish. No change in the attitudes of teachers in the control school was measured.

b. *Most of my pupils are not capable of understanding the material I teach (statement 5).*

<table>
<thead>
<tr>
<th>Most of my pupils are not capable of understanding the material I teach (statement 5).</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
<td>Pre</td>
<td>8</td>
<td>2.00</td>
<td>0.00</td>
<td>3.00</td>
<td>0.020*</td>
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</tr>
<tr>
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<td>Post</td>
<td>8</td>
<td>3.00</td>
<td>0.00</td>
<td>3.00</td>
<td>0.020*</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
<td>4</td>
<td>2.50</td>
<td>0.577</td>
<td>0.655</td>
<td>0.537</td>
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</tr>
<tr>
<td>Control</td>
<td>Post</td>
<td>4</td>
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<td>0.500</td>
<td>1.732</td>
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</tr>
<tr>
<td>Exp. Control-Pre</td>
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<td></td>
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<td>3.00</td>
<td>0.580</td>
</tr>
<tr>
<td>Exp. Control-Post</td>
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<td></td>
<td></td>
<td>3.00</td>
<td>0.580</td>
</tr>
</tbody>
</table>

*Statistically significant where p<0.05.

Figure 4.35: Comparison of the feeling of teachers in the experimental and control schools as to the ability of their pupils to understand the material they teach.

It can be seen from Figure 4.35 that at the beginning of the year, teachers in both schools did not agree that their pupils were incapable of understanding the material taught. However, at the end of the school year, teachers in the experimental school responded that their pupils were not capable of understanding the material, while teachers in the control school did not change their original opinion. This runs counter to what the improvement project tried to accomplish.
c. The attitudes and learning habits that my pupils bring from home hamper their chances for success in school (statement 6).

<table>
<thead>
<tr>
<th>The attitudes and learning habits that my pupils bring from home hamper their chances for success in school (statement 6).</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
<td>Pre</td>
<td>8</td>
<td>3.63</td>
<td>0.518</td>
<td>0.514</td>
<td>0.000*</td>
<td></td>
</tr>
<tr>
<td>Exp</td>
<td>Post</td>
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<td>2.25</td>
<td>0.463</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
<td>4</td>
<td>3.00</td>
<td>0.000</td>
<td>1.73</td>
<td>0.134</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Post</td>
<td>4</td>
<td>2.50</td>
<td>0.577</td>
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<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.416</td>
<td>0.011*</td>
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</tr>
<tr>
<td>Exp. Control-Post</td>
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<td></td>
<td></td>
<td></td>
<td>-0.753</td>
<td>0.485</td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.36: Comparison of the feeling of teachers in the experimental and control schools as to attitudes and habits of pupils hampering their chances for success in school.

Figure 4.36 shows that at the beginning of the school year, teachers in both schools felt that attitudes and habits of their pupils hampered their chances for success. However, at the end of the year, while teachers in the control school did not change their opinion, there was a significant change in the opinions of teachers in the experimental school. They no longer felt that these habits hampered the pupils’ chances for success. It is interesting to note that at the beginning of the year, experimental school teachers felt significantly stronger than control school teachers that the attitudes and habits of their pupils hampered their chances for success (p=0.011). At the end of the year, when this opinion changed, no significant difference was measured between the two schools.
d. I feel that I am successful in imparting my educational perceptions to my pupils (statement 3).

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
<td>Pre</td>
<td>8</td>
<td>3.00</td>
<td>0.535</td>
<td>-2.376</td>
<td>0.046*</td>
</tr>
<tr>
<td>Exp</td>
<td>Post</td>
<td>8</td>
<td>3.63</td>
<td>0.518</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
<td>4</td>
<td>2.50</td>
<td>0.577</td>
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</tr>
<tr>
<td>Control</td>
<td>Post</td>
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<td>2.40</td>
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<td></td>
<td>3.292</td>
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</table>

* Statistically significant where p<0.05.

Figure 4.37: Comparison of the feeling of teachers in the experimental and control schools as to their degree of success in imparting their educational perceptions to their pupils.

From Figure 4.37 we see that at the beginning of the school year, teachers in the experimental school agreed with the statement that they were successful in imparting their educational perceptions to their pupils; teachers in the control school did not feel that this was so. At the end of the year, experimental school teachers agreed even more strongly with this statement (p=0.046), while control school teachers did not change their beliefs, and a significant difference between the two schools was measured (p=0.019).

Summary

This section examined teachers' perception of pupils' ability to succeed, as expressed by responses to four statements on the teacher questionnaires. Results show that the experimental school teachers were less positive, at the end of the year than at the beginning, regarding two of the statements. They came close to agreeing that they were wasting their time trying to teach the pupils and they felt that their pupils were not capable of understanding the material. However, at the end of the year the teachers did come to believe that the habits and attitudes that their pupils brought from home would not hamper
their chances for success, and that they were more successful in imparting their educational perceptions to their pupils.

Teachers in both schools expressed similar beliefs in three of the statements at the beginning of the year. These beliefs did not significantly change at the end of the year. Thus, at the end of the year there was a significant difference between teachers of both schools as to their success in imparting educational perceptions. The control school teachers were more pessimistic than the experimental school teachers.

3. Pupils' assessment of teachers' concern for their success

This section examines the pupils' assessment of the importance their teachers placed on their future success. This belief was compared in both schools at the beginning and end of the school year by the following statements on the pupil questionnaires:

a. My teachers put a lot of effort into helping me succeed in my exams (statement 5).

b. My teachers encouraged me to succeed (statement 9).

c. It is important for my teachers that I succeed (statement 19).
a. My teachers put a lot of effort into helping me succeed in my exams (statement 5).

<table>
<thead>
<tr>
<th>My teachers put a lot of effort into helping me succeed in my exams (statement 5).</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exp</td>
<td>Pre</td>
<td>60</td>
<td>2.58</td>
<td>0.944</td>
<td>-5.262</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td>0.531</td>
<td>0.598</td>
</tr>
<tr>
<td></td>
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<td>0.726</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exp. Control-Pre</td>
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<td></td>
<td></td>
<td></td>
<td>-1.967</td>
<td>0.055</td>
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<tr>
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<td></td>
<td></td>
<td>2.783</td>
<td>0.008*</td>
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</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.38: Comparison of the belief of pupils in the experimental and control schools as to effort their teachers made for them to succeed.

From Figure 4.38 we can see that both at the beginning and the end of the year pupils in both schools felt that their teachers made an effort to ensure their success on exams. At the end of the year, while pupils in the experimental school expressed a significantly higher degree of this belief as compared to the beginning of the year (p=0.00), no change was expressed by the control school pupils. Thus, at the end of the year, there was a significant difference between the pupils of the two schools (p=0.008).

b. My teachers encouraged me to succeed (statement 9).

<table>
<thead>
<tr>
<th>My teachers encouraged me to succeed (statement 9).</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exp</td>
<td>Pre</td>
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<td>0.907</td>
<td>-3.166</td>
<td>0.002*</td>
</tr>
<tr>
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<td>Exp</td>
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<td>0.618</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Post</td>
<td>25</td>
<td>3.04</td>
<td>0.841</td>
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</tr>
<tr>
<td></td>
<td>Exp. Control-Pre</td>
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<td></td>
<td></td>
<td></td>
<td>-0.317</td>
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<td>Exp. Control-Post</td>
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<td></td>
<td>2.970</td>
<td>0.0039*</td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.39: Comparison of the belief of pupils in the experimental and control schools as to the degree their teachers encouraged them to succeed.
Figure 4.39 shows that at the beginning of the year, pupils from both schools felt that their teachers encouraged them to succeed. At the end of the school year, this belief significantly increased even more in the experimental school (p=0.002), while pupils in the control school did not show any significant change in this belief.

In addition, while the beginning of the school year, no significant difference was found between the beliefs of the pupils in both school regarding the degree of encouragement they received, at the end of the year experimental school pupils expressed a significantly higher belief that their teachers encouraged them to succeed.

c. It is important for my teachers that I succeed (statement 19).

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
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<td>0.877</td>
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<td>0.001*</td>
</tr>
<tr>
<td>Exp</td>
<td>Post</td>
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<td>3.55</td>
<td>0.502</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
<td>25</td>
<td>2.96</td>
<td>0.841</td>
<td>2.143</td>
<td>0.307</td>
</tr>
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<td>Control</td>
<td>Post</td>
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<td>1.000</td>
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<td></td>
</tr>
<tr>
<td>Exp. Control-Pre</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exp. Control-Post</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.40: Comparison of the belief of pupils in the experimental and control schools as to the importance of their success to their teachers.

From Figure 4.40 it can be seen that at the beginning of the school year no significant difference was found between the feelings of the pupils in both school regarding the importance of their success to their teachers; pupils in both schools felt that it was important to their teachers that they succeed.

However, at the end of the year, two important differences emerged: a) pupils in the experimental school expressed a significantly higher assessment regarding the importance their teachers placed on their success (p=0.001), and
b) there was no significant change in the control school. Thus, at the end of the year, a significant difference was measured between the experimental school and the control school pupils (p=0.00).

**Summary**

The responses of the experimental school pupils, to all three statements relating to teacher concern for their success, showed a significant increase at the end of the year, as compared to the beginning of the year. They felt that their teachers put more effort into helping them succeed, gave them more encouragement and that it was very important for them to have the pupils succeed.

In contrast, no significant changes were measured in the control school at the end of the year. Thus, there emerged a significant difference between the schools regarding the pupils’ assessment of their teachers’ concern for their success, in all three issues examined.

**Summary of Pupils’ Educational Self-image and Teachers’ Perception of Pupils’ Ability**

This section investigated various components of the educational self-image of the pupils in the experimental school, as well as their perception of the degree of concern their teachers felt regarding their success. Results in the experimental school were compared with the results in the control school. In addition, the teachers’ perception of their pupils’ learning ability and study skills were measured in both schools, and compared. The following is a summary of the major findings:

**Pupil educational self-image in the experimental school**

Pupils in the experimental school began the school year with a positive educational self-image as measured both by what *they* thought of their
chances to succeed, and how they perceived their teachers, parents and friends assessed their chances to succeed. At the end of the year there were significant increases in five of the seven items measured, indicating that the pupils’ belief in their potential to succeed was heightened. Regarding the other two items – pupils’ perception of the teachers’ assessment and pupils’ belief that they would receive high grades, although no significant increase was measured, these perceptions remained high.

Comparison of pupil educational self-image in the experimental and control schools
Comparing the experimental school pupils with the control school pupils, the following picture emerges:
At the beginning of the school year, the experimental school pupils had a significantly higher assessment of their teachers’ perception of their potential. All other items were basically similar in both schools. This changed at the end of the year. The experimental school pupils registered a significantly higher perception of the assessment of their parents, teachers and friends regarding their chances for success, in addition to a significantly higher self-evaluation on two of the items measuring pupil self-image. In contrast, the control school pupils did not express any significant change in any of the seven items measured. Thus, at the end of the year, the expressed educational self-image of the pupils in the control school was significantly lower than that of pupils in the experimental school.

Teachers’ assessment of pupils’ ability to succeed
The teachers’ assessment of the ability of their pupils in the experimental school was quite different from the perception the pupils had of their teachers regarding their chances to succeed. Only in one of the four statements measured (“I am successful in imparting my educational perceptions”) was
there a positive response at the beginning of the year. This belief was also significantly strengthened at the end of the year. In two of the items that cast doubt on the pupils’ ability (“I frequently feel that I am wasting my time trying to work as a teacher” and “Most of my pupils are not capable of understanding the material I teach”), at the end of the year the teachers were more pessimistic, and came close to agreeing with these statements.

The teachers’ responses at the end of the year, to the statement regarding negative learning habits and attitudes from home that hamper the pupils’ chances for success, show an optimistic trend. At the beginning of the year, they clearly agreed with this statement. At years end there was a significant change, and they no longer felt that their pupils were hampered by negative learning habits from home.

When comparing the responses of teachers in both schools to the four statements, two differences were noted: Firstly, at the beginning of the year experimental school teachers were significantly more in agreement with the statement regarding the negative attitudes and habits the pupils bring from their homes. However, at the end of the year, the responses were similar to the control school. Secondly, at the end of the year, teachers in the experimental school were significantly more positive about succeeding in imparting their educational perceptions, than control school teachers.

Pupils’ perception of teachers’ concern for their success

How did the pupils perceive their teachers’ concern for their success? A comparison of responses of the experimental school pupils at the beginning and end of the year to all three statements on the questionnaire shows that: a) pupils began the year with an initial positive perception of their teachers’ concern, b) at years end they believed more strongly that it was important for their teachers to have them succeed. This is in contrast with the pupils of the control school, whose perceptions of their teachers’ concern for success did
not show a significant change at the end of the year, resulting in a significant
difference between the experimental school and control school pupils.

E. Motivation

Introduction
Motivation is an important underlying factor regarding success in learning. Pupils who are motivated will devote more time and effort to their studies, thus improving their chances of success (e.g. Berry and Plecha, 1999; DeKeyrel, et al., 2000). It is probable that increasing pupil motivation will, in the long run, bring about increased achievement, and a higher rate of success on the matriculation exams.

Parents usually play a role in encouraging their children to study, thus increasing their motivation. The “Success for All” school improvement program aimed to involve parents, with the idea that “parents are an integral part of the pupils’ success and support cycle” and that “based on the reports they receive, parents are expected to play an active role in their children’s progress” (see Chapter One, page 46).

This section will examine the motivation of experimental school and control school pupils to achieve a matriculation certificate, and the attitude of the parents in the experimental school, both at the beginning and end of the 1999-2000 school year, regarding the importance of a matriculation certificate for their child.

Pupils from both schools and parents from the experimental school, were asked to respond to statements on questionnaires, relating to two aspects of motivation: a) the importance of achieving a matriculation certificate and b) the willingness of the pupils to exert effort when studying.
Pupils' motivation to succeed

The following aspects of pupils' motivation were examined:

a. Motivation to achieve a matriculation certificate: I want to study in the University in the future (statement 20).

b. Willingness to devote effort: I will put a lot of effort into studying for my exams (statement 3) and I am striving for high grades (statement 11).

c. General motivation towards success in studies: It is important for me to succeed in my studies (statement 14).

<table>
<thead>
<tr>
<th>I want to study in the University in the future (Statement 20)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exp</td>
<td>Pre</td>
<td>60</td>
<td>3.33</td>
<td>0.80</td>
<td>-0.125</td>
<td>0.901</td>
</tr>
<tr>
<td></td>
<td>Exp</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Control</td>
<td>Pre</td>
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<td>3.32</td>
<td>0.80</td>
<td>1.317</td>
<td>0.194</td>
</tr>
<tr>
<td></td>
<td>Control</td>
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<td>3.00</td>
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</tr>
<tr>
<td></td>
<td>Exp. Control-Pre</td>
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<td></td>
<td></td>
<td></td>
<td>0.070</td>
<td>0.945</td>
</tr>
<tr>
<td></td>
<td>Exp. Control-Post</td>
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<td></td>
<td></td>
<td></td>
<td>1.737</td>
<td>0.091</td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.41 shows that motivation towards studying in a University was high in both schools, and there was no significant difference between them, both at the beginning and the end of the school year. In both schools no significant change was measured at the end of the year, when compared to the beginning of the year.
b. Willingness to devote effort to their studies

1. I will put a lot of effort into studying for my exams (statement 3).

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
<td>Pre</td>
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<td>1.784</td>
<td>0.077</td>
</tr>
<tr>
<td>Exp</td>
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<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre</td>
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<td>-0.576</td>
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<td>Control</td>
<td>Post</td>
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<td>3.48</td>
<td>0.71</td>
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</tbody>
</table>

Exp. Control-Pre

Exp. Control-Post

* Statistically significant where p<0.05.

Figure 4.42: Comparison of the amount of effort pupils in both schools plan to put into studying for exams.

From Figure 4.42 it can be seen that no significant difference was measured between the two schools, both at the beginning and at the end of the school year, as to the effort pupils claimed they exerted when studying for exams. Pupils in both schools felt, both at the beginning and end of the year, that they put a lot of effort into studying for exams. In addition, no change was measured in either school between the beginning and end of the year.

2. I am striving for high grades (statement 11).

<table>
<thead>
<tr>
<th>I am striving for high grades (statement 11).</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
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<td>1.201</td>
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<tr>
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<tr>
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<td>0.849</td>
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<td>0.65</td>
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</tr>
</tbody>
</table>

Exp. Control-Pre

Exp. Control-Post

* Statistically significant where p<0.05.

Figure 4.43: Comparison of the pupils' responses as to striving for high grades in the experimental and control schools.

276
Figure 4.43 shows that no significant difference was measured between the two schools, both at the beginning and at the end of the school year, as to pupils’ responses that they were striving for high grades. Pupils in both schools claimed, both at the beginning and end of the year that they were striving for high grades. In addition, no change was measured regarding this statement, between the beginning and end of the year, for pupils in either school.

c. General motivation towards success in studies

*It is important for me to succeed in my studies (statement 14).*

<table>
<thead>
<tr>
<th>It is important for me to succeed in my studies (statement 14)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
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</thead>
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<td>3.75</td>
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<td>0.211</td>
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<tr>
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<td>Post</td>
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<td>3.95</td>
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<td>0.65</td>
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</tr>
<tr>
<td></td>
<td>Exp. Control-Pre</td>
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<td></td>
<td></td>
<td>0.952</td>
<td>0.346</td>
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<tr>
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<td>Exp. Control-Post</td>
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<td></td>
<td></td>
<td>2.077</td>
<td>0.046*</td>
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</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.44: Comparison of the importance pupils place on the necessity to succeed in their studies, in the experimental and control schools.

From Figure 4.44 it can be seen that pupils in both schools claimed, both at the beginning and end of the year, that it was important for them to succeed in their studies. While no significant difference was measured regarding the importance pupils placed on the need to succeed in their studies at the beginning of the school year, at the end of the year there was a significant difference; pupils in the experimental school felt more strongly about this (p=0.046).

The data above shows that pupils in both schools expressed high motivation towards learning and succeeding in all three statements. No significant change
was measured at the end of the year as compared to the beginning, for either school. However, at the end of the year experimental school pupils felt significantly stronger than control school pupils that it was important for them to succeed in their studies.

Parents’ attitude regarding importance of matriculation exams for child’s success

The attitude of experimental school parents as to the importance of matriculation exams for their child’s success, was measured by the statement: I feel that it is important for my child to get a matriculation certificate (statement 5). The results presented in Figure 4.45 show that although at the beginning of the school year parents felt that it was important for their child to get a matriculation certificate, this attitude increased significantly to one of great importance, at the end of the school year (p=0.00).

Importance of matriculation certificate in eyes of parents

I feel that it is important for my child to get a matriculation certificate (statement 5).

<table>
<thead>
<tr>
<th>I feel that it is important for my child to get a matriculation certificate (statement 5)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
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<tbody>
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<td></td>
<td>Exp</td>
<td>Pre</td>
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<td>-7.938</td>
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<td>Exp</td>
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</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.45: Parents’ belief regarding the importance of a matriculation certificate for their child, both at the beginning and the end of the 1999-2000 school year.

Summary of motivation

This section examined the motivation of pupils in the control and experimental schools towards learning, and the importance to experimental school parents that their child receive a national matriculation certificate.
From the data presented above, it was seen that both at the beginning and end of the school year pupils in both schools expressed high motivation to continue on to University studies, to put effort into their studies and to succeed in their exams. No significant difference was measured at the end of the year as compared to the beginning, between both schools. Only in the statement relating to importance to succeed, was there a significant difference between the two schools at the end of the year, with the experimental school pupils expressing a stronger degree of desire to succeed.

It is important to note that at the end of the year, experimental school parents placed more importance on achieving a matriculation certificate.

F. Teachers’ Attitudes Towards School

Introduction

In development towns in Israel, partly due to the low success rate on the National Matriculation exams, it is hard to attract qualified teachers. Most of these teachers do not live in the development town, and do not want to raise their children there. If the intervention program could succeed in improving their attitudes towards the school, in the long run it would be possible to attract them.

An important aspect of teacher attitude toward school, relates to their feeling of involvement and ability to have input in school policy and school functioning. This goal was not an aim of the SFA project, but it is possible that a feeling of involvement was achieved as a side effect.

This section seeks to examine if there was any change, in the way teachers perceive their school, as a result of the intervention program. Questionnaires were given to all 8 teachers involved in the project in the experimental school, at the beginning and at the end of the 1999-2000 school year. This group of teachers consisted of three homeroom teachers and an additional five subject matter teachers. In order to compare the only two comprehensive high schools
in the town under study, four 10th grade homeroom teachers from the control school also received the same questionnaires (for questionnaires see Appendix I, page 383).

This section examines the following:

1. School satisfaction
   a. General satisfaction (statements 1, 2, 11, 19, 21)
   b. Staff cooperation (statements 7, 8, 9, 10)

2. Principal-teacher relationship and teacher input in school functioning (statements 16, 24, 30, 31, 32, 33, 34)

3. School climate
   a. Discipline (statement 26)
   b. Teacher-pupil relations (statement 15)

1. School Satisfaction

   a. General satisfaction

   The data presented in this section are based on the following:

   1. I wait impatiently to begin each school day (statement 1).
   2. I am always satisfied to work in this school (statement 2).
   3. Even if I would be offered a position in another school I will not take it (statement 11).
   4. In this school there are workshops that fulfill the teachers' needs (statement 19).
   5. In this school, teachers are under a lot of pressure from overwork (statement 21).
1. *I wait impatiently to begin each school day (statement 1).*

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<tr>
<th>I wait impatiently to begin each school day (statement 1)</th>
<th>School</th>
<th>Time</th>
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<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
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* Statistically significant where p<0.05. ^ Not able to compute where stdv.=0.

Figure 4.46: Comparison of responses of teachers in experimental and control schools as to their eagerness to begin school each day.

Figure 4.46 shows that at the beginning of the school year, teachers in both schools were eager to begin the school day; no significant difference was found between the two schools. However, at the end of the year, teachers in the experimental school were even more eager, as compared to the beginning (p=0.033), while there was no change in the responses of teachers in the control school. Thus, at the end of the year, experimental school teachers were significantly more eager to begin their school day than control school teachers (p=0.029).
2. I am always satisfied to work in this school (statement 2).

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* Statistically significant where p<0.05.
^ Not able to compute where stdv.=0.

Fig 4.47: Comparison of teachers in experimental and control schools as to their expressed satisfaction with their school.

It can be seen from Figure 4.47 that the teachers in both schools were generally satisfied with their school. No significant difference was measured between the two schools, or within the schools at the end of the year, as compared to the beginning.
3. *Even if I would be offered a position in another school I would not take it* (statement 11).

<table>
<thead>
<tr>
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* Statistically significant where p<0.05.
^ Not able to compute where stdv.=0.

Figure 4.48: Comparison of teachers in experimental and control schools as to their willingness to take a position in another school.

Figure 4.48 shows that teachers in the experimental school, both at the beginning and end of the school year, responded if offered, that they would not take a position in another school. In contrast, both at the beginning and end of the year, teachers in the control school stated that they would take a position in another school. At the beginning of the year no significant difference was measured between the schools. At the end of the year statistical significance could not be computed due to a standard deviation of zero.
4. In this school there are workshops that fulfill the teachers' needs.

(statement 19).

<table>
<thead>
<tr>
<th>In this school there are workshops that fulfill the teachers' needs (statement 19)</th>
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* Statistically significant where p<0.05.

Fig 4.49: Comparison of teachers in experimental and control schools as to their belief that their school offers workshops that fulfill their needs.

From Figure 4.49, we see that at the beginning of the school year, experimental school teachers did not feel that there were workshops in their school that fulfilled their needs. However, at the end of the year this attitude changed significantly; teachers agreed that there were such workshops (p=0.006). In general, teachers in the control school did not agree that there were workshops to fulfill their needs, and this attitude remained the same at the end of the year.
5. *In this school, teachers are under a lot of pressure from overwork*  
*(statement 21)*.

<table>
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</tbody>
</table>

Statistically significant where p<0.05.

^ Not able to compute where stdv =0.

Fig 4.50: Comparison of teachers in experimental and control schools as to their feeling pressure from overwork.

Figure 4.50 shows that at the beginning of the school year, there was a significant difference between the teachers from both schools as to feelings of pressure from overwork (p=0.002); control school teachers felt that they were under pressure, while experimental school teachers did not. However, at the end of the year, there was a significant change in the assessment of teachers from the experimental school, who now felt that they were under pressure (p=0.002). Teachers from the control school agreed that they were under the same degree of pressure, at the beginning and end of the year.

b. **Staff cooperation**

The data presented in this section are based on the following:

1. I can count on my colleagues to assist me even though it is not part of their job *(statement 7)*.
2. I feel that most of my colleagues accept and respect me *(statement 8)*.
3. There is excellent cooperation between my colleagues and me in school *(statement 9)*.
4. This school is like a big family *(statement 10)*.
1. *I can count on my colleagues to assist me even though it is not part of their job* (statement 7).

<table>
<thead>
<tr>
<th>School</th>
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<th>Mean</th>
<th>Std. deviation</th>
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* Statistically significant where p<0.05.

Figure 4.51: Comparison of teachers in experimental and control schools regarding their belief that they can count on their colleagues for assistance.

Figure 4.51 shows that, in general, teachers in both schools felt that they could count on their colleagues for assistance. No significant difference was measured between the two schools or within the schools, at the end of the year, as compared to the beginning.

2. *I feel that most of my colleagues accept and respect me* (statement 8).

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
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* Statistically significant where p<0.05.
^ Not able to compute where stdv =0.

Figure 4.52: Comparison of teachers in experimental and control schools regarding their belief that most of their colleagues accept and respect them.
From Figure 4.52 it can be seen, that in the beginning of the school year, teachers in both schools stated that they felt their colleagues accepted and respected them; no significant difference was found between the two schools. However, at the end of the year, the response of the teachers in the experimental school was significantly more emphatic that their colleagues accepted and respected them, as compared to the beginning (p=0.011); there was no change in the responses of teachers in the control school. Thus, at the end of the year, there was a significant difference between experimental school control school teachers regarding this issue (p=0.029).

3. There is excellent cooperation between my colleagues and me in school (statement 9).

<table>
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<tr>
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<th>Std. deviation</th>
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* Statistically significant where p<0.05.
^ Not able to compute where stdv = 0.

Figure 4.53: Comparison of teachers in experimental and control schools regarding their feeling that there was excellent cooperation between themselves and their colleagues.

Figure 4.53 shows that at the beginning of the school year, teachers in both schools did not agree that there was excellent cooperation between the teachers; no significant difference was found between the two schools. However, at the end of the year, as compared to the beginning, experimental school teachers agreed with the statement that there was excellent cooperation between the teachers, (p=0.002), while responses of control school teachers remained the same.
4. *This school is like a big family (statement 10).*

<table>
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* Statistically significant where p<0.05.

Figure 4.54: Comparison of teachers in experimental and control schools as to their feeling that their school is like a big family.

From Figure 4.54 it can be seen, that at the beginning of the school year, teachers in both schools did not fully agree that their school was like one big family; no significant difference was found between the two schools. However, at the end of the year, there was a significant change in the attitude of the experimental school teachers (p=0.033); teachers expressed a higher level of agreement with the statement that their school was like one big family. There was no significant change in the attitude of the control school teachers at the end of the year, as compared to the beginning.

**Summary**

In general, teachers in the experimental school were fairly satisfied with their school at the beginning of the school year. This satisfaction significantly increased at the end of the year: they were more eager to begin each school day, they believed more strongly that their colleagues accepted and respected them, they felt that there was better cooperation with their colleagues and they concurred that the school was 'one big family'. In addition, at the beginning of the year they did not feel that the workshops fulfilled their needs, while at the end the teachers felt that they did. Despite these positive increases in
school satisfaction, at the end of the year the teachers responded that they were under a lot of pressure from overwork.

In comparison, control school teachers, who in general were fairly satisfied with their school at the beginning of the year, did not express any increases in satisfaction at the end of the year. It is interesting to note that both at the beginning and end of the year they felt that they were under a lot of pressure from overwork, and they didn’t agree that the school was like ‘one big family’.

2. Principal-teacher relationship and teacher input in school functioning

This section examines the responses of teachers to the following statements:

a. In this school you have to get permission from the administration for everything (statement 16).

b. In this school the teachers assist in introducing changes (statement 24).

c. The teachers’ influence is restricted to classrooms (statement 30).

d. Decisions in this school are made by the principal and vice-principal only (statement 31).

e. The policies and procedures are dictated from above (statement 32).

f. The school principal determines priorities and plans, and follows up on performance (statement 33).

g. The principal knows towards which goals to lead the teachers, and transmits this to them (statement 34).
a. In this school you have to get permission from the administration for everything (statement 16).

<table>
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<tr>
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</tbody>
</table>

* Statistically significant where p<0.05.
^ Not able to compute where stdv =0.

Fig 4.55: Comparison of teachers in experimental and control schools regarding their belief that they have to get permission for everything in their school.

It can be seen from Figure 4.55 that the teachers in both schools felt they had to get permission for everything. No significant difference was measured between both schools, or within the schools, at the end of the year as compared to the beginning.

b. In this school the teachers assist in introducing changes (statement 24).

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
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<td></td>
<td></td>
<td>3.989</td>
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* Statistically significant where p<0.05.

Figure 4.56: Comparison of teachers in experimental and control schools regarding their belief that in their school, teachers assist in introducing changes.

Figure 4.56 shows that at the beginning of the school year, teachers in both schools did not feel that they assisted in introducing changes. At the end of the
year, teachers in the experimental school significantly changed their belief, and now felt that they did assist in introducing change (p=0.041). This is in contrast to teachers in the control school who did not change their original belief. While there was no difference between the schools at the beginning of the year, at the end of the year, experimental school teachers expressed a significantly higher belief regarding this issue (p=0.006).

c. The teachers' influence is restricted to classrooms (statement 30).

<table>
<thead>
<tr>
<th>The teachers' influence is restricted to classrooms (statement 30)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
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<th>t-test</th>
<th>Sig. (2-tailed)</th>
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</table>

* Statistically significant where p<0.05.
^ Not able to compute where stdv =0.

Figure 4.57: Comparison of teachers in experimental and control schools regarding their belief that their influence is restricted to classrooms.

Figure 4.57 shows that at the beginning of the school year, teachers in the experimental school tended to agree that their influence was restricted to classrooms. At the end of the year however, there was a significant change in this attitude (p=0.011); i.e. they did not feel that their influence was restricted to classrooms. Teachers in the control school felt that their influence was not restricted to classrooms, both at the beginning and end of the school year.
d. Decisions in this school are made by the principal and vice-principal only (statement 31).

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
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<td>-2.560</td>
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* Statistically significant where p<0.05.

Fig 4.58: Comparison of teachers in experimental and control schools regarding their belief that decisions were made only by the principal and vice-principal.

From Figure 4.58 it can be seen, that at the beginning of the school year, teachers in both schools felt that decisions in school were made by the principal and vice-principal; no significant difference was found between the two schools. However, at the end of the year, experimental school teachers, in general, did not agree with this statement; there was a significant difference at the end of the year as compared to the beginning (p=0.001). In contrast, at the end of the year, teachers in the control school felt even more strongly that all decisions were made by the principal and vice-principal. Thus, at the end of the year, there was a significant difference between the experimental school teachers and control school teachers regarding school decisions (p=0.046). Teachers in the control school strongly agreed that the principal and vice-principal made all school decisions.
e. The policies and procedures are dictated from above (statement 32).

<table>
<thead>
<tr>
<th>The policies and procedures are dictated from above (statement 32)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
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* Statistically significant where p<0.05.

^ Not able to compute where stdv =0.

Fig 4.59: Comparison of teachers in experimental and control schools regarding their belief that the policies and procedures in their school are dictated from above.

Figure 4.59 shows that at the beginning of the school year, all teachers in both schools felt that the policies and procedures were dictated from above. However, at the end of the year, teachers in the experimental school did not feel this way; there was a significant difference as compared to the beginning of the year (p=0.011). In contrast, all teachers in the control school still felt the same as in the beginning.

Thus, at the end of the year, there was a significant difference between the control and experimental school teachers regarding the control of policies and procedures in their school (p=0.011).
f. The school principal determines priorities and plans, and follows up on performance (statement 33).

The school principal determines priorities and plans, and follows up on performance (statement 33)

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
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* Statistically significant where p<0.05.
^ Not able to compute where stdv =0.

Fig 4.60: Comparison of teachers in experimental and control schools regarding their belief that the principal determined priorities and plans, and followed up on performance.

It can be seen from Figure 4.60, that the teachers in both schools felt that the principal determined priorities and plans, and followed up on performance. No significant difference was measured between the two schools, or within the schools, at the end of the year as compared to the beginning.

g. The principal knows towards which goals to lead the teachers, and transmits this to them (statement 34).

The principal knows towards which goals to lead teachers, and transmits this to them (statement 34)

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.
^ Not able to compute where stdv =0.

Fig 4.61: Comparison of teachers in experimental and control schools regarding their belief that the principal had clear goals that he transmitted to the them.
Figure 4.61 shows that all teachers in both school felt that the principal had clear goals that he transmitted to the teachers, both at the beginning and end of the school year.

Summary
At the beginning of the school year, there was consistent agreement between the teachers in the experimental school and the control school regarding their input in school decision-making and functioning, as compared to the administrations’ influence. Teachers from both schools felt: they had to get permission from the administration for everything; policies and procedures were dictated from above; school decisions were made by the principal and vice-principal; the principal determined priorities and lead towards his goals; and that they did not assist in introducing change. However, there was a significant difference in the responses of the experimental and control school teachers to the statement “Teachers influence is restricted to the classroom”. Experimental school teachers tended to agree, while control school teachers did not.

At the end of the year, teachers in the experimental school expressed a significant change regarding four of the statements. They no longer felt that: their influence was restricted to the classroom; policies and practices were dictated from above; and school decisions were made only by the principal and vice-principal. They now felt that they assisted in effecting school changes. This was in contrast to the control school teachers, who did not express any significant differences between their responses at the beginning and the end of the year.

3. School Climate
School climate includes discipline in the school, and teacher-pupil relations.

a. Level of discipline
This was measured by the following statement:

*The level of discipline in the school is very low (statement 26).*

<table>
<thead>
<tr>
<th>The level of discipline in the school is very low (statement 26)</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
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</table>

* Statistically significant where p<0.05.

Figure 4.62: Comparison of teachers in experimental and control schools as to level of discipline in their school.

Figure 4.62 shows that at the beginning of the year, teachers in the experimental school agreed to strongly agreed, that discipline in their school was very low. This was significantly different from the opinion of teachers in the control school, who mostly disagreed, showing that they thought that discipline was satisfactory in their school (p=0.023). At the end of the school year the tables were turned. Most control school teachers now agreed that discipline in their school was low, while experimental school teachers disagreed. There was a significant difference between the teachers’ attitude towards discipline in the experimental school at the end of the year, as compared to the beginning (p=0.015); they felt that discipline in the school had improved. (It should be noted that this question referred to discipline in the school in general, not just as concerning the 10th grade pupils who participated in the SFA programme.)

b. Teacher-pupil relations

This was based on the following statement:

*In this school the relationship between pupils and teachers is friendly (statement 15).*
In this school the relationship between pupils and teachers is friendly (statement 15)

<table>
<thead>
<tr>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>t-test</th>
<th>Sig. (2-tailed)</th>
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</tbody>
</table>

* Statistically significant where p<0.05.
^ Not able to compute where stdv =0.

Figure 4.63: Comparison of teachers in experimental and control school regarding their belief that in their school the relationship between pupils and teachers was friendly.

From Figure 4.63 it can be seen that at the beginning of the school year, teachers in both schools did not agree that their relationship with their pupils was a friendly one. At the end of the year however, there was a significant change in the experimental school teachers’ assessment of their relationship with the pupils; they now agreed that this relationship was friendly (p=0.033). This was in contrast to teachers in the control school who did not change their original belief.

Summary

In summary, it can be seen that teachers in the experimental school felt that there was a significant improvement in discipline at the end of the year as compared to the beginning; teachers in the control school felt that discipline had deteriorated somewhat. In addition, while at the beginning of the year teachers in both school rated the relationship between pupils and teachers as somewhat less than friendly, at the end of the year, experimental school teachers responded that this relationship had improved and was now friendly, while teachers in the control school did not report any change.
G. Homeroom Teacher and the SFA Programme

Introduction

The "mechanech" plays a crucial role in the Israeli school system. He/she is responsible for administrative aspects of the class, is expected to deal with emotional needs and problems of pupils and to maintain close contact with parents (see Chapter One, page 23). The degree to which they are carried out varies from school to school.

An important component of the "Success for All" school improvement program was the enhancement of the homeroom teacher's (mechanech) responsibilities (see Chapter One, page 36). The improvement project redefined the role of the "mechanech", and allotted him/her a major role in the project. In Chapter Five, page 343, this role will be discussed in greater detail.

In this section data will be presented describing how the homeroom teacher functioned in the SFA programme, in the following areas:

1. Dealing with learning and personal problems of pupils
2. Contact with parents

At the end of the 1999-2000 school year, the principal and vice-principal of the experimental school were interviewed, regarding the enhanced homeroom teacher's function. The following points were noted:

a. Every school day began with homeroom period, during which the homeroom teacher alternated teaching a regular subject matter lesson with a group guidance session. These guidance sessions were held two or three times a week. During these sessions the homeroom teachers also encouraged the pupils to raise problems they had experienced, both academic and personal. Common problems were discussed, led by the homeroom teacher.
b. The homeroom teachers received *daily* reports from subject-matter teachers on the academic progress and behaviour of the pupils. All problems were dealt with immediately.

c. The homeroom teachers held weekly meetings with the subject matter teachers. The pupils’ weekly progress was presented, as was the following week’s plan. Solutions for problems that had arisen were discussed.

d. At the end of each school week (on Thursday or Friday), the homeroom teachers held a short session with their pupils. These sessions served to sum up the week, to plan for the next week.

e. Under the new project, each homeroom teacher received an additional 14, non-teaching, hours (see Chapter One, page 38). These extra hours enabled them to meet regularly with individual pupils. The additional non-teaching hours each homeroom teacher received, required him/her to remain on the school grounds for additional hours. During this time individual meetings with pupils and teachers took place.

f. The additional non-teaching hours were also used to make house visits; the homeroom teachers made house calls often.

g. The homeroom teachers frequently met with school administrators and Board of Education representatives for reporting progress, solving problems and making various arrangements (i.e. marathons).

h. Each homeroom teacher prepared monthly progress reports on the amount of subject matter covered.

i. The homeroom teachers were responsible for all matters concerning the learning environments. This included changing to larger and more comfortable classrooms, collecting money to buy more comfortable chairs and making arrangements for the learning marathons that took place in a youth hostel in a nearby town.
1. Dealing with learning and personal problems of the pupils

One of the aspects of the “Success for All” school improvement project was the “leadership of the homeroom teachers” (see Chapter One, page 36). This meant that they were expected to “be responsible for behaviour and discipline” and to be “responsible for the motivational process”. It was also assumed that the homeroom teacher would play an important role in raising the self-image of his/her pupils.

During the project’s implementation, the principal and vice-principal of the experimental school described the following activities of the homeroom teachers. These would enable them to better deal with their pupil’s emotional needs and problems:

a. Motivational “pep talks” to increase motivation and self-image - The homeroom teachers held frequent motivational talks with their pupils:
   1. With the entire class during morning “homeroom sessions”
   2. With individual pupils, during the school day
   3. In conjunction with the school psychologist or school guidance counsellor during morning “homeroom sessions”.

b. Individual and group talks following each exam – The homeroom teachers held discussions following each exam, with the specific purpose of encouraging pupils to keep trying, and to raise motivation and self-image.

c. Individual talks – The homeroom teacher met frequently pupils who had emotional, discipline or achievement problems.

d. Home visits – The homeroom teacher made evening home visits whenever it was deemed necessary to deal with emotional, discipline and/or achievement problems.

The subject-matter teachers were closely involved with raising pupil’s motivation and self-image. When exams were returned, all questions were
reviewed in detail, and every pupil was given a chance to retake the exam. If necessary, a third or fourth chance was also given, until the pupil succeeded, and exhibited mastery of the material. The subject-matter teachers played an important role in the monitoring of the academic achievement of his/her pupils, and seeing to it that they continued to study and did not “give up”.

2. Contact with parents
The homeroom teacher determines to a large extent a parent’s involvement in school life. It is assumed that a change in parent involvement can be directly attributed to the homeroom teacher. One of the hypotheses of this research, hypothesis 8 states: There will be a better relationship between the homeroom teacher and the parents during the new program. In order to test this hypothesis, parents of all 60 pupils from the experimental school answered questionnaires at the beginning and the end of the 1999-2000 school year. The following factors were examined:

a. Parent involvement in school life
b. Parent satisfaction with function of homeroom teacher

a. Parent involvement in school life
Parent involvement in school life in the experimental school was measured by the following statements:

1. I am interested in what goes on in school (statement 1).
2. I know the teaching staff (statement 2).
3. I participate in the class social activities (statement 3).
4. I know my child’s school curriculum (statement 4).
5. I participate in the school’s social activities (statement 6).
6. I am aware of the achievement of the pupils in the school (statement 8).
7. I accompany the class on school trips (statement 10).
8. I actively participate in the class parent’s committee (statement 11).
9. I give a lesson or a lecture to my child’s class (statement 12).
10. I actively participate in the school parent’s committee (statement 13).
11. I am a partner to the decisions made by the school staff (statement 17).
12. There is constant dialogue between the parents and the school staff (statement 18).
13. The school encourages parents’ activities in the school (statement 22).
14. I want to be more involved in what goes on in school (statement 25).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Stdv</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am interested in what goes on in school (statement 1)</td>
<td>Pre</td>
<td>60</td>
<td>2.78</td>
<td>0.72</td>
<td>-1.811</td>
<td>0.073</td>
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<td>Post</td>
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<td>2.98</td>
<td>0.47</td>
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<tr>
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<td>3.70</td>
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<td>-0.199</td>
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<td>I participate in the class social activities (statement 3)</td>
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<td>-6.311</td>
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<td>0.59</td>
<td>-12.586</td>
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<td>I participate in the school’s social activities (statement 6)</td>
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<td>-5.222</td>
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<td>1.63</td>
<td>0.58</td>
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<tr>
<td>I am aware of the achievement of the pupils in the school (statement 8)</td>
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<td>60</td>
<td>2.55</td>
<td>0.79</td>
<td>-3.857</td>
<td>0.000*</td>
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<tr>
<td>Post</td>
<td>60</td>
<td>3.02</td>
<td>0.50</td>
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<tr>
<td>I accompany the class on school trips (statement 10)</td>
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<td>1.07</td>
<td>0.25</td>
<td>0.386</td>
<td>0.700</td>
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<td>Post</td>
<td>60</td>
<td>1.05</td>
<td>0.22</td>
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<tr>
<td>I actively participate in the class parent’s committee (statement 11)</td>
<td>Pre</td>
<td>60</td>
<td>1.30</td>
<td>0.91</td>
<td>0.000</td>
<td>1.000</td>
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<td>Post</td>
<td>60</td>
<td>1.30</td>
<td>0.91</td>
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<td></td>
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<td>Time</td>
<td>N</td>
<td>Mean</td>
<td>Stdv</td>
<td>Pre-post t-test</td>
<td>Sig. (2-tailed)</td>
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</tr>
<tr>
<td>I give a lesson or a lecture to my child’s class (statement 12).</td>
<td>Pre</td>
<td>60</td>
<td>1.02</td>
<td>0.13</td>
<td>-1.681</td>
<td>0.095</td>
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<tr>
<td>Post</td>
<td>60</td>
<td>1.08</td>
<td>0.28</td>
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<tr>
<td>I actively participate in the school parents’ committee (statement 13).</td>
<td>Pre</td>
<td>60</td>
<td>1.13</td>
<td>0.50</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>1.13</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am a partner to the decisions made by the school staff (statement 17).</td>
<td>Pre</td>
<td>60</td>
<td>1.00</td>
<td>0.00</td>
<td>-21.410</td>
<td>0.000*</td>
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<td>Post</td>
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<td>2.62</td>
<td>0.58</td>
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<td>There is constant dialogue between the parents and the school staff (statement 18).</td>
<td>Pre</td>
<td>60</td>
<td>1.93</td>
<td>0.25</td>
<td>-16.315</td>
<td>0.000*</td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>3.05</td>
<td>0.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The school encourages parents’ activities in the school (statement 22)</td>
<td>Pre</td>
<td>60</td>
<td>2.03</td>
<td>0.49</td>
<td>-6.974</td>
<td>0.000*</td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>2.73</td>
<td>0.61</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>I want to be more involved in what goes on in school (statement 25).</td>
<td>Pre</td>
<td>60</td>
<td>2.40</td>
<td>0.67</td>
<td>-5.530</td>
<td>0.000*</td>
</tr>
<tr>
<td>Post</td>
<td>60</td>
<td>2.98</td>
<td>0.47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.64: Comparison of factors concerning parental involvement in the experimental school at the beginning and end of the 1999-2000 school year.

From Figure 4.64 and 4.65 it can be seen, that 8 of the fourteen items measured show significant increase at the end of the school year, following the implementation of the project. These items are: participation in school activities, knowledge of child’s curriculum, participation in school social activities, awareness of achievement of pupils in school, being a partner to decisions made by school staff, being involved in constant dialogue with school staff, feeling encouraged to participate in school activities and the desire to be more involved in what goes on in the school. Regarding the
parameter of “knowing the teaching staff”, this was already very high at the beginning of the school year, and remained the same at the end of the school year. As to the statement “I am interested in what goes on in school”, the initial response showed, that as a group, the parents were only somewhat interested, and there was no significant change at the end of the year. This is puzzling in light of the other significant increases expressed. Of the remaining six items, four of them are specialized activities, and only a limited number of parents are usually asked to participate in them. These activities are: accompanying the class on school trips, giving lectures to the class and participating in the class parents’ committee and the school parents’ committee.

![Parent Involvement in School](image)

**Figure 4.65:** Comparison of fourteen aspects of parental involvement in the experimental school.
**b. Parent satisfaction with function of homeroom teacher**

Satisfaction with how homeroom teachers functioned in the experimental school was measured by:

1. I am satisfied with the work of the homeroom teacher (statement 14).
2. I meet with the homeroom teacher concerning school matters (statement 15).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Stdv</th>
<th>Pre-post t-test</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with the work of the homeroom teacher (statement 14)</td>
<td>Pre</td>
<td>60</td>
<td>3.00</td>
<td>0.66</td>
<td>-6.704</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>60</td>
<td>3.70</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I meet with the homeroom teacher concerning school matters (Statement 15)</td>
<td>Pre</td>
<td>60</td>
<td>2.48</td>
<td>0.60</td>
<td>-5.710</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>60</td>
<td>3.00</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistically significant where p<0.05.

Figure 4.66: Comparison of factors concerning function of homeroom teachers in the eyes of the parents from the experimental school.

Figure 4.66 shows that at the end of the 1999-2000 school year, experimental school parents were significantly more satisfied with the homeroom teacher’s work, and met more often with the homeroom teacher, than at the beginning of the school year.

In summary: for the most part there was a positive change in the involvement of experimental school parents and in their satisfaction with the homeroom teacher’s work at the end of the school year, as compared to the beginning of the school year.
Summary
The SFA programme increased the homeroom teachers’ responsibility for their pupils’ learning and personal problems, and increased their contact with parents.
Information provided by the principal and vice-principal during interviews, in addition to responses on questionnaires, indicate that there was indeed a major change in the functioning of the homeroom teacher. They felt responsible for their pupils’ success; they became familiar with all the personal and learning problems of each pupil and helped to solve their problems. The close contact they established with parents contributed to increased parental involvement in the school.

H. Evaluation of the SFA Programme by Participants
Introduction
The “Success for All” school improvement program that was implemented in the experimental school in the school year 1999-2000 was evaluated by the following participants:

1. Principal and vice-principal (administrator in charge of the project) of the experimental school - semi-structured interviews were conducted at the beginning and the end of the 1999-2000 school year.
2. Eight teachers from the experimental school, of which three were homeroom teachers, responded to three statements regarding the project, at the end of the school year.
3. Sixty parents of pupils in the experimental school responded to two statements evaluating the project, at the end of the school year.
4. Sixty pupils in the experimental school responded to three statements regarding the project, at the end of the school year.
This section presents the data concerning the success of the project in the eyes of the principal, vice-principal, teachers, pupils and parents in the experimental school. Transcripts of the interviews are in Appendix IV, page 399.

In addition the principal of the control school was interviewed at the beginning of the school year, before the control school decided to withdraw from the SFA programme. A follow up interview took place at the end of the school year, primarily regarding the reason for non-participation in the programme. Remarks by the control school principal regarding the SFA can be found below, page 313.

**Evaluation of the project by principal and vice-principal of the experimental school**

This section is based on semi-structured interviews with the principal and the assistant principal in the experimental school.

a. **Readiness for program implementation:**

The principal felt that the workshops that the school staff participated in, before the start of the program, were helpful in preparing them for this project, and therefore he and his staff were motivated to implement it. Workshops and internal evaluation that took place during the school year ensured continued staff motivation and cooperation.

b. **Curriculum and schedule changes:**

*Homeroom teachers:* In the opinion of both the principal and vice-principal, the homeroom teachers were satisfied with the implementation of the new programme. The principal said: "The homeroom teachers expressed great satisfaction with the additional hours for homeroom classes. As a result, their relationship with their pupils became stronger and more positive. Pupils began to see them not only as teachers but also as friends who tried to help them succeed in their exams. . . One
homeroom teacher told me 'now I see that a teacher who spends so many hours in his class can influence his pupils; until now I was a skeptic'.”

**Subject matter teachers:** The principal said that the teachers were satisfied with the new method of study. It required a lot of preparation on their part, but it ensured the success of the pupils because “they don’t have to remember the material for a long time, and they can concentrate on fewer subjects”. They also felt that the marathons and the practice in answering matriculation statements contributed towards success on the exams.

The vice-principal stated: “Despite all my initial qualms, the teachers are quite pleased with their pupils’ achievement, behaviour and motivation. Some of the teachers even feel quite close to their pupils. All of the teachers, but especially the homeroom teachers, feel that they worked very hard, but in the words of one of them: ‘We succeeded in bringing the ships to a safe shore’.”

Subject matter teachers were not compensated for extra time spent at staff meetings, as well as for the many additional hours spent with pupils and in preparing lessons.

c. **Criteria for success of the project:**

In the first interview the principal said he would consider the project a success if three objectives were achieved. These were:

1. Over 90% of the pupils would pass their 10th grade matriculation exams.
2. An increase in pupils’ motivation to succeed in their studies.
3. Positive attitude of teachers towards weak pupils.

In the second interview, at the end of the year, the principal felt that teachers had a more positive attitude toward weak pupils. “During my conversations with teachers who taught the project classes, I felt that they had become more convinced that weak pupils can also succeed if they are
given the proper attention, their problems are attended to, and their self-image is strengthened. In my opinion, the teachers changed the motto of “Success for All” from an abstract idea to a concrete working model.”

A change in pupil motivation became noticeable about six weeks into the school year. According to both the principal and vice-principal, this change was dramatic by the end of the year. They attributed this change to the intensive efforts of all concerned, especially the homeroom teachers. The vice-principal stated: “The pupils became serious about their studies, even to the point that most of the discipline problems disappeared in these classes, and pupils stopped cutting classes.”

d. Conditions for successful implementation of the project:

In the first interview, the principal said that three conditions were necessary:

1. Full cooperation from various agencies, such as the City Municipality, Israeli Board of Education etc.

2. The school’s awareness regarding the budget available. The principal: “I am upset that I was not invited to participate in budget meetings. On the other hand, I gain by not having to worry about the budget – I just have to ask permission for each major expense, but it makes my decision-making more difficult”.

3. Proper remuneration for homeroom teachers and subject matter teachers who participate in the project.

In the second interview the principal reported:

1. “After about two months of not knowing, I was finally informed of the budget, and the school received all the money that was promised for the project. Most of the funds came from the National Board of Education and the rest from the City Municipality. This made my decision making much easier.
2. All agencies cooperated fully, by providing funds, tutors, moral support and the provision of various advisors. The Minister of Education, who visited twice, spoke with me, teachers, pupils and the city mayor. The Minister received a project report every two months from the district governor. This district governor, together with his staff, visited the school four times during the school year, and was in contact throughout the project. Representatives of the Israeli Association of Community Centres, who were the initiators and who monitored the project, visited often, and were available for advice, and problem solving. The city mayor and his staff were in frequent contact with me and the vice principal (who was in charge of the project). They helped solve problems such as air conditioning of classrooms, provision of suitable desks and chairs for pupils, replacement of chalk blackboards with white boards, etc. Parent representatives from each class that participated in the project visited the school and received reports. Almost all parents participated in joint meetings with teachers, the project head, agencies, etc.

3. Three months into the school year, the Ministry of Education approved and supported the changes in the definition of the homeroom teachers’ position. They received the promised additional salary for the project’s implementation – 14 additional hours for each teacher. The Ministry of Education came to an agreement with the National Teacher’s Organization, that other homeroom teachers in the country would not demand the same salary increase, and that the increase would only be for one year (for the duration of the project).

d. **Continuation of the project:** Both the principal and vice-principal felt that it was very important to continue the project;
pupils’ motivation and their desire to succeed increased, attendance increased and no pupils dropped out during the school year. The teachers worked hard, but the successful results of the winter matriculation exams showed that their efforts were rewarded. Parents expressed their satisfaction with the project, especially after receiving the results of the winter matriculation exams. The school governors were also pleased. However, at the end of the school year it became obvious that the project was too expensive, and the Government could not afford to continue to fund it.

**Teachers’ evaluation of the project**

Eight teachers from the experimental school responded to the following three statements regarding the “Success for All” school improvement program:

1. I enjoyed being part of the school project (statement 34).
2. I would like to continue teaching under this project (statement 35).
3. I feel that the project was a success (statement 36).

Figure 4.67 presents the results of the teachers’ responses regarding their assessment of the project. As a group, the teachers strongly agreed to all three statements: they enjoyed being part of the project, they would like to continue working under this project and they felt that the project was a success.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Stdv</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed being part of the school project (statement 34).</td>
<td>Post</td>
<td>8</td>
<td>3.75</td>
<td>0.463</td>
</tr>
<tr>
<td>I would like to continue teaching under this project (statement 35).</td>
<td>Post</td>
<td>8</td>
<td>3.63</td>
<td>0.518</td>
</tr>
<tr>
<td>I feel that the project was a success (statement 36).</td>
<td>Post</td>
<td>8</td>
<td>3.75</td>
<td>0.463</td>
</tr>
</tbody>
</table>

Figure 4.67: Evaluation of the project by teachers in the experimental school.
Parents’ evaluation of the project

The parents were asked to respond to the following statements:

1. My child put more effort into his/her studies under the new program (statement 29).
2. I feel that the new program was successful (statement 30).

Please note that these statements were only used on the questionnaire at the end of the school year, so there is no comparison with pre-test data.

Figure 4.68 shows that the parents felt that their child put more effort into his/her studies under the new programme, and they strongly agreed that the programme was successful.

<table>
<thead>
<tr>
<th>Statement</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Stdv</th>
<th>t-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>My child put more effort into his/her studies under the new program (statement 29).</td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.30</td>
<td>0.619</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that the new program was successful (statement 30).</td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.65</td>
<td>0.480</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.68: Evaluation of the project by parents in the experimental school.

Pupils’ evaluation of the project

Pupils evaluation of the “Success for All” school improvement program included the following statements:

1. My tutors put a lot of effort into helping me succeed in my exams (statement 6).
2. I feel that participating in the new program improved my chances for success (statement 22).
3. I would like to continue learning in this program (statement 23).
Figure 4.69 presents the results of these three statements, taken from the questionnaire given to pupils at the end of the school year. It can be seen that the pupils agreed that participating in the new program improved their chances for success, they would like to continue learning in this program and that their tutors put a lot of effort into helping them succeed in their exams.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>School</th>
<th>Time</th>
<th>N</th>
<th>Mean</th>
<th>Stdv</th>
</tr>
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<tbody>
<tr>
<td>My tutors put a lot of effort into helping me succeed in my exams (statement 6).</td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.43</td>
<td>0.621</td>
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<tr>
<td>I feel that participating in the new program improved my chances for success (statement 22).</td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.483</td>
<td>0.499</td>
</tr>
<tr>
<td>I would like to Continue learning in this program (statement 23).</td>
<td>Exp</td>
<td>Post</td>
<td>60</td>
<td>3.483</td>
<td>0.596</td>
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</tbody>
</table>

Figure 4.69: Evaluation of the project by pupils in the experimental school.

Remarks of the principal of the control school regarding the SFA programme

This section is based on interviews with the principal of the control school at the beginning of the school year, after several months of preparation for the implementation of the SFA programme, and at the end of the school year. He claimed that the effort needed for the project’s implementation was too great of a burden on the school’s staff. “The teachers constantly complain about the heavy load that the project puts on them, and this in addition to other projects that we are implementing this year. The pupils are afraid to commit to the new “craze” of the administration that would require them to study too much.
All day I have to calm teachers who complain about the requirements and that the benefits are not proportional to the amount of time they have to put in.”

He and his staff did not think that the SFA programme would bring about the desired results. In addition, since his school was already participating in a large number of projects, the teachers felt that “there just is no room for another one in the school at this time”. (Approximately a month after the beginning of the school year, the principal and staff of the control school decided not to participate in this program). In the second interview the principal said: “I feel confident that the projects that we implemented in our school this year, will lead to improved results on the upcoming matriculation exams. In my opinion, the motivation of our pupils is increasing, although discipline problems still exist.”

**Summary of evaluation**

The “Success for All” school improvement program was evaluated by the principal and vice-principal, the teachers, students and parents from the experimental school. The following is a summary of these evaluations:

1. The teachers, as a group, strongly agreed to all three statements: they enjoyed being part of the project, they would like to continue working under this project and they felt that the project was a success.

2. The pupils felt that participating in the program increased their chances for success, and they would like to continue to study under the new program.

3. The parents felt that their child put more effort into his/her studies under the new program, and they tended to strongly agree that the new program was successful.

4. The principal claimed that it was very important to continue with the project. He felt that pupil’s motivation and their desire to succeed
increased, attendance increased and no pupils dropped out during the school year.

5. The principal and vice-principal felt that their relationship with the parents in the school was strengthened.

I. Summary of Chapter Four

The data presented in this chapter was collected in order to test the following hypotheses. Each hypothesis will be followed by the findings of this research.

1. Following the implementation of the school improvement programme there will be an increase in the percentage of tenth grade pupils who will pass the matriculation exams in the experimental school, as compared to the percentage of pupils who passed the exams in previous years – This hypothesis was confirmed. In the experimental school, a significant increase in the percentage of pupils passing their matriculation exams was observed in all four subjects. In three of the four, Hebrew Language, History and Bible, the observed increases were greater than expected, had the trend of the previous years continued.

2. In the year 2000, a higher percentage of tenth grade pupils from the experimental school will pass their matriculation exams, as compared to the control school – This hypothesis was confirmed. A significantly higher percentage of pupils passed the Hebrew Language and the History matriculation exams in the experimental school as compared to the control school.

3. No tenth grade pupils will drop out of school and not continue on to the 11th grade in the year 2000 - This hypothesis was confirmed. The dropout rate decreased to zero – no 10th grade pupils left the experimental school in the year 2000.
4. The implementation of the school improvement programme in the experimental school will raise the image of this school in the eyes of its pupils, while there will be no change in the image of the control school in the eyes of its pupils – This hypothesis was confirmed. Pupils in the experimental school expressed a significantly higher evaluation of their school at the end of the year, than they did in the beginning, prior to the program’s implementation. This is in contrast to the control school, whose pupils did not show any change regarding school image.

5. The implementation of the school improvement programme in the experimental school will raise the image of this school in the eyes of the parents – Four statements were used to examine this. All show a significant increase at the end of the 2000 school year as compared to the beginning of the school year. It can thus be said that this hypothesis was confirmed. However, it should be noted that despite the significant increase in satisfaction with level of achievement, at the end of the year parents were still not completely satisfied.

6. As a result of the new programme, the experimental pupils' educational self-image will be heightened, while the control school pupils will not express any change in their educational self-image at the end of the 1999-2000 school year - Pupils’ educational self-image included four components: pupils’ perception of their own self-image, pupils’ perception of how their parents perceived their chances for success, pupils’ perception of how their friends perceived their chances for success and pupils’ perception of how their teachers perceived their chances for success. For the first three components, a significant increase was measured at the end of the year, as compared to the beginning. As to their perception of how their teachers perceived their chances for success, no significant change was observed at the end of
the year. In the control school, no significant differences were measured over the year.

7. As a result of the new program, teachers in the experimental school will express increased belief in their pupils’ ability to succeed, while teachers in the control school will not show such a similar increase – this hypothesis was found to be false. The project was not successful in changing experimental school teachers’ beliefs in their pupils’ ability or their feeling of “wasting time” trying to teach them. However, it did change their attitudes about the pupils’ background being a hindrance for learning (the pupils come from low-socioeconomic backgrounds). There was no change in the teachers in the control school to any of the statements concerning this issue.

8. As a result of the new programme, the pupils in the experimental school will express increased motivation towards learning – This hypothesis was found to be false. No change was found regarding pupil’s motivation to succeed in school and in their exams. However, it is important to note that the pupils expressed motivation was already high at the beginning of the year.

One of the major changes implemented by the “Success for All” school improvement program was a change in the traditional role of the homeroom teacher. The results presented in this section gave an overview of this new role, and is discussed at length in the Chapter Five, pages 342-345.

In addition to the above hypotheses, this research thesis set out to evaluate the project as seen by participants in the program. It can be said that all participants (principal, vice-principal, teachers, students and parents) expressed positive attitudes towards the project, and felt that it was a success. The critical evaluation of the project, its underlying theory and its implementation is discussed at length in the following chapter.
Chapter Five – Discussion

Introduction
As explained in Chapter One, the educational and social gap is an important issue in Israel (see page 12). The Ministry of Education, recognizing the serious social problems created by unequal ethnic representation in higher education, began making efforts to improve education, in those areas, where schools were populated by large numbers of pupils of Afro-Asian origin. Both national and local programs are continuously being made to improve academic achievement in targeted schools.

One of these programs is the “Success for All” school improvement program, researched in this study. It was designed by the National Association of Community Centres and the National Board of Education, in conjunction with the local municipality and local school officials, in the development town, to meet the specific needs of their two comprehensive high schools. The high schools of this town had a low public image, due mainly to a poor achievement record on national matriculation exams. Addressing this problem only on a narrow teaching level, as had been attempted in the past, had not achieved the desired outcomes. Therefore, a decision was made to implement a wide-ranging programme, based on school effectiveness and school improvement research findings, in the hope of increasing the number of pupils who would succeed in obtaining a matriculation certificate, and thus be able to continue on to higher education.

This chapter is divided into four main areas:

A. Discussion of the findings of the SFA project:

1. Analysis and significance of findings
2. Elements of the SFA programme that contributed towards the improved success on matriculation exams
B. The SFA programme in light of effective schools and school improvement literature

C. Evaluation of the SFA programme and suggestions for future programs:
   1. Difficulties and Problems Encountered in the Implementation of the SFA Programme, and Suggestions for an Improved Project (non-budgetary matters)
   2. Reasons for Discontinuation and Suggestions for a Modified, Less Costly SFA Programme

D. Summary of Chapter Five

A. Discussion of the Findings of the SFA Project

1. Analysis and Significance of Findings
This section discusses and analyses the outcomes of the SFA project in the following areas: 1) matriculation exams, 2) pupil dropout, 3) educational self-image, 4) pupil motivation and 5) school image. This section also compares results in the experimental and control schools.

1. Matriculation exams
Despite efforts made in the last decade, as described in Chapter One, page 5, the numbers of pupils eligible for a matriculation certificate, although increasing over the years, still fell below the national average (Annual Report of the National Comptroller, 1999). This study examined two hypotheses related to pupils' success in the 10th grade matriculation exams: a) Following the implementation of the SFA project, in the experimental school, statistically significant increases in the percentage of pupils passing all four matriculation exams will be observed, as compared to previous years and b) a significantly higher percentage of pupils will pass the Hebrew
Language and the History exams in the experimental school than in the control school.

This section compares the number of pupils in the tenth grade sitting for and passing the national matriculation exams before and after the implementation of the SFA programme in a) the experimental school as compared to previous years and b) between the experimental and control schools and national norms.

**Percentage of pupils sitting for the matriculation exams**

Until 1995, most of the pupils attending either school in the development town, did not study in a matriculation track. One of the changes made in this town in the 1995-1996 school year, was the abolishment of vocational tracks. All pupils were placed in an academic track leading to a national matriculation certificate. However, until the 1998-1999 school year, some pupils were not permitted to sit for certain matriculation exams. An unofficial, undisclosed policy of many schools in Israel, was not to encourage, and to sometimes actually discourage pupils, studying in matriculation tracks but failing a certain subject, from sitting for that particular exam (Levi, 1990). This lowers the number of pupils who take these exams, since approximately only 50% of pupils in Israel study in matriculation tracks (Swirsky and Swirsky, 1998). The reason for this is that schools are evaluated based on the success of their pupils on the national exams. This success was measured by the numbers of pupils passing the exams as compared to the numbers sitting for these exams. The percentages did not take into account the total number of pupils attending a particular grade in the school.

In the school year 1998-1999, a new policy was adopted in the development town, whereby all pupils were allowed to take all matriculation exams in 1999, regardless of prior achievement; this policy did not actively encourage
weak pupils to take their exams. The SFA instituted a programme of actively encouraging all pupils to sit for all exams.

It can be seen from the results presented in Chapter Four, page 230, that this policy of encouragement was very successful. In the experimental school all pupils in the 10\textsuperscript{th} grade - 100\% - sat for all four matriculation exams. This was a significant increase, as compared to the 1999 school figures.

In 2000, when comparing the two common matriculation exams (Hebrew language and history) with the control school, the experimental school had a significantly higher percentage of pupils sitting for both exams. Also when comparing the experimental school and the national figures for the Hebrew language, history and Bible exams, a significantly higher percentage of experimental school pupils sat for these exams.

**Percentage of pupils passing the matriculation exams**

In addition to the varied educational enrichment activities designed to enhance the pupils' chances to succeed on their matriculation exams, the SFA initiated the scheduling of winter matriculation exams. This decreased the number of subjects a pupil had to be tested in, within a short period of time (usually 2-4 weeks). The burden of taking four matriculation exams at the end of the tenth grade is a heavy one for most pupils, and especially for those from an under-privileged background such as the population under study in this research (Agaf Shachar, 1997). As a direct result of this reorganization, tenth graders in the experimental school took two exams at the end of the winter session, and two at the end of the spring session. This is in contrast to previous years, when all four exams were taken at the end of the school year. It was surmised, that decreasing by half the number of matriculation exams a tenth grade pupil was required to take in a given semester, and by easing the course load so that fewer subjects are studied simultaneously with more hours devoted to each subject, the result would be
an increase in the number of pupils passing these exams (Israeli Association of Community Centres Ltd. Jerusalem, 1997).

The results of the 10th grade matriculation exams in the experimental school in 2000 clearly show that both of the hypotheses of this study related to the matriculation exams, were confirmed. Figure 4.15 and 4.16, pages 241 and 242, show: a) in all four matriculation exams there was a statistically significant increase in the percentage of pupils in the experimental school who passed their exams in 2000 as compared to the results in 1999 (confirmation of the first hypothesis); b) in comparing the results in the matriculation exams in 2000 of the pupils in the experimental and control schools, a significantly higher percent of experimental school pupils passed the Hebrew language and history exams than did the control school pupils (confirmation of the second hypothesis) (see also Figure 4.8, p. 234 and Figure 4.11, p. 237).

In addition, when comparing the results in the experimental school with national norms we also note the following important data: in all three 10th grade standardized matriculation exams taken in 1999, the percentage of experimental school pupils who passed was significantly lower than the national average. This changed dramatically in 2000. On the history and Bible exams the percentage of pupils in the experimental school was now higher than the national average, and the results in the Hebrew language exam compared favorably with the national norm.

Figure 4.16, p. 242 also shows that based on the Goodness of Fit test, in the year 2000 the pupils in the experimental school achieved higher than the expected trend on all three of their standardized 10th grade matriculation exams. The improvement in these three exams was especially noteworthy. While the statistically calculated expected percentage of pupils passing the year 2000 matriculation exams in Hebrew language and history is 68.8% and 75.1%, respectively, the actual success rate was 95% for Hebrew language
and 93.3% for history. For the Bible exam, the improvement in 2000 was even more outstanding. Although there was no improvement between the years 1998 and 1999, and the statistically calculated expected success rate was 58%, the actual success rate was 93.3%, 35% greater than expected. To better appreciate the significance of the fact that in each of the four 10th grade matriculation exams there was an average success rate of 94%, it is important to note that 100% of the 10th grade class took all four exams. As stated earlier on page 226, this was not the case in previous years in both the experimental and control schools.

What is the significance of encouraging all high school pupils to take the matriculation exams, and making every effort to help the individual pupil pass these exams? When we examine the results of the exams in the experimental school in 1998 and 1999, prior to the implementation of the SFA project, and compare them with results of the matriculation exams in 2000, we can appreciate the importance of the SFA project for many pupils in the experimental school.

In 2000, following the implementation of the SFA project, only 3 youngsters failed Hebrew language, and 4 failed history. In comparison with these positive results, in 1998, 24 tenth grade pupils failed the Hebrew language exam and 26 failed the history exam. In 1999, 28 pupils failed the Hebrew language exam, and 27 failed the history exam. Those who failed and still wanted to try for a matriculation certificate, had to re-take these exams in future years, at their own expense. Thus, at the age of sixteen many pupils were already in the unfortunate situation of the matriculation certificate being an unrealistic goal for them. They would most likely be unable to pursue higher education, and would probably wind up in lower-paying, blue-collar jobs. In contrast, those individuals who studied under the SFA project
could maintain their hopes for attaining higher education, which would open the doors of opportunity.

When comparing the pupils in the experimental and control schools in the year 2000, we see that over 90% of the pupils in the experimental school passed all four exams in the 10th grade, while in the same year, in the control school, only 75% passed the history exam and 71% passed the Hebrew Language exam (Figure 4.7, p. 233 and Figure 4.10, p. 236). This is significant on the individual level. It in effect means that 25% of the pupils in the control school have very little hope of obtaining a matriculation certificate in the future. Therefore, they cannot hope to attend a University, thus perpetuating the low-socio-economic status of the next generation.

In spite of the above impressive statistics, pointing to the positive effect of the SFA on pupils’ achievement, one may question the validity of attributing the improved achievement directly to the SFA programme. In response to this legitimate question note the following: a) other than the implementation of the SFA project, no other known relevant change took place in the experimental school in 1999-2000. 1) The ethnic background and scholastic ability and achievement of the 10th grade pupils was similar to former 10th grade pupils. 2) There were no changes of note in teaching staff or administration; b) The SFA programme was based on validated effective schools research; and c) The SFA was not simply an ‘add-on’ improvement programme. It was a wide-ranging, encompassing set of interacting school organizational changes, teaching practices, pupil activities, environmental conditions and parental involvement, taking into account contextual factors. Thus, the SFA had a multiplying effect on many school factors, known and unknown.

Finally, it is important to stress Creemers' contention (1994, p. 20) that: “An important conclusion that can be derived from research is that the margins for schools and classrooms are small. About 12 to 18 percent of the variance
in student outcomes can be explained by classroom and school factors. . ., but can it be said that any effective school or school improvement study is completely "clean" of other factors that were not tested or that the researchers were not aware of?"

2. Pupil dropout

This section discusses the SFA project and its impact on pupil dropout. One of the aims of the SFA program was to keep all pupils in high school until graduation. Despite a steady decline in the dropout rate in the school, concern over potential dropouts remained. The compulsory education law in Israel requires children from the age of five to fifteen to attend an educational institution, and also provides free education for the ages of 5-18. Despite this, nearly one-fifth of Israeli teenagers drop out before the 12th grade (Swirsky and Swirsky, 1998).

In the past twenty years, much effort has been made in Israel to decrease the dropout rate. Avraham Bourg, who held the position of chairman of the Parliamentary committee on education, claimed that the "mission" of decreasing the dropout rate was the responsibility of three parties: the pupil’s family, the local municipality and the national government (Parliamentary Proceedings, 2001). He felt that only cooperation between these three parties would bring about the desired results.

As seen from Chapter Four, Fig. 4.17, p. 246, the dropout rate from 10th to 11th grade in 1993 and 1994 was very high – 31.17% in 1993 and 36.71% in 1994. In 1995 a significant policy change was adopted by both comprehensive high schools in the town studied in this research. All pupils were placed in an academic track, and vocational tracks were abolished. It was hoped that this change would lower the dropout rate, since it encouraged pupils to remain in school in order to achieve a national matriculation certificate. In fact, following the 1995-1996 school year, the percentage of
pupils who continued on to the 11th grade in the experimental school increased greatly; the 10th grade dropout rate at the end of the 1998 school year was only 7.69%. To help maintain this positive trend, in the 1998-1999 school year, a further modification of policy allowed all pupils to sit for all matriculation exams, regardless of prior achievement. Thus, at the end of the 1998-1999 school year only 3.03% of the 10th grade pupils dropped out of the experimental school.

Aware that failure on the matriculation exams would lead to discouragement and eventual dropout, school authorities recognized that success in these exams was crucial in order to keep pupils in high school until graduation.

The SFA school improvement project, addressed the problem of potential dropouts with a multi-faceted programme, that included the following:

a) increasing parental involvement in school life, in the hope that this would bring about a change in their attitude as to the importance of higher education, and raise the school image in their eyes;
b) paying more attention to the particular individual needs of each pupil, by redesigning the role of the homeroom teacher, and assigning more hours to a psychologist and a school guidance counsellor. This extra attention focused on raising the self-esteem of the pupils and attempted to solve problems concerned with academic achievement; and
c) raising the success rate on the matriculation exams by actively encouraging all pupils to take the exams, and providing the necessary assistance to enable weaker pupils to succeed.

Figure 4.19, p. 247, shows that the trend of less dropouts continued; in the year 2000, in the aftermath of the SFA programme, all 60 pupils continued on to the 11th grade. This compares favourably with the 7.62% dropout rate in the control school and the 11.5% dropout rate for the total Israeli 10th grade pupil population.

Pupils in the academic track set their educational goals on the premise that it is a “must” to achieve a matriculation certificate. Keeping alive their hope of
achieving this certificate is a key component in keeping the pupils in school. The positive results of the SFA programme, reinforced the pupils’ expectations of reaching this goal. This is one of the possible explanations for the fact that all 10th grade pupils continued on to the 11th grade, in the experimental school, for the first time in its history. It is reasonable to assume that 10th grade pupils, who had already failed important exams believed that their hopes for a matriculation certificate were not realistic. Therefore, they would not make an effort to succeed in the remaining two years of secondary school. Indeed, some of these pupils would drop out of school; they feel that there is no point in continuing their studies, as the school offered no alternative tracks to the academic-matriculation one.

In 2000, only four pupils in the experimental school failed the History exam, and three failed the Hebrew Language exam; they might have been candidates for dropping out. However, this was not the case due to the provision of the SFA program that provided an opportunity to be re-tested, at a later date. This new opportunity was known to all the pupils, and might have served to dispel thoughts of dropping out.

In summary, the SFA project made intense efforts on three fronts: to have pupils remain in school until graduation; to raise the academic self-esteem of the 10th grade pupils by removing obstacles on the path to academic success; to increase parental involvement in school life; and to increase their awareness of the importance of a matriculation certificate. It is probable, that these factors led to the positive outcome of 100% of the 10th graders continuing on to the 11th grade, in the experimental school.

3. Educational self-image

One of the hypotheses of the SFA programme was that there would be a heightening of the educational self-image of pupils in the experimental
school, without a similar change occurring in the control school. This educational self-image was examined by statements on two levels: a) how the pupil evaluates himself/herself and b) how he/she perceives how others (parents, teachers, friends) evaluate him/her.

The data presented in Chapter Four, beginning on page 257, shows that the above hypothesis was confirmed. Based on pupil responses in both schools, we find: a) At the end of the year, following the SFA programme, based on five of seven statements, two components of the educational self-image of the experimental school pupils showed a significant increase. Responses to the other two statements were initially high, and remained so at the end of the year. b) In contrast, the control school pupils did not express any significant change in any of the seven items measured.

**Comparison of both schools as to how the pupils evaluate themselves**

At the beginning of the school year, there was no significant difference between the two schools, in all statements measuring the pupils' educational self-image. However, at the end of the school year there was a significant difference as to the sitting for all tenth grade matriculation exams. Control school pupils expressed a significantly lower degree of belief that they would take all of these exams, as compared to pupils in the experimental school.

**Comparison of both schools regarding the pupils' perception of how others evaluate them**

At the beginning of the school year, there was no significant difference between pupils in both schools, in their perception of how parents and friends evaluated their chances to succeed. Pupils' perception of their teachers' evaluation was significantly higher in the experimental school than in the control school.

At the end of the year, experimental school pupils expressed a significant positive increase in their perception of how parents and friends evaluated
them, as compared to the beginning of the year. By contrast, the control school pupils showed no significant change in their perception of how parents, friends and teachers evaluated them. Thus, at the end of the year, experimental school pupils’ perception of their parents, friends and teachers expectations of their success were significantly higher than control school pupils’ perceptions.

Discussion of results
A high pupil self-image, as well as high parent expectations, is typical of disadvantaged pupils of North African descent (Corman, 1986). Parents tend to overestimate their children’s abilities, and generally expect academic success. This expectation is also internalised by the pupils themselves until failure shatters this rosy image. The 10th grade pupils had not yet sat for any matriculation exams; therefore, they had no past record of failure in these exams. Earlier failures in internal school exams are shrugged off, since, in their eyes, they were of no consequence. Thus, we find high pupil expectations for success, and a perception of high parent expectation for success, in both schools.

The significant positive increase expressed by the experimental school pupils at the end of the year in their belief that they would sit for all exams and succeed in them, may be attributed to the SFA effect. The SFA was designed primarily to encourage pupils to take all exams, and in addition, provided special enrichment activities to help them succeed. Emphasizing the motto “Success for All”, the educational staff in the experimental school also radiated a positive attitude towards the pupils. All this served to strengthen and reinforce the pupils’ educational self-image.

The significant positive difference, in the perception of their teachers’ evaluation, by experimental school pupils as compared to control school pupils, both at the beginning and end of the year, might also be attributed to the SFA effect. The importance of teachers exhibiting a school climate of
expectations, for pupil success, was high on the agenda of the SFA school improvement project.

In summary, it is probable that the enhanced educational self-image of the experimental school pupils was a contributing factor to the positive results on the matriculation exams. One may assume, that perceived high expectations of significant others (teachers, parents and pupils), leads to high self-expectations, which in turn, leads to greater motivation. Higher motivation leads to more intensive study, which brings about improved test results.

**Pupils perception of teachers’ concern for their success**

The data presented in Chapter Four, beginning on page 268, shows that at the end of the year, experimental school pupils felt even more strongly than they did at the beginning of the year, that their success on the matriculation exams was an important concern of their teachers. They felt that teachers had encouraged them and had made significant efforts to ensure their success on the exams.

In contrast, control school pupils expressed no change at the end of the year. In all three items measured, experimental school pupils assessment of their teacher efforts, concern and encouragement was significantly higher that that of control school pupils.

Once again, it could be surmised, that the SFA school improvement programme, with its emphasis on the concept that “everyone can succeed”, was a key factor in the significant positive changes in the experimental school pupils’ perception of their teachers. It is also likely, that expectations for success are linked with concern for success. Experimental school pupils, as compared to control school pupils, had significantly higher perceptions of their teachers’ belief in their success, as well as stronger feelings that their teachers were concerned for their success (see page 270).
Experimental school teachers’ assessment of pupils’ ability to succeed

From the data presented in Chapter Four, pages 263-268, as to the experimental school teachers’ assessment of their pupils’ ability to succeed, the following two results stand out:

1. Of the four statements measured at the beginning of the year, teachers were only positive regarding one: “I am successful in imparting my educational perceptions to my pupils”. This was the only statement that showed a significant positive change at the end of the year.

2. At the end of the year, the teachers tended to be even more pessimistic than at the beginning of the year on two items: “I am wasting my time as a teacher” and “Most of my pupils are not capable of understanding the material I teach”.

It is clear that there is a contradiction between the positive change pertaining to the imparting of educational perceptions and their assessment of the learning habits of their pupils on the one hand, and the increased negative feeling of “wasting time” and “not capable of understanding the material”. It is possible that the teachers themselves were in conflict regarding their assessment of their pupils’ chances for success. It seems that at the beginning of the school year, the teachers were enthusiastic about the potential of the SFA project to succeed, based on the preliminary meetings describing the intensive, in-depth programme. However, during the day-to-day interaction with pupils, teachers were confronted with the reality of dealing with below-average achieving pupils. One can also conjecture that the teachers were concerned, that despite the input of the programme, the pupils would not do well on the matriculation exams. Therefore, their skeptical response regarding their pupils’ ability was to prepare a “cover” in the event that they didn’t live up to expectations.
What message did the pupils receive from their teachers? The data relating to the pupils’ perception of their teachers’ assessment of their ability to succeed, shows that the pupils internalized a positive message from their teachers. This is an important point. The SFA programme succeeded in creating a positive learning environment in the school. Teachers, in spite of their own reservations, projected to the pupils’ expectations that they would succeed.

Comparison of teachers’ assessment in the experimental and control schools

The data in Chapter Four, pages 264-267, shows that the responses of the teachers in both schools were similar, both at the beginning and end of the year. The only significant difference measured at the beginning of the year was regarding the attitudes and habits brought from home by the pupils. The experimental school teachers were significantly more in agreement with this statement than the control school teachers. However, at the end of the year this difference was no longer apparent. The only significant difference measured at the end of the year concerned the success in imparting educational perceptions; experimental school teachers were more positive.

One can conjecture from the above that during the year, possibly due to the SFA programme, teachers in the experimental school became somewhat more positive regarding their pupils’ chances for success, while the opinions of the control school teachers remained as they were at the beginning of the year.

4. Pupil motivation

Another key to scholastic success is pupil motivation (Leo and Galloway, 1996). From responses on the questionnaires, it was seen that pupils in both schools expressed high motivation to succeed in their studies and the desire to continue on to higher education. It was important for them to receive high grades, and they were willing to work hard to achieve them. These findings
were consistent both at the beginning and at the end of the school year (pages 275-278). However, the principals of both schools contradicted these statements.

**Pupil motivation in the experimental school**

The principal and vice-principal of the experimental school contradicted the highly positive pupil assessment of their motivation at the beginning of the school year. Both stated, that prior to the project’s implementation pupils showed very little interest in learning, as was expressed by high absenteeism rates and poor class discipline. In the initial interview, one week into the 1999-2000 school year, the vice-principal stated: “I’m quite disappointed that the pupils as a group are just as indifferent regarding their studies as last year. I had hoped that the SFA would have given them greater motivation since they signed a written commitment.” The fact that the responses given by the pupils, on the first questionnaire, were contradicted by the administrators’ evaluation raises the question of what the true state of pupil motivation at the start of the school year was. One can speculate that there is a difference between how pupils regard themselves, and how they actually behave. The day-to-day behaviour of the pupils is a more reliable indicator of pupil motivation than the momentary expression of attitude on paper.

The motivation picture began to change, as the SFA programme became an accepted routine in the school. According to both the principal and the vice-principal, change was already apparent six weeks into the school year, and by the end of the year the change was dramatic. The principal stated: “Where in the beginning of the year, the 10th graders behaved no differently than other pupils in the school, slowly, but surely, a change occurred. Now, at the end of the year, I can definitely say that the 10th graders show much more motivation towards learning”. They felt that these changes could be attributed to the intensive efforts of all concerned, especially the homeroom
teachers. Thus, according to the senior administrators, the SFA program did indeed bring about a positive change in pupil motivation.
Pupils’ scepticism regarding new programmes could be a reason as to why the initial orientation activities of the SFA programme were not sufficient to influence learning motivation. In the past, the pupils had been exposed to a number of highly praised school initiatives that had not changed the school’s educational scene. Only when the impact of the wide-ranging SFA programme was actually experienced, did the pupils become “believers”

I, the author of this thesis, believe that the SFA program did significantly increase pupil motivation. This is based on my observations as a teacher in this school, and on the opinions expressed verbally, to me, by my fellow teachers. They told me that pupils actively participated more during lessons, initiated questions that showed interest in understanding the material and frequently approached them for help. Even during recess pupils could be heard discussing aspects of the SFA programme.

Bowring-Carr and West-Burnham’s (1997, p. 110) practical steps that schools can take to increase pupil motivation are similar to many elements in the SFA programme. These include:

a. Abundant opportunities for success, since motivation is a correlation of success more than failure.

b. Regular feedback, reinforcement, recognition and praise.

c. Ensuring that the learner accepts the validity of the activity in personal terms.

The above, explains how the SFA programme was instrumental in the increased motivation.
Pupil motivation in the control school

Pupils in the control school also expressed high motivation towards learning at the beginning of the school year. However, the principal of the control school stated in the initial interview that: “tenth grade pupils in my school are not as serious about their studies as I would expect them to be. This is the first year that they will be taking matriculation exams, and I hope that as the year progresses they will become more serious”. At the end of the school year the same principal stated that “I don’t think that the pupils are serious enough about their matriculation subjects. They don’t realize that if they don’t do well now, it will hurt their chances in the future. Hopefully next year, when they are older, they will be more serious”.

5. School image

Raising the school image in the eyes of both pupils and parents was one of the objectives of the SFA project. Questionnaires explored the issue of school image, as perceived by the parents of the experimental school and by pupils in both schools. Results of the pupil and parent questionnaire responses indicate a significant positive change, in the eyes of both pupils and parents, in the experimental school. Pupils in the control school showed no change in their perception of school image at the end of the school year as compared to the beginning. ¹

Several important points emerged regarding school image when analysing the responses of the experimental school parents. Parents expressed greater satisfaction at the end of the school year in the quality of discipline, the attitude of teachers toward pupils and their efforts to ensure pupil’s success (see pages 251-254). It should be noted that at the end of the year, although there was a significant increase, parents claimed that they were still not

¹ Unfortunately, one of the flaws of this research was that the parents of the control school were not surveyed, for reasons discussed in Chapter Three of this thesis.
satisfied with the level of achievement in the school. This could be because at the time they responded to the questionnaire, their children had not yet taken the second semester matriculation exams. Therefore, they did not know whether or not there was an improvement in the level of achievement.

Hopefully, this improvement in school image may have positive implications in the future for pupil enrolment in the experimental school. As explained in detail in Chapter One, page 7, both the experimental and control school have similar populations, and in some cases siblings attend both schools. When "word gets out" that the experimental school has a better academic programme than the control school, parents will prefer to register their children in the experimental school. They will also refrain from sending pupils 'out of town' to boarding schools. This image of a 'better school' was most likely also strengthened when the results of the summer matriculation exams became known in September 2000.

In fact, in September 2000 there was approximately a fifteen percent increase in enrolment for the 7th grade in the experimental school. Some of these pupils were non-religious immigrants from the former Soviet Union, whose parents chose to send them to the religious school, probably due to its improved academic image in the community.

2. Elements of the SFA Programme that Contributed Towards the Improved Success on the Matriculation Exams

The SFA project, being a multi-faceted programme, was composed of individual factors, which in turn had a reciprocal effect. For example, both school discipline and pupil motivation have a positive impact on classroom teaching, and when teaching is effective and the pupils are learning (i.e.
succeeding), discipline and motivation improve. Additional elements of the programme may have had similar reciprocal positive effects.

Section A pages 321-325, discussed and analysed the significant increase in the numbers of 10th grade pupils who passed their matriculation exams. This section discusses factors that may have contributed towards these positive results. To facilitate this discussion, these factors are classified into two main categories. Aspects of the programme that relate directly to the teaching and learning process are included in the category “directly related”. Other components of the SFA programme that could also have contributed to academic success are included in the category of “indirect factors”.

1. Factors that might have contributed directly to improved achievement in matriculation subjects:
   a. Increased teaching hours and making the most of class teaching time.
   b. Intensive learning marathons
   c. Creation of winter and spring sessions
   d. Tutors

a. *Increased number of teaching hours in matriculation subjects, and making the most of class teaching time* – Under the SFA programme, the four matriculation subjects tested in the tenth grade were each allotted one semester of 8-10 weekly teaching hours. (The norm in Israel is 3-5 weekly teaching hours per subject). These extra hours lengthened the school day. Cultural activities, such as visiting museums and attending plays, continued periodically as usual. Even prior to the SFA programme, this school did not have daily scheduled extra-curricular programmes such as music, sports, etc.

Much effort was made to maximize teaching time, by instructing subject-matter teachers to refer all matters not directly related to the subject being
taught, to the homeroom teacher. (For more details on this issue see page 351 – ‘High quality teaching and learning’). The overall result was a substantial increase in actual teaching time devoted to each matriculation subject. This additional teaching time could be used to fill in earlier learning gaps, and to drill and repeat material, in an effort to ensure each pupil’s mastery of the material. The teachers’ use of reinforcement techniques, which emphasized the positive responses of the pupils and frequent monitoring of their progress, also contributed to pupil motivation and success.

b. Intensive learning marathons: During the first semester, pupils attended three intensive learning marathons, for the two matriculation subjects they were to be tested on at the end of the first semester, one more than was planned. Each marathon was held in a youth hostel located outside of the pupils’ hometown, for a period of three days. Intensive learning took place during the day, and social activities occupied the evening hours. The pupils received hot meals and enjoyed good accommodations. The marathons were spaced out over the semester, one at the beginning, one in the middle and one at the end of the semester, just prior to the matriculation exam. Subject-matter teachers, homeroom teachers and tutors all participated. According to the vice-principal, who was present during all the marathons: “In my opinion, the marathons were one of the most important elements of the project. They served to raise the self-confidence of the pupils, drew the pupils into a closer relationship with their teachers and with each other, and were very valuable for learning and drilling material. It is unfortunate that during the second semester there were only two marathons, but since the pupils had already gained much self-confidence and had better learning skills than at the beginning of the school year, this wasn’t so significant.” Due to budget problems, during the spring semester only
two marathons took place for subjects that were to be tested at the end of the school year.

c. *Creation of winter and spring sessions, with only two matriculation subjects studied in the semester.* Matriculation exams were given in two subjects at the end of the semester: This enabled the pupils to concentrate on fewer matriculation subjects simultaneously, thus increasing their chances for success. In contrast, in Israel, most subjects are studied for an entire school year, and matriculation exams are given in the months of June and July.

d. *Tutors:* Research in Israel has shown that tutors can have a positive effect on pupils (Buskila, 1999; Oren, 1989). University students, majoring in the 10th grade matriculation subjects were chosen to serve as tutors, three per class, once or twice a week. Each class was divided into groups according to the level of the pupils. These tutors, in coordination with the subject matter teacher, reviewed the material, answered questions and helped to formulate exact answers to review questions. They also assisted, in the same manner, during the intensive learning marathons. Thus, the employment of tutors enabled specific attention to individual needs. At the end of the school year, pupils in the experimental school, agreed - to strongly agreed to the statement: “My tutors put a lot of effort into helping me succeed in my exams” (see page 313).

The heart of the SFA programme is the attention to individual needs. The intensive tutoring the pupils received was the means to the implementation of the slogan – “Success for All”. Without tutors many pupils would have fallen by the wayside because of their earlier educational gaps.
2. Factors that could have contributed indirectly to increased achievement:

   a. Parental involvement
   b. Homeroom teacher as an educational leader
   c. Heightening the educational self-image of pupils
   d. Pupil responsibility in the learning process

*a. Parental involvement:* The SFA designers considered it crucial to involve parents in the new program. It recognized the importance of the parents’ role to the success of the project, and it included specific steps for their involvement in raising achievement. (See Chapter One, pages 45-46.)

It was assumed that increased parental involvement would heighten the parents’ awareness of the importance of a Matriculation certificate. They, in turn, would encourage their child to make a greater effort to succeed, thus increasing motivation.

The importance of parental involvement in school reform is not new. Research shows that when adults reinforce the importance of school, student effort and achievement improve (see for example Misholi, 1984; Henderson and Berla, 1994; Olmstead and Rubin, 1982). The effective schools movement and subsequent empirical research have shown that parental participation is a crucial component of the effective school (Mortimore et al., 1988). A dominant view in education today is that parents should be given expanded roles in all aspects of the educational process (Davies, 1989). Smith and O’Day (1991) feel that effective schools are those that provide opportunities for parents to support and to participate in their children’s education. Parental involvement in effective schools is often an integral component of the total school community, where parents identify with and support the school’s mission (Goldring and Shapira, 1996).
The SFA program set out to involve parents from the beginning, virtually from the planning stages. This involvement was carried out in the following manner (Israeli Association of Community Centres Ltd. Jerusalem 1997):

1. All parents received letters that outlined the project, and invited them to a general meeting.

2. A meeting was held attended by representatives from the town’s municipal government, the program’s developers and the Board of Education; also present were the principal, vice-principal, teachers and parents. At this meeting, the program, its aims and objectives were presented. Parents were urged to encourage their children, to take an interest in exam results, to create a positive home environment supporting the project, to minimize the household chores expected of their children and to allow sufficient time for study.

3. Every six to eight weeks, general meetings were held with parents, homeroom teachers and school administration present. This was followed by individual meetings of homeroom teachers with parents regarding their child’s progress.

4. Homeroom teachers made house visits at least twice a year.

As mentioned above, parents’ attitudes regarding the importance of the attainment of a matriculation certificate have an important effect on a child’s motivation to learn. Parental attitudes communicated to the child, can range from encouragement, to apathy, to outright discouragement. Results presented in Figure 4.45, page 278, show that following the implementation of the SFA programme there was a significant increase in the belief of the parents as to the importance of getting a matriculation certificate.
b. Homeroom teacher as an educational leader - Much has been written about the role of the principal in implementing change in a school, and playing a key role in school effectiveness (see e.g. Edmons and Fredrikson, 1979; Lawrence, 1989; Ribbins, 2000). In the SFA program, the principal of the experimental school played a crucial role planning, organizing and motivating all teachers involved in the project, but the day-to-day work was carried out by the mechanech. The principal said: “my most important role was encouraging the teachers and the pupils to carry out what the project demanded. However, the day-to-day implementation of the project was carried out by the homeroom teachers.”

A program for school improvement may be planned, down to the very last detail, by academics, educators, governors, etc., but there must be people in the field (school) whose responsibility it is to carry out the daily implementation of the program. Without the cooperation and whole-hearted involvement of the mechanechim, in the words of the principal from the experimental school, “this project would not have been so successful”.

In secondary schools in Israel, the “mechanech” is expected to be responsible for: a) the administrative aspects of the class, b) dealing with emotional needs and problems of the students, c) maintaining close contact with the parents, and d) teaching the assigned subjects (Kashti et al., 1997). The mechanech is allotted only one homeroom period, or “hour of mechanech” as it is called. This one period is supposed to suffice for discussion and clarification of class problems, current events, social and moral issues. In practice, the “hour of mechanech” is often taken up with technical school matters, leaving little time for the homeroom teacher to get to know his/her students, and tend to their needs.

The SFA school improvement program saw the mechanech as the “leader” – the person most instrumental in raising the pupils’ self image and their motivation to succeed, and as the liaison between the parents and the school.
Therefore, the developers of the programme outlined the specific duties expected of the mechanech, and provided for this by greatly increasing the number of his/her administrative (non-teaching) hours.

The redefined role of the mechanech was a key element of the SFA programme. The new functions of the mechanech are outlined here in detail, based on the principles and practices of the mechanech as described in Chapter One, page 36 - 38.

1. The homeroom teacher will lead and guide the new programme changes in his/her class for a period of three years (10th - 12th grades). This principle, of the same mechanech continuing with a particular class for three years, is the ideal. If a class gets a different mechanech every year or two, as is the usual practice, the entire process of getting to know the pupils and their parents is repeated each year, at the expense of in-depth knowledge. Unfortunately, due to the termination of the programme, the homeroom teacher carried out his/her responsibility for one year only.

2. The homeroom teacher is responsible for the structural changes in his/her classroom. He/she is directly responsible for the implementation of the new guidelines relating to students and teachers. The observed outcome was that the homeroom teacher (mechanech) faithfully led and guided his/her class according to the new programme, but only for one school year.

3. The homeroom teacher is responsible for encouraging the pupils to succeed. He/she has to monitor each pupil’s progress. The homeroom teacher will meet regularly with all teachers that teach his/her class, and work together with them as a team. They will discuss difficulties, teaching methods, progress, etc. regarding each of the students. The homeroom teacher must also sit in during other teachers' lessons, in order to give immediate feedback. The homeroom teacher did meet
frequently with the other subject matter teachers of his/her class. As to the monitoring of other teachers’ lessons, this was done infrequently, with the purpose of observing pupil behaviour, and not to observe teachers. This was in order to avoid animosity and jealousy of subject teachers, who would object to the homeroom teacher being placed in an administrative position to criticize their lessons.

4. **The homeroom teacher is responsible for behaviour and discipline.** The principal said that at the beginning of the school year, the homeroom teachers reported that they had the usual amount of discipline problems, such as cutting class, etc. However, about six weeks into the school year, there was a gradual and steady decrease in behavioural problems. He continued: “the pupils began to understand that the entire project staff ‘meant business’, and any deviation from the expectations would be to their detriment”. The teachers’ responses on the questionnaires at the beginning and at the end of the school year corroborated that discipline was poor at the beginning of the school year, but that it had improved significantly by the end of the school year. The principal felt that the homeroom teacher was responsible for this change in pupils’ behaviour.

5. **The homeroom teacher is responsible for class solidarity and moral education.** He/she also serves as the social director for the class; plans and carries out extracurricular activities at least once a week. The socialization of the class, and the informal meetings with the students are a necessary condition for the success of the motivational process. In addition, the homeroom teacher is responsible for pupils’ internalisation of the school’s code. In practice, all of these functions were carried out. The principal said: “the issue of class solidarity and moral education was a very important one. The school allocated funds and support for extra-curricular activities, such as attending plays in a
nearby city, and funded special workshops on how to plan for and carry out social activities”.

6. The homeroom teacher is responsible for the motivational process. He/she has to have ongoing dialogues with individual pupils concerning their achievement and personal problems. Emphasis should be placed on nurturing the hopes and aspirations of the students. This is the ideological basis for raising motivation. The principal reported that the homeroom teachers held frequent individual counselling sessions with the pupils.

7. The homeroom teacher is responsible for contact with the parents. He/she is responsible for consolidating the parents into a support group for the students during the process of change. This includes visits to the homes and parent-teacher evenings. The homeroom teachers were active in strengthening parent-teacher relations. For more details, see above.

8. The homeroom teacher is responsible for the organizational and logistical aspects of the structural change. He/she is responsible for implementing the programme schedule and the marathons. The homeroom teacher took responsibility for all organizational and logistical aspects. When a problem that needed administrative intervention arose, such as pupils’ complaints regarding the food served during one marathon and a request for more social activities between intensive learning periods, he/she took on the role of mediator.

c. Heightening the educational self-image of the pupils – Educational self-image was heightened in the experimental school during the year (see page 329). Researchers have found that there is a significant relationship between self-concept and achievement (see for example Purkey, 1970; Wylie, 1974;
Branden, 1994). Covington (1989) found that pupil achievement is directly affected by self-esteem; when self-esteem increases, achievement scores increase, and when self-esteem decreases, achievement scores decrease. He concluded that self-esteem can be modified through direct instruction, and that such instruction can lead to achievement gains. A study that explored the relationship between a self-esteem program and achievement, of minority at-risk pupils at a high-performing urban elementary school, found that direct teaching, discipline, high academic expectations, the personal touch and teaching values, promoted both pupils’ self-esteem and academic achievement, suggesting that the two are closely related in the elementary school environment (Glanz, 1993).

The above suggests that the heightened educational self-image of pupils in the experimental school may also have been a contributing factor to their higher achievement on the matriculation exams. Page 326 of this chapter discussed the relationship between school dropout and self-esteem.

d. Pupil responsibility in the learning process – The pupils signed a contract that they helped formulate, which defined their responsibilities in the learning process (see Appendix III, page 398). This probably played a role in the success of the programme. The vice-principal of the experimental school, comparing the 10th graders with the rest of the school, commented that “the pupils took their studies more seriously, and I think that the use of a similar contract should become a standard procedure for all grade levels”.

346
B. The SFA Programme in Light of Effective Schools and School Improvement Literature

The SFA school improvement project contained elements of both school effectiveness and school improvement research findings, as detailed in the introduction to Chapter Two, page 52 (Literature Review). This section will identify elements of effective schools and school improvement incorporated into the SFA programme. It is divided into two sub-topics: Effective School Literature and SFA; and School Improvement Literature and the SFA.

1. Effective Schools Literature and the Israeli SFA programme

Chapter Two, pages 70-77, presents several theoretical models that provide a basis for measuring school effectiveness. The models described are: goal model, system-resource model, internal process model, strategic-constituencies model, legitimacy model, organizational learning model, ineffectiveness model and total quality management model. These models can be grouped into three categories: models concerned with external factors, with internal factors, and those with both internal and external factors (Figure 2.2, page 74).

The SFA school improvement program most closely resembles the goal model. It was designed and developed with one major goal – to increase academic achievement. The criterion for determining success of the program was the degree of success on the National Matriculation exams. Focus on this goal, without regard to external factors such as future funding, was a crucial oversight; the programme was discontinued due to lack of funds. It is possible that if the project had dealt with the question of resources as in the Total Quality Management model, lack of funding might not have caused its early termination.
Effective schools research has identified a large number of correlates that characterize effective schools. Reynolds et al. (1996) outline nine key factors that emerged from the many effectiveness research studies in the United Kingdom (see Chapter Two, page 90). Following is a comparison and discussion of the SFA programme in relation to these factors. The wording in italics refers to elements outlined by Reynolds et al. (1996) and it is followed by an analysis of these same elements as relating to the SFA program.

a. **Professional leadership:** *Three characteristics that have been found to be associated with successful leadership: strength of purpose, sharing of leadership positions and being involved in and knowledgeable about what goes on in the classroom.* The principal of the experimental school exhibited all of these characteristics. He was the undisputed force behind the planning and coordination of the major aspects of the program; he had a vision that he shared with others in the school administration and general staff; he was personally involved in gaining teacher involvement and support; he shared his leadership by delegating responsibilities and authority to the vice-principal who was directly responsible for the smooth running of the project; he delegated responsibility and authority to the homeroom teachers who were responsible for seeing to the needs of their pupils; and he was knowledgeable about what took place in the classrooms.

b. **Shared visions and goals:** *Schools were found to be more effective when the staff arrived at a consensus on aims and values, and when these were put into practice by collaborative ways of working.* Planning for the SFA program began almost an entire school year before it was implemented in the classrooms. During that year, many staff meetings were held with the purpose of reaching a consensus regarding the various aspects of the program – ranging from goals and planning to the
eventual implementation. At first, many teachers voiced opposition for various reasons, including: opposition to change; disbelief in the ability of the program to bring about significant changes; bitterness over the fact that only a few of the teachers were chosen by the principal to participate and teach in this project during the school year 1999-2000. The new program demanded an increase in time and effort on the part of the teachers. It took several months and considerable effort on the part of the principal in the experimental school, for the voices of opposition to subside.

The control school, that began the same planning process as the experimental school, did not succeed in quelling opposition. The principal of the control school, himself, was of the opinion that the SFA project would put too much of a burden on his staff (See Chapter Four, pages 313 - 314). Thus, it is not surprising that with the principal not really supporting the project, and no strong leadership with shared goals and visions, the SFA project never got out of the planning stage in the control school; it was discontinued.

Collaboration between staff members was also an important element of the SFA project. This collaboration took place both during the planning stages and during the project’s implementation. All staff members took part in several meetings (without compensation), not just those who would have direct contact with the participating classes during the 1999-2000 school year. The reason for this was two-fold. Firstly, the plan was for the project to be a “growing” one, with a new grade added each year. Thus, each year, more teachers would become directly involved. Secondly, it was felt by the programme’s developers that it was important for all staff to be involved. All could have a positive influence on the changing school atmosphere, and on expectations for increased achievement.
During the planning stages, teachers who were to participate in the project collaborated at meetings held once every two weeks during the school year, and intensively in the summer. Topics discussed during these meetings included: ways to increase motivation, teaching strategies and methods, and assertiveness. During the year of implementation, all teachers in the experimental school, the school guidance counsellor and the city’s psychologist participated in a monthly workshop, held by an organizational advisor. At these sessions problems concerning the project were discussed, and possible solutions were suggested. In the interview at the end of the year, the principal remarked that he felt that these sessions were instrumental in serving as a stage for the teachers to “let off steam”, thus helping to minimize complaints and negative attitudes.

c. Learning environment: Factors concerning the learning environment such as an orderly atmosphere and an attractive working environment were found to contribute towards effectiveness. The SFA program brought about improved classrooms for tenth grade pupils. They were moved to large rooms that were furnished for them with comfortable desks and chairs, and large, new whiteboards were installed. The most significant improvement was the installation of air conditioning units in each classroom. The town under study is located at the edge of a desert, where temperatures are above 30 degrees centigrade for many months of the year, sometimes reaching 40 degrees or more from April till October. On the other hand, during the winter months, temperatures drop drastically; classrooms become iceboxes, where pupils and teachers alike huddle in coats, hats and gloves. The addition of air-conditioners enhanced the learning environment, and according to the vice-principal caused jealousy on the part of other pupils and teachers who were not so fortunate.
Another improvement was the distribution of sandwiches and drinks for lunch, only to pupils participating in the project. Most schools in Israel do not provide meals, and many pupils spend the entire school day learning without eating. For breakfast, some have a roll or a slice of bread with a drink, but others don’t eat anything. Some take a sandwich to school, but many children from poor families do not even have that.

In a religious high school, a typical 10th grade day begins at 8:00 AM, or even earlier, and sometimes extends until late afternoon. It is difficult to expect them to concentrate throughout the day. The SFA program addressed this problem by providing sandwiches and a drink everyday, the most the budget would allow.

Learning marathons that took place each semester were held in a completely different environment - in a modern youth hostel, where the pupils enjoyed hot meals and comfortable learning and sleeping accommodations. (For more details see page 338.)

d. High quality teaching and learning: This includes: making the maximum of learning time, academic emphasis as measured in relation to the entry of a high proportion of pupils into public examinations and the amount of curriculum covered. In the planning of the SFA project a lot of thought was given to these factors, since the main goal was to increase achievement. Measures were taken to ensure that maximum lesson time was utilized for teaching. Subject-matter teachers were advised not to deal with discipline, or other problems, during class time. Any such problem was referred to the “mechanech” who was allotted time for this purpose. The principal felt that this arrangement helped to relieve the subject-matter teachers of the burden of dealing with difficult pupils. He stated, “Many subject-matter teachers came to tell me how relieved they were with the new arrangement. In the past, the “mechanech” was expected to deal only with severe discipline
problems, and not the every day ones that are common in this school - latecomers, class skippers and general discipline problems. Under the new arrangement, these were assigned to the “mechanech”, thus changing the role of the subject-matter teacher from “policeman” to teacher. The teachers claimed that they covered more material during the period, and in a better atmosphere.” Social activities previously took place during class time: assemblies, cultural activities and school outings. These activities were scheduled so as not to interfere with “learning” time.

Regarding the issue of entry of a high proportion of pupils into public examinations, this was one of the innovations of the SFA project. All pupils were encouraged to take all matriculation exams, regardless of prior achievement. The principal stated during the interviews, both at the beginning and at the end of the school year, that he felt that this encouragement was a very important factor in the programme. Instilling in the pupils, from the first day of the school year, that they would be expected (and even required) to take all the matriculation exams, put the pupils in an “academic mode”. It did not allow for “goofing off”, under the pretext that “I will not take the exams anyway, just like my brother/sister didn’t”. They were given to understand that “you will have to take all the exams, so you might as well study and do well on them”.

Teachers were also affected. They had to make special efforts to ensure that all pupils would succeed. This is in contrast to previous years when some pupils were “ignored” during lessons, since they were not expected to take the exams at the end of the year.

The amount of curriculum covered was closely monitored by outside proctors. How this monitoring was done will be discussed in the Section “g” below, page 353 - “monitoring pupil progress”.

352
e. **High expectations:** *Research has shown that when teachers had high expectations for their pupils' success, they were more prone to encourage them to succeed.* Stressed many times during teacher’s meetings, both prior to and during SFA’s implementation, was that all the pupils were capable of passing their matriculation exams; it was just a matter of finding the appropriate teaching method and/or the correct approach to the pupil. The principal felt that the teachers’ high expectations filtered down to the pupils. However, unexpectedly, teacher questionnaires at the end of the school year indicated that they held a lessened belief in their pupils’ ability to succeed in the 10th grade matriculation exams, as compared to the beginning of the year. An in-depth discussion of this can be found on pages 272-273.

f. **Positive reinforcement:** *This factor includes clear and fair discipline and direct and positive feedback.* Positive feedback was employed. Grading pupils’ work was done in a constructive manner, as opposed to summative evaluation. For partially correct answers, pupils were praised for the part that was correct, instead of simply getting an X on the answer. Quizzes were given frequently, with similar questions, until the pupils felt confident that they knew the answers to that particular topic. In addition, throughout the school year, pupils were drilled on questions from previous years matriculation exams. This helped to familiarize them with the format of the exams, type of questions asked and the responses expected.

g. **Monitoring pupil progress:** *Well established mechanisms for monitoring the performance and progress of pupils, classes, the school as a whole and the efficacy of improvement programmes, are important features of effective schools.* The SFA program included a unique system for monitoring pupils’ progress. Every other week homeroom teachers met with subject-matter teachers of their class. These meetings
were also attended by the project head (the vice-principal), and representatives of the Israeli Community Centres, who were the designers of the SFA project. At these meetings the progress of almost every pupil was discussed. If there was a decline in a pupil’s achievement or behaviour, methods of handling these were discussed; e.g. additional tutor assistance in the evening.

In addition to these meetings, the entire staff participating in the project met with an organizational advisor once every three to four weeks. Problems were raised by teachers regarding individual pupils, and possible solutions were discussed. General issues considered included pupils’ lack of articulation skills, short attention span and difficulties in abstract thinking.

A rigid system for monitoring progress was set up. Once every three to four weeks, every pupil was tested in each matriculation subject. These exams were on the same level as the National Matriculation Exams. Each exam was corrected twice, once by the subject-matter teacher, and a second time by outside experts. The purpose of these exams was to ensure that the subject-matter teachers were teaching up to the expected national standard, and that the grades really reflected their pupils’ knowledge. According to the principal, this was one aspect of the SFA program that the teachers constantly objected to, but it was made clear to them that if they wanted to continue to participate in the project, they didn’t have a choice.

h. **Pupils’ rights and responsibilities:** Good staff/pupil relations were found to have a positive effect on pupils’ self-esteem, and schools that conveyed trust and set standards for mature behaviour were found to be more effective. Under the SFA program there was an open relationship between the pupils and staff. Any pupil with a question or problem could turn to the “mechanech”, to a staff member, and/or to the
guidance counsellor; they served as an “ear” for all pupils, and aided in solving problems. These conversations were held behind closed doors.

Pupils’ responsibilities were taken seriously. At the beginning of the school year, a contract was drawn up by representatives of the pupils, together with the homeroom teachers. This contract clearly stated the behaviours expected of the pupils and included: mandatory attendance, maximum learning effort, a commitment not to cause any discipline problems, etc. All pupils were required to sign this contract, showing a willingness to stand by it.

i. Purposeful teaching: This point refers to efficient organization, including planning lessons in advance and well-structured lessons. The SFA programme envisioned that teachers would be required to submit long and short-term lesson plans. However, since this is not the commonly accepted practice in secondary schools in Israel, the teachers objected, and this requirement was dropped. Observation of lessons was one method used to monitor the teacher. Representatives of the school administration, the Board of Education and school governors sat in on lessons during the year, at an average of three visits per teacher. Following the observations, constructive discussions were held. Teachers were also monitored by test results. As mentioned in Section “g” above, page 354, outside experts also corrected exams. When the responses were not deemed satisfactory by these experts teachers were required to re-teach the material, and the pupils were re-tested. In the opinion of the vice-principal, advanced written lesson plans scrutinized by the experts in the various fields, could have lessened the need for re-testing.

Effective Schools research has also provided models, guidelines and lists of key factors to be used in examining a school’s effectiveness. Creemers (1994a) argues: “the basic idea behind all school effectiveness models is to
distinguish between educational levels, the higher levels contributing to the lower ones" (Stoll and Fink, 1996, p. 39). Creemers and Scheerens (1994) multi-level model of schooling incorporates four organizational levels: the student, the classroom, the school and the context of the school. They defined three specific characteristics of educational effectiveness: quality of instruction, time for learning and opportunity to learn, for each of the four levels. These are "facilitated by characteristics at higher levels, leading to consistency, cohesion, constancy and control at higher levels, and to achievement in basic, higher order and meta-cognitive skills at the student level" (ibid, p. 40).

- **Student level factors**: Creemer's model assumes that student achievement is strongly influenced by the student's social background, intelligence, motivation, the way the students spend their time during their lessons and the way they use their opportunities to learn. In both schools under study in this research, social background and native intelligence are two factors that are a given, and are not affected by the tenth grade school improvement program. Other pupil factors that might be influenced by an intervention program were targeted by the SFA project. These included raising pupil motivation and educational self-image, and putting effort into ensuring that pupils make the most of their learning opportunities.

- **Classroom level factors**: Creemer's model of classroom level factors leading to effective schools include time for learning, opportunity to learn and quality of instruction. Factors addressed by the SFA included: goal setting, adaptation of teaching methods and learning strategies to the needs of individual students. Matriculation exams were given twice a year so as to allow pupils to concentrate on fewer subjects simultaneously. Frequent monitoring of student progress and the
provision of intensive learning opportunities in the form of marathons were also elements of the program.

- **School level factors**: Creemers' model discusses quality (rules and agreement about classroom instruction, evaluation/policy system, school culture); time (time schedule, rules and agreements about time use, orderly and quiet atmosphere); and opportunity (school curriculum, consensus about mission, rules and agreements about how to implement the school curriculum). In the SFA programme, factors usually considered to be school level were actually only on the classroom level, because all changes were made for the 10th grade classes only. Thus curriculum, scheduling, classroom policy, etc., became classroom level factors.

- **Context of the school factors**: Taking into consideration the context of the school was an important component of the SFA programme. The aims and objectives of SFA were developed in conjunction with political and educational community leaders, in an attempt to meet the specific needs of the school. During the year prior to the project's implementation, meetings took place on several levels; school governors, city municipality officials, school staff, and parents. These meetings yielded general consensus concerning aspects of the program, definition of aims and goals, and decisions as to the process of its implementation. All these efforts tailored the SFA to meet the specific needs of the pupils in the development town, and at the same time made the community and the educators aware of the programme's goals, and the manner of its implementation. Thus, all involved saw themselves as participants of the program and were motivated towards helping it succeed, even before its actual implementation.

It can be seen from the above, that the SFA program included elements found to be present in effective schools as described by Reynolds et al.
(1996). Many of these elements were lacking in the experimental school prior to implementation of the SFA program. As a result of this programme, many of the effective classroom factors were incorporated exclusively in the 10th grade. Thus, in the 1999-2000 school year, there was a marked difference between the 10th grades and the rest of the school. This situation caused pupil and teacher jealousies is discussed on page 364. The original plan envisioned that each year another grade level would be added, until the entire school would participate in the SFA program. Unfortunately, this vision was not actualised (see pages 365-366).

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This section compared various elements of the SFA school improvement project with individual factors of effective schools and the multiple level approach as described in effective schools literature. The next section will examine the SFA project within the context of school improvement projects that served as a basis for the SFA program.

2. School Improvement Programmes and the Israeli SFA Programme

The developers of the Israeli SFA school improvement project, modelled the project along the lines of the “Success for All” project, developed by Slavin (Slavin et al., 1992; Israeli Association of Community Centres Ltd., 1997). Slavin’s program targeted elementary schools and dealt primarily with remedial skills for children at risk of school failure. Although the Israeli SFA program was developed for high school students, the underlying assumption that all pupils can succeed was the same (Chapter Two, pages 30 and 128).

The introduction of the SFA project into the comprehensive high school followed a major policy change - the designation of all students as academic.
Since the national matriculation certificate is the core of the academic programme, all pupils were allowed to sit for all exams, regardless of prior achievement. The SFA project, by encouraging and assisting all 10th grade pupils, led to the fact that all 10th grade pupils took all four matriculation exams with an average success rate of over 90%.

Another element of Slavin's programme was the changing of the mindset of educators and policymakers, as to the ability of disadvantaged and minority children to learn and succeed. The Israeli SFA programme attempted to change attitudes of teachers regarding their pupils' ability to succeed. Both programmes also stressed the importance of high quality instruction that was sensitive to pupils' needs.

Three more factors common to both programmes were the use of tutors, frequent assessments (in the Israeli programme every 3-4 weeks, in Slavin's programme, every 8 weeks) and family support teams. However, Slavin's programme included two elements not present in SFA: 1) a school-wide curriculum whereby pupils are grouped across age lines and 2) "Buy-in" - at least 80% of staff must agree by secret ballot to adopt the programme.

Regarding a school-wide curriculum, the SFA programme was designed to eventually encompass the entire six-year school, but no consideration was given to regrouping across grade levels. This strategy could be helpful in giving pupils an opportunity to restudy matriculation subjects. The original plan did relate to the issue of retesting: assistance would be given during the last semester of the 12th grade, to pupils who had failed a matriculation exam in previous years, without elaborating on how this was to be done (Chapter One, page 36).

The idea of "buy-in" would have saved money and effort in the control school. They spent several months preparing for the implementation of the SFA programme, before the school’s administrators decided to drop it. A
ballot at the initial stages, to decide whether or not to continue with the preparations, would have been more efficient.

The Israeli SFA programme, following the maxim of Sizer's school improvement plan "Less is More", recommended that fewer subjects be taught during each semester, and fewer pupils be assigned to each teacher. A limit of twenty-five pupils per class was set. The school schedule, for the teaching of matriculation subjects tested in the 10th grade, was organized on a semester, instead of a yearly basis. Each subject was taught for one semester only, and the national matriculation exam was administered at the end of that semester. This was accomplished by teaching the total yearly hours during only one semester, thus, pupils were able to concentrate on fewer subjects each semester.

Sizer also recommended less differentiation of subject matter, less emphasis on exams that evaluate knowledge, and more emphasis on ability to use knowledge. This writer suggests that when the SFA programme is implemented in a junior high setting (grades 7-9), where matriculation exams do not impose curriculum restrictions, these specific guidelines could be followed.

A third school improvement programme that has elements similar to SFA is Brighouse and Woods "Critical Interventions" (see Chapter Two, page 131). These interventions include: extending achievement by establishing criteria and standards as benchmarks; providing one-to-one learning opportunities by targeting pupils in need; introducing peer tutoring; raising the standard – setting targets to improve pupils' improvement; and building self-esteem. One critical intervention not included in SFA is the participation of teachers in innovation and research. It is this writer's opinion that professionalization of teachers would be a positive addition to the SFA programme.
Figure 5.1 compares the major elements of the Israeli SFA project with the other three school improvement projects that are described in Chapter Two, and outlined in Figure 2.7, page 137.
<table>
<thead>
<tr>
<th>School Organization and Structure</th>
<th>Sizer</th>
<th>Slavin</th>
<th>Brighouse</th>
<th>Israeli SFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team teaching</td>
<td>Grouping according to level and not only by age</td>
<td>Annual action plans</td>
<td>Marathons</td>
<td></td>
</tr>
<tr>
<td>Double periods</td>
<td>Small classes of 20</td>
<td>School climate to encourage staff involvement in setting up and carrying out program</td>
<td>Small classes</td>
<td></td>
</tr>
<tr>
<td>Smaller schools</td>
<td>Special resources allocated for early grades</td>
<td></td>
<td>Special resources</td>
<td></td>
</tr>
<tr>
<td>Fewer students per teacher</td>
<td>Fewer subjects</td>
<td>Redefinition of homeroom teacher role</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum and Learning</th>
<th>Fewer subjects</th>
<th>Mastery of basic skills</th>
<th>Establish standards and adjust curriculum to meet them</th>
<th>Fewer subjects and matriculation subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated subjects</td>
<td>Tutorial help for under-achievers</td>
<td>Target needy students</td>
<td>Establish standard</td>
<td>Establish standard</td>
</tr>
<tr>
<td>Continuity of subject matter</td>
<td>Frequent assessment</td>
<td>One on one peer tutoring</td>
<td>Target needy pupils</td>
<td>Target needy pupils</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Review and analyse achievement data</td>
<td></td>
<td>Tutors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th>Extracurricular activities at beginning and end of school day</th>
<th>Family support team</th>
<th>Extracurricular activities</th>
<th>Parental involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Extracurricular activities</td>
<td>Community volunteers and helpers</td>
<td>Extra-curricular activities led by homeroom teacher</td>
</tr>
</tbody>
</table>

| Motto | “Less is More” | “Success for All” | Critical interventions – butterfly effect | “Success for All” |

Figure 5.1: Comparison of the Israeli SFA program with other school improvement programs.
Comparing the various school improvement programs, it can be seen from Figure 5.1 that each one of the programs promotes a different mix of change and innovation. The possibilities are numerous and the specific suggestions are tailored to meet the special needs of each school population.

* * * * *

In conclusion, this section examined the SFA project, along the lines of school improvement programmes that served as its basis. The next section analyses the difficulties that arose in implementing the programme. Based on this, suggestions are made for an improved SFA programme.

C. Evaluation of the SFA and Suggestions for Future Programmes

1. Difficulties and problems encountered in the implementation of the SFA project, and suggestions for an improved SFA project (non-budgetary matters)

This section discusses the difficulties, problems and unexpected reactions of teachers and pupils from the experimental school. Suggestions regarding budget issues will be discussed below, beginning on page 365.

a. Pupil and teacher complaints - Most pupil complaints centered around the intensive and long school day. The extra hours added to the school day, as well as the pressure on them to succeed, evoked many complaints by the pupils. Teachers complained that pupils concentrated mostly on their matriculation subjects, while neglecting other subjects. These included important ones such as mathematics, which is a matriculation subject that will be tested in the 11th grade. To overcome this neglect, it is suggested that the 10th year final grades, of

2 Information communicated to this writer.
subjects that have a matriculation exam in the 11th or 12th grade, be included as part of the final matriculation score.

b. Jealousy of pupils and teachers not participating in the project – There were frequent complaints from both pupils and teachers who did not participate in the project. The pupils wanted better learning conditions and lunches. Homeroom teachers wanted the same conditions as those in the project, e.g. more non-teaching hours to devote to their class and an increase in salary. Subject-matter teachers also wanted comparable conditions – additional hours per subject, and thus fewer classes in their workload. If the project had continued as planned, these problems would have eventually resolved themselves. It is this writers’ suggestion that if a program is not implemented school-wide, problems of jealousy should be foreseen. At the beginning of the school year attempts should be made to defuse this issue through some form of compensation.

c. Long-range lesson planning – The SFA programme did not call for long-range lesson planning. The vice-principal felt that lack of plans was “a stumbling block in monitoring the learning process, i.e. effective planning and goal attainment”. He suggested that outside experts should be used for initial lesson planning instead of at the end stage, to mark the pupils’ tests.

d. Loss of teaching hours in the over-all school schedule – The SFA project exacerbated the teacher absentee problem due to intensive learning marathons held outside the school. The subject-matter teachers involved in the project also taught other classes at the school. During their absence, while they participated in the marathons, their other pupils lost many teaching hours.

Absenteeism of teachers is a serious problem in Israel. Due to the political situation, many male teachers are called up for reserve army
duty, usually for 30 days a year. In addition, Israel is blessed with a relatively high birth rate, and women teachers receive 84 days of maternity leave after each birth. These absences, coupled with day-to-day illnesses, account for the fact many class hours that should have been devoted to teaching, are wasted. Since it is difficult to find qualified substitute teachers, when a teacher is absent efforts are made to rearrange the class’s schedule so that the pupils can begin the school day later, or leave earlier. Failing that, they simply have free periods, without any supervised activity. It is recommended that the practice of hiring qualified substitute teachers be adopted, at least for matriculation subjects. Budgetary considerations aside, this maximizing of scheduled teaching time is very important. At the beginning of the school year a search for substitute teachers should be made, perhaps among retired people and teachers who only want to work part-time. In this manner a reservoir of substitute teachers could be established in each school district. Another possibility, is the hiring of full-time substitute teachers who are capable of teaching more than one subject. These teachers could be “shared” by several schools, thus reducing the burden of cost on an individual school.

2. Reasons for the Discontinuation of the SFA Project and Suggestions for a Modified, Less Costly Project

Due to budgetary cuts, imposed by the National Board of Education, the experimental school was unable to continue the SFA project after only one year of implementation. Critical evaluation will focus on the reasons for the discontinuance of the SFA programme in the experimental school, and the aborting of the programme in the control school before it actually began. Following that, there will be a discussion of aspects of the programme that might be modified to make it more cost-effective.
1. Reasons for discontinuance of the SFA project after only one year

The SFA project was discontinued in the experimental school after only one year for lack of budget. The project cost about three million shekalin, which is a huge sum of money on its own, and especially considering that we are dealing with only sixty pupils. It amounted to 50,000 shekalin, or 10,000 dollars, per pupil. The SFA program was designed to be a "growing one", whereby each year another grade level would be added. At that rate, the increased budget necessary for three years of secondary school would have been nine million shekalin; this in addition to the regular school budget. This would have placed an impossible burden on the already strained budget of the Ministry of Education. Due to national security problems during the past two years, funds have been diverted from various Ministries to the Ministry of Defence, thus depleting funds available for education in general, and special educational projects in particular. Furthermore, it was feared that the two national teacher organizations in Israel, would eventually demand that the extra salary and lower classroom load the homeroom teachers had in the experimental school, be copied on a national scale. These demands could not possibly be met, due to the high cost of such a change.

It should be noted that funding for special projects is generally done on a year-to-year basis, under the assumption that: "if there are sufficient funds, we continue, if not, we don't". Therefore, regardless of the positive outcomes, the extremely high cost of the SFA project was the main cause of its demise.

Discontinuance in the control school

Why did the control school abort the project before it was actually launched? Both schools participated in the planning of the project in the months prior to the 1999-2000 school year. However, voices of discontent in the experimental school were silenced during this preparatory phase, but not in the control school. About six weeks into the 1999-2000 school year, the
control school announced, to all concerned, that they had decided not to continue to participate in the SFA project. The reasons given by the principal of the control school for not continuing in the project were as follows:

a. The school was already involved in a number of projects, and the addition of another one would have been too much of a burden on the administration and the teachers.

b. The pupils were already participating in various projects, and the addition of another one would lead to confusion and lack of motivation on their part.

c. The administration claimed that the SFA project was similar to others that the school had implemented in the past, and therefore they were not interested in it. The principal claimed that “the SFA project is very similar to others we have already tried, with little success, such as the Holon Project, and another similar project will just confuse the teachers, as well as the pupils.”

d. The SFA project was very demanding of the teachers involved, and especially of the mechanchim. “The teachers emphatically told me that they were not willing to participate in another new project, that will only waste their time. They claimed that they were tired of outside “experts” telling them how and what to teach, especially since they were college graduates with teaching licenses.”

e. The teachers claimed that the additional salary they would receive was not worth all the extra time and effort that would be required of them.

It can be seen that the reasons given by the control school, as to why they were not interested in implementing the SFA project, were not related to budget. Although most of the problems described above were also relevant for the experimental school, its principal and staff decided to undertake the challenge of implementing the programme.
2. Aspects of the SFA program that might be modified to cut costs

Recognizing that the project was discontinued due to lack of sufficient funding, it follows that the program should be examined for areas where money could be saved. All aspects of the SFA project contributed in some way to the increase in pupils’ achievement, as discussed in the previous chapter. Nonetheless, when faced with the alternative of either cutting budgetary items or discontinuing the project, it is this writer’s opinion, that it is possible to omit or cut some elements without significant harm. Below is a list of some possibilities for budgetary cuts:

a. *Tutors* - Each class had three tutors assigned to it, for each of the four matriculation subjects. The number of tutors could be reduced in all, or some, of the matriculation subjects.

b. *Outside experts* – The major exams given by the subject-matter teachers were examined by experts outside of the school. In addition to costing money, this policy also caused discontent among the teachers, who felt that the administration doubted their professional proficiency, thus necessitating outside monitoring. The experts could be replaced by a cooperative school staff effort, to improve the quality of teaching and testing.

c. *The intensive learning marathons* - these marathons took place for a period of three days, three times in the first semester, and twice in the second semester. The project began to have monetary problems in the second semester, thus the number of planned marathons was reduced from three to two. These marathons were held in a youth hostel in another city, entailing travel expenses, lodging and meals for pupils, teachers and the project director. While there are advantages to holding marathons in a non-school setting, they do not justify the high cost involved. It could be possible to hold them at a location closer to the school, where the pupils and teachers could go
home at the end of the day. Another possibility is to shorten them from three days to two. Finally, the number of marathons could be reduced.

d. Allotted number of teaching hours for matriculation subjects – Under the SFA program, more hours were scheduled for teaching matriculation subjects (8-10 weekly hours) than is the custom in Israel. It is suggested that this might be modified to 6 –8 hours weekly, thus saving money.

e. Outside support: a) outside consultant on organizational efficiency and b) consultant psychologist – These were found to be important in helping to solve problems concerning administration, teachers, and individual students. Despite the high cost, it is not recommended to cut either of these positions. However, meetings with the organizational advisor could be with the entire school staff, and not just with teachers directly involved in the project. In this way, in the following years, teachers joining the project would be knowledgeable, thus saving on hours paid to the advisor. This suggestion is only on the basis of budget problems, and not the ideal situation, since teachers not involved in the project do not have the same interests and concerns as those who are, and the meetings would not be as relevant for them as for the other teachers.

f. The Israeli Association of Community Centres – This body was the main outside planner and overseer of the SFA project. It is the opinion of this writer that the Association should be involved in the project and receive payment only during the planning stages, at the beginning of the first year of implementation, and maybe at the summation of the year.

In conclusion, there are a number of possibilities for reducing the costs of the project. When taken together, the amount saved could be considerable. If
the total cost for each class in the programme would be more reasonable, then the chances that the SFA could continue, with an additional grade included, would be increased. Furthermore, the budget for the grade that continues in the programme would be less per pupil for their second year, since there would be less of a need for special individual attention.

D. Summary of Chapter Five
This chapter opens with the social and educational context of the SFA School improvement project that was implemented in a development town in Southern Israel. The low percentage of these pupils who achieve the National Matriculation Certificate and continue on to the University led to the increased awareness in Israel of the importance of improving education, especially in areas populated by the Sephardic North African Jews. An in-depth overview of the school improvement and school effectiveness literature showed how the SFA project included key elements described in the literature.

The SFA programme that targeted the 10th grade, and set as its major goal to increase the number of pupils who succeed in their matriculation exams was a success. Over 90% of the pupils in the experimental school passed all four matriculation exams, while in the control school only about 70% of the pupils passed their exams. Other goals of the programme were also achieved. These included: enhanced educational self-image and overall school image, and increased parental involvement.

The components of the programme that directly contributed to its success, and the factors that had an indirect input on the results, were analysed. Problems and difficulties encountered in the programme were then discussed, with suggestions for improvement. The budgetary cause for the discontinuation of the program was explained, with recommendations for possible future modifications to save money.
On a final note, some may question whether the positive results in the experimental school as described in Chapter Four can be attributed to the SFA programme, which was only one variable in a complex school setting where many other variables may have relevance. The following are the key points raised in Chapter Five that support the conclusions of this thesis that the SFA in all probability was responsible for the positive changes:

1. While it is true that the SFA was the variable researched, it was in fact not a single variable, but a cluster of a number of important school initiatives and interventions that impacted on the pupils.
2. The SFA was composed of factors which research has shown to be effective in improving pupil achievement.
3. The results in the experimental school were statistically compared on three levels:
   a. With data from previous years in the experimental school.
   b. With matriculation data of a control school having a similar population for the year when the SFA school programme was implemented in the experimental school, as well as with previous years.
   c. With national matriculation norms.
4. No other known significant school or community changes occurred during the SFA school year.
Chapter Six – Conclusions

Several years ago, when I began planning this research designed to evaluate the "Success for All" school improvement programme, I had hopes, but no assurances, that it would succeed. In reflecting upon this study, I believe, that a number of reservations notwithstanding, my research shows that in the school that adopted the programme the specific goal of raising the percentage of success of pupils, in a development town in Israel, on the national matriculation exams, was achieved. There was a substantial increase in the percentage of pupils sitting for and passing all four 10th grade matriculation exams. In addition, all 10th grade pupils continued on to the 11th grade, and there was a significant improvement both of the school’s image in the eyes of pupils and parents and in the pupils’ educational self-image.

Taken at face value, these improvements seem impressive. However, it could be that they can be accounted for by factors that are not necessarily connected with the programme. This is always a possibility in such complex situations. In attempting to distinguish the influence of the programme, my research sought to employ a comparative approach. This took three key forms. First, I compared results for 1999-2000 within the experimental with those obtained in earlier years. Second, I compared the results at the experimental schools with those that obtained for the same years in a similar school within the same town (the control school) that did not implement the programme. Third, I compared the results at the experimental schools with those that obtained for the same years nationally. In all respects the results for 1999-2000 at the experimental school were superior. Whilst this, in the context of a single study, may not be conclusive, it is surely indicative.
However, all this notwithstanding, the study can at best be described as a qualified success, since it was based on results obtained from only a single year. The SFA programme had been initially planned to continue for further years and in doing so to include all grades within this comprehensive high school. Unfortunately, due to budget problems, the program was discontinued because of its high cost.

The strength of the SFA programme was also its weakness. Its developers recognized that isolated changes, such as the addition of teaching hours or the provision of teacher workshops, would be unlikely to offer a complete answer to the school’s achievement problems. In consequence, and in seeking to “guarantee” success, the SFA introduced many changes, some of which were very costly. These included additional hours for the matriculation subject teachers, use of tutors, more than doubling the homeroom teachers’ hours, outside marathons and school building improvements.

What in the programme was crucial to its success, and what was of secondary importance? It was not possible, given the limitations of my research, to identify and determine precisely if and how specific elements of the programme actually contributed towards its success. A more comprehensive study could have sought to evaluate the following individual components of the SFA programme:

a. To gauge the effectiveness of the homeroom teachers, pupils and parents could have been asked to complete an anonymous questionnaire, evaluating the impact of these teachers on them.

b. An evaluation of the marathons by teachers and pupils, by questionnaire and/or interview.
c. An evaluation of the effectiveness and necessity of the additional hours allotted to the subject teacher, by questionnaire and/or interview.

d. An evaluation of the effectiveness and necessity of the frequent teacher workshops, held both before and during the actual implementation of the project, by questionnaire and/or interview.

Another aspect that was not included within my research was the examination of key non-academic parameters, such as social and moral school-related factors. This was an important limitation, not least because the SFA programme, while it emphasized scholastic achievement, also included activities that were aimed at strengthening social cooperation and inter-personal behaviour. However, the impact of this aspect of the programme was not measured.

**Difficulties and limitations**

During the planning and carrying out of this research, I encountered a number of difficulties and limitations, which may qualify the validity of some of the results. In brief outline, these include the following:

a. Obtaining data from the control school: The control school principal would not permit parents to respond to questionnaires, allowed only 4 teachers and 25 pupils to participate in this research, and did not provide dropout data for years prior to 2000. This led to unequal population sizes of pupils and teachers. Thus, comparison data was not as well grounded as it might have been. Ethical considerations prevented the obtaining of information without the principal’s consent.
b. National matriculation data for specific matriculation subjects was not available prior to 1999.

c. Data obtained from the experimental school was compared with only one other school. The experimental school pupils took four matriculation exams, but the results of only two were compared with the control school (they did not take the other two exams), and national norms. Therefore, the results of these other two exams were compared only to those of previous years in the same school. One of these was also compared to the national norm, while there are no national statistics for the other.

d. The positive outcomes observed in the experimental school during the year of the SFA project were observed in a very specific setting – 10th graders from an underprivileged background in a development town in Israel. Until this programme is tried and evaluated in other settings, we cannot be confident that what succeeded here would necessarily succeed in other places. Furthermore, what worked for 10th graders might not necessarily work for 11th or 12th graders, and what worked for history, might not work for mathematics.

e. This study examined only one year of what was planned as a three-year programme. We do not know that even if the programme had continued until the end of the 12th grade, the pupils would have succeeded and been eligible for a full matriculation certificate. Furthermore, it put both pupils and teachers under a great deal of pressure, and it is an open question whether they would have been able to function in this way and at this level for two further years.
When evaluating school improvement initiatives, it is essential not to lose sight of the importance of the socio-economic background of the pupils on their chances for educational success. Setting this issue in a historical context, it should be noted that early studies of school effectiveness, by Coleman et al. (1966) and by Jenks et al. (1972) found they were relatively powerless to address social inequalities. For Thrupp these and similar studies suggest that: “the road to greater equality of opportunity lay not in education, but in other social and economic policies” (1999, p. 16). He concluded: "Because of its sociological and political shortcomings, SER (school effectiveness research) in its current form is most unlikely to ever make the considerable difference in reducing disparities in student achievement" (Thrupp, 2002, p. 3).

Stephen Ball, another outspoken critic of SER, also contends that it diverted attention from dealing with the socio-economic factors that impact on student achievement. Furthermore, he claims that SER, through its emphasis on the management concepts of efficiency and accountability, has opened the door to a number of 'evils', including the stigmatizing of schools as 'poor' or 'inefficient'. These schools become the objects of management therapies from above (Ball, 1990, p. 153). As Lauder et al. (1998, p. 1) have argued: “For teachers effective school research has been a two edged sword. It has raised the possibility that they can make a difference to educational outcomes [but] ... it has also saddled them with responsibilities over which they would claim to have little control... At the height of the implementation of the New Right agenda the claim that schools could make a difference were used ideologically to deny any suggestions that schools were limited in their performance by their socioeconomic intake or context".
Along with these criticisms, there has been a sustained attempt to measure what difference schools can make. Much of this argument has been highly technical, but as Macbeath and Mortimer (2001) have argued that the: “unambiguous finding from three decades of research across the world… is that schools do make a difference. While social background continues to play a strong influential role, schools are not helpless in promoting educational and social mobility… studies between and within countries come to different conclusions about the magnitude of the school effect, there is a broad consensus that it lies in the region of 5 to 15 per cent” (6). In a similar overview study, Teddlie and Reynolds (2001, p. 54) are rather more optimistic stating: "SE researchers, while agreeing that social class has a large impact on achievement, conclude that this makes the development of methods to improve lower-SES schools (and their classroom instruction) even more important". In doing so they suggest that schools can account for 12-15% of the variance in student achievement. Their conclusion is that the glass is not 85% empty, but 15% full, and that 15% can have powerful effects in the long term. In illustrating this effect, Thomas and Mortimer (1994) that the difference between a most effective school and a least effective school could, in England, be “translated as a difference for the average pupil of seven grade Cs instead of six grade Es at GCSE.

The SFA programme researched in this study lends support to the arguments of Teddlie and Reynolds (2001). Instead of complaining and blaming socio-economic conditions that are beyond the control of educators for the poor achievement of the pupils, the SFA programme led to highly positive results on the National Matriculation Exams. This, in turn, would have significant impact on the socio-economic future of these pupils. Thus, it can be argued, that by improving schools we can impact
on the future society. It can do so both by enabling pupils from deprived socio-economic background to improve their level of achievement and also by playing a part in breaking what Slavin (1995) has described as a self-generating downward spiral of low self-esteem, low achievement and reduced motivation. To do this, he argues schools much reach out to families and communities in new ways and with new insights into learning.

Contrary to the pessimistic scenario predicted by Ball and others whereby schools are labeled from above as being 'poor' or 'inefficient', in my study the parents, administration and staff of the Israeli secondary school that implemented the SFA programme, recognized the need for dramatic improvement on the matriculation exams. As a result, as Slavin has envisaged, a cooperative and voluntary programme was developed and implemented, and was not arbitrarily imposed from above.

It is important to note that the socio-educational environment in Israel was perhaps unusually conducive to the development of school improvement programmes for several reasons. First of all, there is a very strong affinity between academia and the field in Israel. Many University professors and academic researchers in the field of education began their profession life in the teaching profession, and remain closely tied to the field to this day. This enables relatively easy transition from academic studies to field practices and innovations. Secondly, there are pressures on all levels of society, even among low SES populations, that children achieve a matriculation certificate, even though this may be an unrealistic goal. This pressure led the schools in the development town under study to adopt an all-academic curriculum, which was followed by the adoption of the SFA.
The Israeli SFA programme joins a growing number of successful school improvement programmes on the secondary level, for low SES student populations, that are based on effective school research. Two Canadian school improvement programmes are good examples of the role that schools can play in reducing social inequalities:

a. The Halton Effective School project that included 17 secondary schools (Stoll and Fink, 1996).


Can SFA be implemented in Israeli Secondary Schools without significant additional funding?

It is important to point out that the SFA project researched in this study was an improvement programme designed especially for the secondary school. Pupils in the school began their high school studies with significant academic deficiencies. It was therefore essential to address these deficiencies by a belated, multi-faceted enrichment programme. The ideal educational stage for 'Success for All' programmes is in early elementary school. However, for the past several years the Israeli educational budget has been cut substantially, and the achievement level of pupils designated as disadvantaged has deteriorated even more. As a result these pupils will continue to arrive in high school ill equipped to cope with academic matriculation exams. I do not see how it is possible to close this educational gap without significant funding. This thesis has shown that it is possible even at the late stage of 10th grade to achieve significant success. This may encourage educational leaders to lobby for the additional funds necessary to adopt a leaner version of the SFA programme in other disadvantaged areas in Israel.
A final note focuses on the possibility of the SFA programme being extended in Israel without substantial additional financial resources. It is important to point out that the SFA project researched in this study was an improvement programme designed especially for the secondary school. Pupils in the school began their high school studies with significant academic differences. It is therefore essential to address these deficiencies by a belated, multi-faceted enrichment programme. If the ideal educational stage for 'Success for All' programmes is in early elementary school, my study has suggested that it is still possible even at the late stage of 10th grade to achieve significant success. This may encourage educational leaders to lobby for the additional funds necessary to adopt a leaner version of the SFA programme in other disadvantaged areas in Israel.

A final note
Results of the 2002 national matriculation exams as reported by the Israeli Ministry of Education, show that the educational picture in development towns in Israel remains distressing. The gap between pupils who live in middle class and upscale neighbourhoods, and those who live in the development town, is unacceptable. Only 40% of pupils residing in development towns succeeded in achieving a national matriculation certificate in 2002, as opposed to 80% of pupils from well-to-do neighbourhoods in the centre of the country; in the key matriculation subjects of mathematics and English, pupils from a development town had a five to six times lower success rate (Sebirsky, 2003). However, in contrast to the situation nationally, pupils who participated in the SFA programme in the 10th grade in the year 1999-2000, in the school under study in this research, showed the following very positive results:
a. 85% received a National Matriculation Certificate.
b. 10% had to repeat one or two exams in order to be eligible for the certificate.
c. 5% had to repeat 3 exams in order to be eligible for the certificate.
d. 100% of the pupils completed 12th grade.

Sadly, the programme was discontinued after only one year. Even so most of the teachers who were involved in the SFA project continue to work according to its guiding principles, and do so without remuneration.

Although it is not possible categorically to state that the SFA programme was directly responsible for all the positive findings reported in this research, nevertheless, this study does once again support Slavin’s motto of “Success for All”. If we believe that every ‘normal’ pupil can succeed in achieving a matriculation certificate when given the proper educational tools, it follows that there is no excuse for accepting the existing serious gap between pupils of different socio-economic levels. Schools in disadvantaged areas must be given the necessary budgets to ‘level the educational playing field’.

It is my hope that this study will represent another small step on the road leading to school improvement. It is vital that educators remain optimistic and continue to apply the theories of effective schools research, to improve schools. It is also vital that researchers continue to engage in such research and in doing so to improve how they go about this. They must also work closely with teachers, pupils, parents, policy makers and other key stakeholders in this important enterprise.
Appendix

I – Questionnaires – Page 383
II- Semi-Structured Interview Questions – Page 393
III – Pupil Charter – Page 398
IV – Interview Transcripts – Page 399
V - Permission to Conduct Research – Page 415

1 Documents were translated from Hebrew
Appendix I

Pupil Questionnaire I

This questionnaire was designed to examine your feelings regarding your matriculation exams. It is not a test. Please mark the box corresponding to the number that comes closest to what you feel.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I believe that I will succeed in my matriculation exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I have been successful in my exams in the past.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I will put a lot of effort into studying for my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. My friends believe that I will succeed in my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. My teachers put a lot of effort into helping me succeed in my exams.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. My tutors put a lot of effort into helping me succeed in my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. The pace of learning suits me.</td>
<td>1</td>
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<td>4</td>
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<tr>
<td>8. My teachers believe that I will succeed in my exams.</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. My teachers encourage me to succeed.</td>
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<td>4</td>
</tr>
<tr>
<td>10. My parents believe that I will succeed in my exams.</td>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I am striving for high grades.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I feel that I will receive high grades.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I am sure that I will take all my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. It is important for me to succeed in my studies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. I actively participate in my classroom lessons.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I spend a lot of time on my homework everyday.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. The other students in my class help me in my studies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. I help other students who have difficulties.</td>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. It is important to my teachers that I succeed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. I want to study in the University in the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. This school is a good place in which to learn.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Pupil Questionnaire II

This questionnaire was designed to examine your feelings regarding your matriculation exams. It is not a test. Please mark the box corresponding to the number that comes closest to what you feel.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I believe that I will succeed in my matriculation exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>I have been successful in my exams in the past.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>I put a lot of effort into studying for my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>My friends believe that I will succeed in my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>My teachers put a lot of effort into helping me succeed in my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>My tutors put a lot of effort into helping me succeed in my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>The pace of learning suited me.</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>My teachers believe that I will succeed in my exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>My teachers encouraged me to succeed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>My parents believe that I will succeed in my exams.</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>I am striving for high grades.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>I feel that I will receive high grades.</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
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<tr>
<td>21</td>
<td>This school is a good place in which to learn.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22</td>
<td>I feel that participating in the new program improved my chances of success.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23</td>
<td>I would like to continue learning in this program.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Teacher Questionnaire I

This questionnaire was designed to examine your feelings regarding your school. Please mark the box corresponding to the number that comes closest to what you feel.

<p>| 1. I wait impatiently to begin each new school day. | 1 | 2 | 3 | 4 |
| 2. I am always satisfied to work in this school. | 1 | 2 | 3 | 4 |
| 3. I feel that I am successful in imparting my educational perceptions to my pupils. | 1 | 2 | 3 | 4 |
| 4. I frequently feel that I am wasting my time trying to work as a teacher. | 1 | 2 | 3 | 4 |
| 5. Most of my pupils are not capable of understanding the material I teach. | 1 | 2 | 3 | 4 |
| 6. The attitudes and learning habits that my pupils bring from home hamper their chances for success in school. | 1 | 2 | 3 | 4 |
| 7. I can count on my colleagues to assist me even though it is not part of their job. | 1 | 2 | 3 | 4 |
| 8. I feel that most of my colleagues accept me and respect me. | 1 | 2 | 3 | 4 |
| 9. There is excellent cooperation between my colleagues and me in school. | 1 | 2 | 3 | 4 |
| 10. This school is like a big family. | 1 | 2 | 3 | 4 |
| 11. Even if I would be offered a position in another school I will not take it. | 1 | 2 | 3 | 4 |
| 12. In this school we have frequent professional meetings. | 1 | 2 | 3 | 4 |
| 13. There is constant overseeing of the teachers' performance. | 1 | 2 | 3 | 4 |
| 14. In this school there is constant pressure for achievement. | 1 | 2 | 3 | 4 |
| 15. In this school the relationship between pupils and teachers is friendly. | 1 | 2 | 3 | 4 |
| 16. In this school you have to get permission from the administration for everything. | 1 | 2 | 3 | 4 |
| 17. In this school there is a constant supply of necessary teaching materials. | 1 | 2 | 3 | 4 |
| 18. You don’t have to work hard in this school. | 1 | 2 | 3 | 4 |
| 19. In this school there are workshops that fulfill the teachers' needs. | 1 | 2 | 3 | 4 |
| 20. In this school you get constant feedback on your work. | 1 | 2 | 3 | 4 |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21. In this school, teachers are under a lot of pressure from overwork.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. In this school everything is organized according to rules and regulations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23. In this school they try out new teaching methods.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24. In this school the teachers assist in introducing changes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25. In this school most teachers are pedagogically conservative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26. The level of discipline in the school is very low.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. The teachers are very often late or absent.</td>
<td>1</td>
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</tr>
<tr>
<td>28. The principal knows towards which goals to lead the teachers, and transmits this towards them.</td>
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</tr>
<tr>
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<td>30. The teachers' influence is restricted to classrooms.</td>
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<td>31. Decisions in the school are made by the principal and and vice-principal only.</td>
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<td>32. The policies and procedures are dictated from above.</td>
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</tr>
<tr>
<td>33. The school principal determines priorities and plans, and follows up on performance.</td>
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</tr>
</tbody>
</table>
**Teacher Questionnaire II**

This questionnaire was designed to examine your feelings regarding your school. Please mark the box corresponding to the number that comes closest to what you feel.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td>2</td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<td>7.</td>
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</tr>
<tr>
<td>8.</td>
<td>1</td>
<td>2</td>
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<td>1</td>
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<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>34.</td>
<td>I enjoyed be part of the school project.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>35.</td>
<td>I would like to continue teaching under this project.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>36.</td>
<td>I think that the project was a success.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Parent Questionnaire 1

This questionnaire was designed to examine your feelings regarding your children’s school. Please mark the box corresponding to the number that comes closest to what you feel.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am interested in what goes on in school.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. I know the teaching staff.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. I participate in the class social activities.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I know my child’s school curriculum.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. I feel that it is important for my child to get a matriculation degree.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I participate in the school’s social activities.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I am satisfied with the amount of homework given.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. I am aware of the achievement of the students in the school.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. I am satisfied with the attitude of the teachers towards my child.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. I accompany the class on school trips.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. I actively participate in the class parent’s committee.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. I give a lesson or a lecture to my child’s class.</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. I actively participate in the school parent’s committee.</td>
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<td>18. There is constant dialogue between the parents and the school staff.</td>
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<td>19. I agree with the school’s goals.</td>
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<td>20. I emphasize before my children the importance of their teachers’ messages.</td>
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<td>24. I identify with the life-style of the school.</td>
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Parent Questionnaire II

This questionnaire was designed to examine your feelings regarding your children’s school. Please mark the box corresponding to the number that comes closest to what you feel.

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<tr>
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<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
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<td>1</td>
<td>I am interested in what goes on in school.</td>
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<td>2</td>
<td>I know the teaching staff.</td>
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<td>3</td>
<td>I participate in the class social activities.</td>
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<td>4</td>
<td>I know my child’s school curriculum.</td>
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<td>5</td>
<td>I feel that it is important for my child to get a matriculation degree.</td>
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<td>6</td>
<td>I participate in the school’s social activities.</td>
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<td>7</td>
<td>I am satisfied with the amount of homework given.</td>
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<td>8</td>
<td>I am aware of the achievement of the students in the school.</td>
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<td>9</td>
<td>I am satisfied with the attitude of the teachers towards my child.</td>
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<td>10</td>
<td>I accompany the class on school trips.</td>
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<td>11</td>
<td>I actively participate in the class parent’s committee.</td>
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<td>12</td>
<td>I give a lesson or a lecture to my child’s class.</td>
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<td>13</td>
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<td>29. My child put more effort into his/her studies under the new program.</td>
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<td>30. I feel that the new program was successful.</td>
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Appendix II

Semi-Structured Interview Questions for the Principals of both Schools at the Beginning of the 1999-2000 School Year

1. What do you feel are the conditions for the successful implementation of the project?
2. In what ways has your school prepared for the implementation of the SFA project, and do you feel that the preparations were sufficient?
3. What are the criteria that will determine the success of the project?
4. How would you describe the pupils' motivation now, at the beginning of the year?
5. How do you think the homeroom teachers feel about this project, as compared to the normal teaching programme?
6. How do you think the subject-matter teachers feel about this project as compared to the normal teaching programme?
Semi-Structured Interview Questions for the Principal of the Experimental School at the End of the 1999-2000 School Year

1. Can you please sum up the major changes that occurred during the year as a result of the project?
2. Were the conditions that you set for the project's successful implementation fulfilled? Please explain.
3. How do you think the homeroom teachers feel about this project, as compared to the normal teaching program?
4. How do you think the subject-matter teachers feel about this project as compared to the normal teaching program?
5. Did you feel any difference in teachers' attitudes towards the pupils this year?
6. Do you think the teacher workshops concerning the project were sufficient, or should something else have been done?
7. Did the motivation of the pupils change as a result of this project?
8. Do you feel that the project was a success?
9. Were you successful in keeping all pupils in your school?
10. Was there a change in the pupils' belief in their ability to succeed in school, as a result of this project?
11. Was there a change in your belief concerning the pupils' ability to succeed in school, as a result of this project?
12. Did the project affect the pupils' desire to achieve a matriculation certificate?
13. Was there a change in the parents' involvement in the school, as a result of the project?
14. Was there a change in your relationship with the parents in your school as a result of this project?
15. Do you feel that it is important that the project continue next year?
16. What do you think are the requisite conditions that will ensure the project's success next year?
17. Do you have any suggestions regarding future SFA projects? Please explain.
Semi-Structured Interview Questions for the Principal of the Control School at the End of the 1999-2000 School Year

1. Why did your school decide to drop out of the SFA project?

2. In what ways did the other projects that your school participated in live up to your expectations?

3. Did you feel any change in the motivation of your pupils towards their studies this year?

4. What have you heard about the results of the SFA project in the other high school?
Semi-Structured Interview Questions for the Vice-Principal of the Experimental School at the Beginning of the 1999-2000 School Year

1. What is your role in the SFA project?
2. In what ways has your school prepared for the implementation of the SFA project, and do you feel that the preparations were sufficient?
3. How would you describe the pupils’ motivation now, at the beginning of the year?
4. How do you think the teachers feel about this project, as compared to the normal teaching programme?
5. Do you believe that the programme will be successful? If yes, why? If no, why?
Semi-Structured Interview Questions for the Vice-Principal of the Experimental School at the End of the 1999-2000 School Year

1. In your opinion, was the project successful? Please explain.
2. How would you describe the pupils' motivation now, at the end of the year?
3. How do you think the teachers feel about this project as compared to the normal teaching programme?
4. What change, if any, did you discern in the parents’ attitude and involvement?
5. How did the curriculum and schedule changes dictated by the programme effect the school?
6. Is it important that the project continue next year? Why?
7. What suggestions regarding future SFA projects do you have?
1. Pupil Charter

As a pupil who is participating in the SFA programme, I pledge to carry out all educational and behavioural requirements placed on me by the school: attend regularly, obey school rules and behave in a manner fitting an observant Jew.

Pupil’s signature ______________________
Date ______________________
Appendix IV

Interview with the Principal of the Experimental School at the Beginning of the 1999-2000 School Year

1. What do you feel are the conditions for the successful implementation of the project?
First of all, there should be full cooperation between all concerned – the Board of Education, representatives of the Community center, school administration, staff and officials of the local municipality. In most areas so far there has been cooperation, except for budget matters. I am upset that I was not invited to participate in budget meetings. On the other hand, I gain by not having to worry about the budget – I just have to ask permission for each major expense, but it makes my decision-making more difficult.

Another thing that I am concerned about is that teachers should get paid for all the extra time and effort that they have to put in during this project. They should also get recognition from the parents and Board of Education.

2. In what ways has your school prepared for the implementation of the SFA project, and do you feel that the preparations were sufficient?
In my opinion, the thorough preparations that we made with the teachers, pupils and parents and the school’s administration will provide good results at the end of the year. Preparation for the project began during the previous school year. Meetings were held once every two weeks, and then more intensively during the summer vacation. At these meetings the aims of the project were accurately defined and important issues such as ways to increase motivation, teaching strategies and methods, and assertiveness were discussed.

The teacher workshops were efficient; all the teachers participated and stayed until the end of each session. They expressed seriousness in their efforts by preparing materials. In addition, a few days before the start of the school year the pupils were prepared for the changes by lectures on the project and its importance. They were given motivational pep talks by a psychologist and guidance counselor. We invited the parents to the school in the evening last year and again this week. We explained to them the project and aims and they heard a talk by a psychologist as to how they can help their children succeed. They were requested not to give their children a lot of chores at home so that they would have time to study. They were asked to constantly encourage their children to make an effort to succeed.
2. **What are the criteria that will determine the success of the project?**
First of all, if over 90% of the pupils will pass all their 10th grade matriculation exams, I will feel that the project was successful. In addition, pupils should show more motivation towards studying, and that teachers should have a more positive attitude towards the weaker pupils.

3. **How would you describe the pupils’ motivation now, at the beginning of the year?**
It seems to me, that the pupils began the new school year just as it has been for as long as I can remember – teachers are already complaining that as a rule, they don’t show much interest in learning. There is a lot of class cutting and poor discipline on the part of those who do show up. However, all the staff has been emphasizing the importance of success on the matriculation exams all week, and we have been trying to encourage all the pupils by saying that they *can* succeed, if they try hard enough.

4. **How do you think the homeroom teachers feel about this project, as compared to the normal teaching program?**
They are pleased that the project is finally beginning, after so many months of preparation. They feel that this program is more comprehensive and serious than any of the others that they have been involved in, and that it will lead to better results. On the other hand, some of the homeroom teachers confided to me that they are afraid of the big responsibility that is now on their shoulders, and the extra work that is expected of them and they have not yet received any compensation.

5. **How do you think the subject-matter teachers feel about this project as compared to the normal teaching program?**
I think that they feel about the same way as the homeroom teachers. They hope that the pupils will not collapse under all the pressure. Each matriculation subject is concentrated during less time, so they have to cover a lot of material in a short period. On another matter, the teachers have been complaining a bit about the large number of workshops and the extra effort required of them. They are not even sure that they will be compensated for all their extra effort.

6. **Do you have anything you would like to add?**
I would just like to say that I have a good feeling about this project. It is different from others we have encountered in the past in that it includes many aspects of school life, and not just one specific thing, such as
achievement in math, for example. I hope that it will live up to our expectations.

Interview with the of Principal of the Experimental School at the end of the 1999-2000 School Year

1. Can you please sum up the major changes that occurred during the year as a result of the project.
When I try to summarize the year of this project, and I hear that there are budgetary problems that might cause the project to be stopped, despite the fact that in my opinion it greatly advanced the 10th graders towards their goal of achieving a matriculation certificate, I am convinced that if we could continue the project, all the pupils, with no exceptions, would get a matriculation certificate. The intensive efforts of the teachers, the school staff and the advisors from the Israeli Community Center, created a serious atmosphere, desire to succeed, and real effort from all those involved: pupils, parents and teachers. The results from the matriculation exams given at the end of the first semester, already showed that we are on the right track - all the pupils sat for all the exams, and there was over 93% passing rate for each exam. I think that parental involvement that encouraged their children also contributed to their success. The marathons contributed to increase in knowledge and motivation and helped to separate studying from the day-to-day problems and stresses (despite their high cost).
The workshops that the teachers participated in, that examined in dept classroom practices, led to formative evaluation and ideas for improving learning.
From time to time teachers and pupils complained about the hard work, but all in all we were able to defuse these complaints.

2. Were the conditions that you set for the project’s successful implementation fulfilled? Please explain.
First of all, I would like to speak about the budget. After about two months of not knowing, I was finally informed of the budget, and the school received all the money that was promised for the project. Most of the funds came from the National Board of Education and the rest from the City Municipality. This made my decision-making regarding expenses much easier.
Second of all, all agencies cooperated fully, by providing funds, tutors, moral support and the provision of various advisors. The Minister of Education, who visited twice, spoke with me, teachers, pupils and the city mayor. The Minister received a project report every two months from the district governor. This district governor, together with his staff, visited the school four times during the school year, and was in
contact throughout the project. Representatives of the Israeli Association of Community Centres, who were the initiators and monitored the project, visited often, and were available for advice, and problem solving. The city mayor and his staff were in frequent contact with me and the vice principal (who was in charge of the project). They helped solve problems such as air conditioning of classrooms, provision of suitable desks and chairs for pupils, replacement of chalk blackboards with white boards, etc. Parent representatives from each class that participated in the project visited the school and received reports. Almost all parents participated in joint meetings with teachers, the project head, agencies, etc.

In my opinion, one of the important conditions for the success of the project, was that the homeroom teachers really get the extra compensation that was promised them. In a country of limited funds, and constant budget cuts on a Ministerial level, promises are not always carried out. Three months into the school year, the Ministry of Education approved and supported the changes in the definition of the homeroom teachers' position. They received the promised additional salary for the project's implementation – 14 additional hours for each teacher. In addition, the Ministry of Education came to an agreement with the National Teacher's Organization, that other homeroom teachers in the country would not demand the same salary increase, and that the increase would only be for one year (for the duration of the project).

3. How do you think the homeroom teachers feel about this project, as compared to the normal teaching program?
The homeroom teachers expressed great satisfaction with the additional hours allotted them to be with their homeroom classes. As a result, their relationship with their pupils became stronger and more positive. This didn’t happen at once. After a few weeks the pupils began to understand that the entire project staff ‘meant business’, and any deviation from the expectations would be to their detriment. The homeroom teachers told me, that the pupils began to see them not only as teachers but also as friends who tried to help them succeed in their exams. The frequent house calls and the talks with the parents also contributed to increasing the pupils’ motivation to succeed. One homeroom teacher told me ‘now I see that a teacher who spends so many hours in his class can influence his pupils; until now I was a skeptic’.

Homeroom teachers had many responsibilities besides teaching. The issue of class solidarity and moral education was a very important one. The school allocated funds and support for extra-curricular activities, such as attending plays in a nearby city, and funded special workshops on
how to plan for and carry out social activities. In addition, they held frequent individual counseling sessions with their pupils. 

My most important role was encouraging the teachers and the pupils to carry out what the project demanded. However, the day-to-day implementation of the project was carried out by the homeroom teachers. Without the cooperation and whole-hearted involvement of the mechanchim this project would not have been so successful.

4. How do you think the subject-matter teachers feel about this project as compared to the normal teaching program?

They claimed that this method, whereby they teach their material in a concentrated manner, and at the end of the semester the pupils take their exam, on the one hand demands a lot of effort in preparing the lessons, but on the other hand ensures the success of the pupils because they don’t have to remember the material for a long time, and they can concentrate on fewer subjects. Also the marathons strengthened the concentration of the pupils on the subject studied, and the exercises on how to answer questions by using similar exams, increased the success of the pupils, both on the internal exams and on the matriculation exams that they took in the first semester, and I am sure in the second semester, too. Subject matter teachers put in many extra hours that they were not compensated for. For example, they spent a lot of time in lesson planning and in giving individual attention to pupils who needed it. They were not compensated for extra staff meetings.

An important decision, was instructing of subject-matter teachers not to deal with discipline, or other problems, during class time. Many subject-matter teachers came to tell me how relieved they were with the new arrangement. In the past, the “mechanech” was expected to deal only with severe discipline problems, and not the every day ones that are common in this school - latecomers, class skippers and general discipline problems. Under the new arrangement, these were assigned to the “mechanech”, thus changing the role of the subject-matter teacher from “policeman” to teacher. The teachers claimed that they covered more material during the period, and in a better atmosphere.

What they did constantly complain about were the outside experts, who re-checked exam paper that they had already graded. I had to deal with this problem many times throughout the year. I don’t think that they agree with this practice even now, at the end of the year.

5. Did you feel any difference in teacher’s attitudes towards the pupils this year?

During my conversations with teachers, who taught the project classes, I felt that they had become more convinced that weak pupils can also
succeed if they are given the proper attention, their problems are attended to, and their self-image is strengthened. In my opinion, the teachers changed the motto of “Success for All” from an abstract idea to a concrete working model.

6. Do you think the teacher workshops concerning the project were sufficient, or should something else have been done?
During the year of the project’s implementation, all teachers in the experimental school, the school guidance counsellor and the city’s psychologist participated in a monthly workshop, held by an organizational advisor. As I already mentioned in the beginning of the interview, at these sessions problems concerning the project were discussed, and possible solutions were suggested. The workshops, before and during the year, were sufficient. I feel that these sessions helped the teachers ‘let off steam’, and resulted in defusing complaints. I don’t think more workshops would have been tolerated by the teachers, although they might have benefited from a few more.

7. Did the motivation of the pupils change as a result of this project?
I feel that they were more serious about their studies. Where in the beginning of the year, the 10th graders behaved no differently than other pupils in the school, slowly, but surely, a change occurred. Now, at the end of the year, I can definitely say that the 10th graders show much more motivation towards learning. First of all, the massive encouragement of the pupils to sit for all the matriculation exams, by all concerned with the project, served as a great ‘motivizer’. This was a very important aspect of the SFA programme. Pupils were instilled from the first day of school, and even before, in preparation for the programme, of the importance of taking all exams, and that it was expected and required. This served to put the pupils in an academic mode, and did not leave room for goofing off with the excuse that “I will not take the exams anyway, just like my brother/sister didn’t”. They were given to understand that “you will have to take all the exams, so you might as well study and do well on them”.

8. Do you feel that the project was a success?
I am sure that it was. I think that it was a great success, and the results on the upcoming matriculation exams will surely prove my feelings. The improved attitudes of the pupils towards learning is so obvious, that I am doubly sure of the results. Even with all of the pressure they were under, they lived up to my expectations. We will see the results in a few months.
9. Were you successful in keeping all pupils in your school?
Up until now, despite all the pressure, not even a single pupil is talking about leaving the school. None of the 10th graders left the school during the year, and hopefully all will continue on in our school to the 11th grade. In fact, I will be very surprised if any of the pupils who participated in the project leave the school, but we will only know for sure in September.

10. Was there a change in the pupils' belief in their ability to succeed in school, as a result of this project?
Yes, especially after they received the results of the first semester matriculation exams.

11. Was there a change in your belief concerning the pupils' ability to succeed in school, as a result of this project?
I personally have always believed, that if the pupils put their mind to it, they can succeed on the matriculation exams. This project only served to strengthen this belief. If you invest massively, approach teaching seriously and believe that pupils can succeed, almost every one can. The SFA project proved this, in my opinion.

12. Did the project affect the pupils' desire to achieve a matriculation certificate?
Pupils always wanted a matriculation certificate, but there is a difference between wanting and making a serious effort to attain one. This project strengthened their belief that a certificate is actually within their reach, and with hard work they can earn one.

13. Was there a change in the parents' involvement in the school, as a result of the project?
Yes. Teachers had more phone calls from parents inquiring about their child's progress. One-on-one parent-teacher meetings, that are held three times a year for all grades, do not usually produce a big turnout of parents. What was very noticeable this year, was that while not very many parents attended these meetings for the other grades in the school, most of the 10th grade parents showed up.
I am sure that the relationship between the parents and the homeroom teacher is now much stronger.

14. Was there a change in your relationship with the parents in your school as a result of this project?
There were four special meetings with parents, since the project was introduced to the school (beginning last year). Almost all of the parents
came to these meetings, sometimes even both parents of a pupil attended. This gave me a chance to get to know them, and as a result I feel that I have a closer relationship with them.

15. Do you feel that it is important to continue the project?
I feel that it is very important to continue with the project. As I mentioned before, the motivation of the pupil’s increased, their desire to succeed increased, attendance increased and no pupils dropped out during the school year. As regarding the teachers, they worked harder, but partial results of their efforts were very good since all the pupils passed the winter matriculation exams. Another party involved were the parents. They expressed their satisfaction with the project, especially after receiving the results of the winter matriculation exams. The school governors were pleased. Despite all the satisfaction, it is now known that the project is too expensive, and the Government could not afford to continue to fund it. In my opinion it is very important that the project continue next year, but as it looks now, the chances for this are not good.

16. What do you think are the requisite conditions that will ensure the project’s success next year?
If it does continue, although as I said I do not believe that it will, the teacher workshops should continue, pupils should still be constantly encouraged to study and to take all matriculation exams, and of course funds have to be provided, at least as much as this year.

17. Do you have any suggestions regarding future SFA projects? Please explain.
First of all, if there had been more money, I would have added more marathons. I would have brought in experts in the specific subject matter that the pupils study for the matriculation exam. This would have increased their knowledge. I would have liked to see more use of audio-visual aids in teaching, and visits to museums and other places of culture, relevant to the material studied.
One of the changes under the SFA was the addition of teaching hours for the matriculation subjects. I think that the number of hours allotted to each subject should be reconsidered – some subjects need more, and others could get by on less.
One of the major problems that our pupils have is their difficulties in expressing their thoughts and knowledge – both orally and written. I would have liked to see some activities that address this problem included in the project. Actually, this should begin in earlier grades, if possible.
Interview with the Principal of the Control School at the Beginning of the 1999-2000 School Year

1. What do you feel are the conditions for the successful implementation of the project?
   The board of education and the city municipality allocated a budget for this project, but I didn’t participate in these meetings, so I don’t know what funds I have and what I can do. I have to get permission for each expense, and this bothers me. In order for me to make the right decisions so that the project will be successful, I have to know what the budget is. Another important condition is that the teachers have to begin to cooperate more, among themselves and with the projects administrators, otherwise the project will not succeed. Another issue is compensation. In my opinion, if you want the project to succeed, the first thing that has to be done is to assure that the teachers will be appropriately compensated for their efforts.

2. In what ways has your school prepared for the implementation of the SFA project, and do you feel that the preparations were sufficient?
   We had teacher workshops during the last semester of the previous school year that continued on to the summer vacation. We also assembled the 9th graders twice during June, and explained the project to them. Besides describing it, we also tried to infuse some motivation into the pupils, on the one hand to participate in the programme, and on the other hand to want to devote more time to study. In addition, we invited the parents of the 9th graders to school, and explained the project to them, and how we saw their role in it. I feel that the great effort that has to be put into the project’s implementation is too much of a burden on the school’s staff. The teachers constantly complain about the heavy load that the project puts on them, and this in addition to other projects that we are implementing this year. They feel that there is no room for another project in the school at this time. The pupils are afraid to commit to the new “craze” of the administration that would require them to study too much. All day I have to calm teachers who complain about the requirements and that the benefits are not proportional to the amount of time they have to put in.

3. What other projects are you implementing this year?
   Mabar, Michael, Weitzman Institute and Shachar.
4. What are the criteria that will determine the success of the project?
All of the tenth graders will pass their two matriculation exams (Hebrew language and history), they will show more motivation towards learning and none of them will drop out of our school.

5. How would you describe the pupils' motivation now, at the beginning of the year?
Tenth grade pupils in my school are not as serious about their studies as I would expect them to be. This is the first year that they will be taking matriculation exams, and I hope that as the year progresses they will become more serious.

6. How do you think the homeroom teachers feel about this project, as compared to the normal teaching program?
The homeroom teachers, and in fact all the teachers involved in the project, complain about the extra work that is required and expected of them. They don’t feel that this project is any different from the many others that we have implemented in our school in the past, and are implementing now, except for the enormous, unprecedented, demands on their time. If it was up to them, they would not participate in the SFA programme.

7. And if it was up to you?
To tell you the truth, I am not too enthusiastic about it either.

8. Do you have anything to add?
I hope that the going will become smoother, and that both teachers and pupils will get used to the new schedule and demands of the project.
Interview with the Principal of the Control School at the End of the 1999-2000 School Year

1. Why did your school decide to drop out of the SFA project?
Two weeks after the beginning of the school year, when I saw all the difficulties of the pupils and teachers, and when I noticed that these problems take up all my time, and do not allow me to administrate the rest of the school, I started to have doubts about this project. In addition, I wasn’t convinced that it would lead to better results than our other projects that the pupils participate in. At the end of the month, the complaints continued to increase until they drove me crazy. I received telephone calls from the parents at all hours of the day and night, and teachers started to be absent more often from school. The teachers emphatically told me that they were not willing to participate in another new project, that will only waste their time. They claimed that they were tired of outside “experts” telling them how and what to teach, especially since they were college graduates with teaching licenses. They also claimed that the additional salary promised them was not worth the extra time and effort required.

All of these led me to conclude that we were making a mistake in implementing this project. I became more and more convinced that this pressure on the teachers and pupils misses the point, and instead of success in the matriculation exams we will get more pupil dropout and teachers leaving the school. In addition, I feel that the SFA project is very similar to others we have already tried, with little success, such as the Holon Project, and another similar project will just confuse the teachers, as well as the pupils.

An important factor in our decision was the lack of teacher cooperation that led to lack of their motivation—which may also have been transmitted to the parents and pupils. It was a major consideration for stopping the project a month after the beginning of the year.

So therefore, I, and the school administration, decided to stop the project. Immediately following this decision, I received encouraging phone calls from parents thanking me. The teachers assembled and expressed enthusiastic support for this decision.

2. In what ways did the other projects that your school participated in live up to your expectations?
I feel confident that the projects that we implemented in our school this year, will lead to improved results on the upcoming matriculation exams.
In my opinion, the motivation of our pupils is increasing, although discipline problems still exist.

3. Did you feel any change in the motivation of your pupils towards their studies this year?
I don't think the pupils are serious enough about their matriculation subjects. They don't realize that if they don't do well now, it will hurt their chances in the future. Hopefully, next year, when they are older, they will become more serious.

4. What have you heard about the results of the SFA project in the other high school?
This is a small community, and both schools are right next to each other. We even have some teachers and families of pupils in common. Of course I have heard many things about SFA, most of them positive. It is possible, that after all the matriculation results are in, that we may come to the conclusion that we made a mistake in not participating in the project this year; but projects come and go. We will try to find another one that will suit our needs.
Interview with the Vice-Principal in Experimental School at the Beginning of the 1999-2000 School Year

1. What is your role in the SFA project?
I am the coordinator and the administrator responsible for the implementation of the project. As coordinator, I have been organizing and heading all teachers meetings, all parent-teacher and pupil-teacher meetings I have been meeting with representatives of the community, Board of Education and the Israeli Community Centers. I am responsible for all reports of pupil progress, teacher absences, schedule changes and coordination between the various parties. I was also in charge of preparing the classrooms for the project – furniture, air-conditioning, painting, etc. In addition, I was responsible for solving problems as they arise. As you can see, I have a big job and a lot of responsibility.

2. In what ways has your school prepared for the implementation of the SFA project, and do you feel that the preparations were sufficient?
I feel that we took every measure in our power to get everything ready for the start of the project in September. We spent many hours at the end of the last school year, and even during our summer vacation, so that everything would be perfect. There were a lot of technical problems that had to be solved, such as funds that were promised but so far not received, equipment ordered that didn’t arrive yet. We even changed the lighting in the project classrooms. We spent a lot of time speaking to parents and pupils who were concerned about various aspects of the project. Since I live in the town, and everyone knows me, it is just natural that I would bump into parents and city leaders in many places outside of school. During these encounters, I answered many questions and tried to eliminate uncertainties.

3. How would you describe the pupils’ motivation now, at the beginning of the year?
I’m quite disappointed, that the pupils as a group are just as indifferent regarding their studies as last year. I had hoped that the SFA would have given them greater motivation since they signed a written commitment. I hope that their motivation will improve when the initial ‘shock’ of the project subsides.

4. How do you think the teachers feel about this project, as compared to the normal teaching programme?
In my opinion, the teachers are a little fearful that if they don’t succeed in teaching the material, their good name will be tainted. They don’t know if
their pupils will be able to function under a lot of pressure. The teachers also feel pressured. They have to spend many hours preparing at home, and in finding ways of teaching the material in an interesting and meaningful manner. They also are skeptical about receiving all that was promised them for the extra effort.

5. Do you believe that the programme will be successful? If yes, why? If no, why?
If anyone involved in the project asks me, I will say that I believe it will succeed. But in my heart I am not so sure. Our pupils, and teachers for that matter, are not used to being under a lot of pressure, and this may break them. The pupils are not used to devoting most of their day to studying, and the teachers have families to consider. In my opinion, a lot will depend on how all those involved stand up under the pressure. I am also not one hundred percent sure that the teachers are completely convinced, that this project will work, any more than others that they had previously participated.
Interview with the Vice-Principal in the Experimental School at the End of the 1999-2000 School Year

1. In your opinion, was the project successful? Please explain.

Despite my misgivings at the beginning of the year, and even as far along as the end of the first semester, I am pleased to say that the project succeeded more than I expected. The matriculation grades from the first semester courses, the pupils’ desire to succeed and the teachers’ efforts to teach, are now the topic of conversation in the school, and even in the entire town. If we continue with this project next year, I am sure that these pupils will complete the 12th grade with little or no dropping out, and with a full matriculation certificate. This will definitely be an historical event in our town.

2. How would you describe the pupils’ motivation now, at the end of the year?

About six weeks after the beginning of the school year, a change in pupil behaviour began to be noticeable. The pupils became serious about their studies, even to the point that most of the discipline problems disappeared in these classes, and pupils stopped cutting classes. As time went on, the improvement increased, and by the end of the year, the change was dramatic. In my opinion, all the teachers’ intensive efforts under the guise of the SFA programme were what led to the dramatic change, but especially the hard work of the homeroom teachers. The contract that the pupils signed the first week of school may have contributed to this. The pupils took their studies more seriously, and I think that the use of a similar contract should become a standard procedure for all grade levels.

3. How do you think the teachers feel about this project as compared to the normal teaching programme?

Despite all my initial qualms, the teachers are quite pleased with their pupils’ achievement, behaviour and motivation. Some of the teachers even feel quite close to their pupils. All of the teachers, but especially the homeroom teachers, feel that they worked very hard, but in the words of one of them: “We succeeded in bringing the ships to a safe shore”.

4. What change, if any, did you discern in the parents’ attitude and involvement?

The relationship between the school and the parents was definitely strengthened. This is seen by the almost daily inquiries regarding their children and their increased participation in parent-teacher meetings. I think that this is a very welcome change.
5. How did the curriculum and schedule changes dictated by the programme effect the school?
In my opinion, the marathons were one of the most important elements of the project. They served to raise the self-confidence of the pupils, drew the pupils into a closer relationship with the teachers and among themselves, and were very valuable for learning and drilling material. It is unfortunate that during the second semester there were only two marathons, but since the pupils had already gained much self-confidence and had better learning skills than at the beginning of the school year, this wasn’t so significant.

On another issue, teachers complained all year long, about the experts to whom they had to pass along the exams that they had already corrected. In my opinion, it would have been much better to have insisted that teachers hand in advance lesson plans to be scrutinized by the experts, even though they refused to do this right at the beginning. I think this would have eliminated the necessity of rechecking the exams. The lack of plans was a stumbling block in the monitoring of the learning process — effective planning and goal attainment.

I would like to add a few words about the improved learning condition for the 10th grades. Pupils and teachers, who were fortunate enough to have air-conditioned classrooms, were of course very pleased; other pupils and teachers were jealous, and complained that it was not fair that they had to teach and learn in cold or hot rooms, depending on the season.

6. Is it important that the project continue next year? Why?
In my opinion, yes. I even feel that the entire school should join the project, as was originally planned. If this should happen, I feel confident that all the matriculation scores of our pupils will improve.

7. What suggestions regarding future SFA projects do you have?
More teachers should be qualified to join the project. I think that it is important to publicize this project, and its results, outside the borders of our town, in order to bring some pride to our community.
January 20, 1999

To Whom it May Concern,

This document gives permission to Mr. Meir Kahan to carry out research, for the purpose of obtaining a PhD degree only, for the University of Leicester, on the “Success for All” school improvement programme to be implemented in the two comprehensive secondary schools in our town, in the years 1999-2000.

This permission is granted only under the condition that all data, results and conclusions will remain strictly confidential, and not be published in any manner or form, except for academic purposes in a PhD thesis.

Sincerely,

[Signature]

Mr. Av. Bitan
Director of Municipal Department of Education
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416


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