

BLUEPRINT FOR SCHOOL IMPROVEMENT

THE 'TO BE WITH YOU' INITIATIVE

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This contribution to enlightenment is the fruit of my labour in the education system during the past three decades, of my meetings with a wide variety of interesting people and of extensive academic study.

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To my father, Avraham, who is no longer with us but whose spirit is with me always.

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Abstract

This study examines the "TBWY" reform program, its design and efficacy. The program was carried out in an Israeli high school with the aim of improving equality of opportunity, narrowing educational achievement gaps (Friedlander & Leon-Elmakias, 2006), improving the climate for study and increasing the number of those eligible for the matriculation (Bagrut) examinations which, since 2006, had been decreasing.

The reform program covered two types of class groups: "homogeneous learning groups" and "guided groups". The homogeneous learning groups were based on the students' proven learning skills, thereby reducing the differences in the students' achievements. In this way, it was possible to focus on teaching methods suitable for the learning group in a uniform and focused way.

The second group is a "guided group" made up of between 15 and 17 students. The "guided group" placed students with different peers to their "learning group" according to matters of common interest among the students, their hobbies, common areas of study, youth movements, extramural activities, groups and students' requests to be together. Each group has a teacher/guide who has undergone extensive training as a group coordinator.

The "guided group" involves a twice-weekly round-table meeting.

In addition to these meetings, the group coordinator met with each student to build an annual program of work and a process for monitoring the student's achievements in all of the areas mentioned.

This study included quantitative and qualitative constructivist methods focused on comparative research with students and teachers during two periods – before the reform program in 2006 and after it, in October 2009.

Several criteria were examined: teachers' perceptions of instruction strategies in homogeneous learning groups and resulting changes – gaps (Nahum, 2009) in educational achievements among the students, changes in the percentages of eligibility for matriculation certificates, school climate, a change in the students' feelings and the extent of teachers' feelings of responsibility for the failure and success of the students.

Findings indicated a relationship between teachers' acceptance of responsibility for the students' success or failure and positive changes in teachers' perceptions of student's abilities, the feelings of students, a reduction in achievement gaps, and improved climate of the school. Furthermore, there was an increase in the number of students eligible for

matriculation with an increase, in their grades from before the implementation of the program, until the present academic year, 2015.

This research contributes to a deeper understanding of the factors that enable greater scholastic achievement, together with an improved climate in an educational institution within the Israeli context. The research contributes to the understanding of the relationship between philosophical and psychological theories and their application in practice within the education system. The results of the research illustrate that a correct implementation of theories can create a change by reducing gaps in students' attainment by improving the school climate, by increasing the extent of the teachers' responsibility vis-à-vis students' success and increasing the number of students who are eligible for a matriculation certificate.

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1. Introduction

1.1 Underachievement and inequality in the Israeli education system

Equality of opportunity in education and academic achievements are declared principles of the education system in Israel. Yet there is a wide gap between the declarations and the actual application of the principles. The Ministry of Education in Israel considers eligibility for a matriculation certificate. Over the years, great efforts have been invested in raising the rates of entitlement to a matriculation certificate (Gilboa, 2010). Until the 2004 academic year, the rate of entitlement was continually increasing, reaching its peak at 54.1%. However, the increase ended in the 2005 academic year, when the rate of entitlement to matriculation dropped to 51.7% (Matriculation Examination Data, 2005).

In recent years, Israel has taken part in several studies comparing students' attainments in the educational system in Israel, with students' attainments in other countries around the world. Among the studies were tests in mathematics, Program for International Student Assessment (PISA) and literacy, in branches of reading, mathematics and science, Planetary Image Research Laboratory (PIRL), Trends in International Mathematics and Science Study (TIMMS).

These tests measure the success of the Israeli education system (Reichel, 2008), in comparison to education systems in other countries, in the preparation of students to face the challenges of a modern reality. Both the indices and the tests indicated large gaps in achievements between students, in sciences and languages.

Equality of opportunity in education requires an organization to support pedagogic processes providing the teachers with knowledge, skills and choice, so enabling the management of instruction as well as providing opportunities for growth and development of all students. The concept of differences in learners in the classroom demands the creation of equality of opportunity in learning and hence equality of opportunity in education. "Equality of opportunity" is a central value in modern and post-modern societies, meaning equal chances and equality to achieve socio-economic goals without discrimination, regardless of sex, race or status (Moss, Pullin, Gee, Haertel & Young, 2008). With equality of opportunity comes "opportunity to learn", (OTL) which differentially affects learning groups of children.

Underachievement by Israeli pupils at local, national and international level has been a source of concern in recent years (Central Bureau of Statistics, 2009) and it has led to

declared governmental goals for improvement in pupil achievement and an increase in the percentage of pupils achieving a matriculation certificate.

Underachievers are students who exhibit a severe discrepancy between expected achievement (as measured by standardized achievement test scores or cognitive or intellectual ability assessments) and actual achievement (as measured by class grades and teacher evaluations). To be classified as an underachiever, the discrepancy between expected and actual achievement must not be the direct result of a diagnosed learning disability. Gifted underachievers are under achievers who exhibit superior scores on measures of expected achievement (i.e. standardized achievement test scores or cognitive or intellectual ability assessments) (Reis & McCoach, 2000).

This research will question whether eligibility for a matriculation certificate is reflected in the principle of equal opportunity in education in Israel today. This principle of equal opportunity ensures that, as far as possible, only ability and motivation are necessary criteria for integrating students into the learning process (Yona, 2005). This principle is intended to prevent a situation in which social inequality, e.g. origin, gender, race and socio-economic status will act as factors that determine, a priori, the chances of success of students in school (Yona, 2005). I believe that this concept of equality of opportunity requires that competition be fair and that achievements and not attribution are what gains reward in schools.

Equality of opportunity in education, can be created as in the example of a meritocratic educational policy, the aim of which is to promote excellence by allocating many more resources to students with high intellectual ability and great motivation for learning and development (Yona, 2005). In this spirit, teachers tend to encourage and reward students whom they consider as having invested efforts in their learning (Heiman, 2004). However, a fierce attack was launched on educational meritocracy as a type of "sham" by the Israeli philosopher, Lampert, (2013) in his book *Meritocratic Education and Social Worthlessness*. According to Lampert, the notion of meritocracy, when applied to educational policy, is nothing but social Darwinism dressed up as equality of opportunity (Gilboa, 2010).

In contrast to meritocratic educational policy, the "TBWY" program focuses on equal access and opportunity to fulfil maximum potential of all students regardless of gender, race or socio-economic level. I will examine the "TBWY" program's parameters and influence on learning, such as; challenge, support, and social-emotional learning, teachers' professional capability and responsibility for the success of students and their

impact in creating a supportive and motivational study atmosphere (Kinchin, 2002). It will be examined whether the "TBWY" reform benefits both teachers and students. The reform is based upon humanistic values such as autonomy, social fairness and self-actualization and on creating a sense of belonging and security through the building of dialogue and relationships between pupils and teaching staff. The reform aimed to encourage equality of opportunity through differential provision of teaching hours (Klinov, 2009), teaching methods and rates of learning adapted to the individual competence and needs of the pupils. In this way, the "TBWY" reform will impact the opportunity differently for different groups of children (Weissblei, 2006). In addition the impact of the program on motivation will be examined. Motivation has long been recognized as a driver and precursor of learning and leads to success in school (Wentzel, 2012).

My conceptualization of the social–emotional conditions for learning expands on other work that identifies some of the ecological factors that contribute to learning (Melaville, Berg & Blank, 2006), including four social and emotional conditions for learning: safety, challenge, support, and social–emotional learning. Although these conditions are conceptually distinct, they are interactive and at least somewhat interdependent.

1.2 The status of the matriculation certificate in Israel

Understanding the intricacies of high school diploma awards is essential to our appreciation of the difficulties inherent in the structure and quality of certificate awards. The structure of the matriculation examinations is important and relevant to the current research, since the research examines the advantages of the "TBWY" program according to the pupils' attainments in the matriculation examinations before and after the program is put into operation within the current examination framework.

"Eligibility for a matriculation certificate is an insufficient manifestation for examining equality between groups. The quality of the certificate, the number of units of study and the grades on the matriculation exam determine the value of the certificate when being considered for acceptance by a university" (Weissblei, 2006).

The matriculation examination (Appendix 17) occupies a central place in the Israeli education system. The certificate is perceived as the main indicator of future educational-scholastic success and as a symbolic rite of adolescence (Inbar, 2005). The State of Israel grants matriculation certificates to every high school graduate who meets the Department

of Education's scholastic requirements. The certificate is used for classifying candidates in the labour market and for granting eligibility for studies in the institutions of higher education (Olssen & Peters, 2005).

In recent years, the matriculation certificate has been the subject of increasing criticism as to its quality, as well as its accessibility. In 2003, 46.8% of all high school graduates in Israel attained a matriculation certificate. This trend has shown a "creeping" increase. In the 1980's, 20% attained a certificate, in the 1990's, 30%, and in the year 2000, 40%. Concurrent to this increase in the rates of eligibility there was an increase in the rate of holders of certificates who did not meet the threshold requirements of the institutions of higher education. In 2000, 7.2% of all certificate holders had a certificate that did not meet the threshold requirements, in 2001 – 15.4%, in 2002 – 14.9%, and in 2003 – 13.8% (Svirsky & Atkin, 2004).

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1.3 The birth process of the "TBWY" reform program

The "TBWY" reform program was developed in 2006 by the author of the research.

The program was carried out in a public state school whose entire student population is supplied by two feeder middle schools. The school is heterogeneous in terms of students' achievements and socio-economic status and recruits students from the west side of the city (high socio-economic status), as well as students from other areas of the city (average socio-economic status). The school enters all of its students for the matriculation exams.

There are three age cohorts in the school: 10th grade students (age 15-16), 11th grade and 12th grade (age 17-18). Each age cohort has a coordinator, a counsellor and a social coordinator. There are about 200 students in each age cohort. There are 60 teachers at the school, 40 full-time and 20 part-time. The principal in this school serves as an instructor for one of the age cohorts and, in this capacity, is subordinate to the coordinator of that particular age level. All of the teachers had been trained in group leadership and facilitation and were partners in group guidance.

The program was developed and implemented against a background of educational, organizational and pedagogical problems within the school. These problems were caused by the fact that the school was organized in the traditional way of most high schools in Israel: similar instructional teaching methods, large heterogeneous learning groups, uniform distribution of hours (unconnected to the heterogeneous nature of the learning groups). There was also a low sense of capability among the students, in addition to

learning difficulties in heterogeneous groups. It was deemed necessary to enhance students' sense of belonging and self-worth while reducing the gaps in scholastic achievements between groups of students. The school, at that time, was unable to improve its achievements. Allocating additional hours of instruction had not increased achievement, nor increased the number of students eligible for a matriculation certificate. The feeling was that the school had stagnated and that real change was essential.

1.4 Professional rationale

Students from low socio-economic levels in local urban areas often fail to achieve academic success when their educational needs have not been addressed (Central Bureau of Statistics, statistical data for Israel, 2004). In view of their low level of achievement, what is required is a change that will increase the opportunity for effective learning and reduce social and ethnic isolation. This is usually achieved by integration. However, the commonly heard argument by representatives of the establishment against integration reveals a new form of discrimination preventing equal opportunity for development, to a large extent, in target populations (Yona, 2005). The question is whether social and educational integration in schools has improved the learning processes for students of the target population or whether there has been an overall decline in students' achievements as a result of the integration. The approach of the reform program, "TBWY", reflects a multi-directional pedagogic thinking model. The program seeks to test a model which deals with equality of opportunities in education, the impact of teachers and teaching styles and students' feelings.

From this stance, educational approaches can flourish, with learning mediation and encouragement of enhanced achievement for all, as a way of both guaranteeing improved achievement among students with low levels and encouraging enhanced achievement and maximum development for all the learners who wish to improve (Brady, 2008).

Equality of opportunity opens the potential of increasing the range of educational possibilities from which the students can choose means of instruction, in order to provide a fair solution for all students. Such a view on education and instruction raises a need for renewed investigation of the nature of instruction, its scope and its training. It implies that the professional profile of the teacher must be dynamic. From the teacher's perspective a great deal of creativity is required in solving problems, controlling the repertoire of instruction, maintaining standards in all fields of knowledge, learning by hands-on experience, and performing tasks professionally. This means support in teaching as a

profession and establishing a close relationship between wide and intensive academic knowledge and the development of assessment abilities, as well as a variety of instructional strategies.

In order to improve the quality of the learning outcomes produced by the school where I served as a principal, I decided to lead my staff, students and the parent community into the "TBWY" school reform program, which addressed both structure and pedagogy. The program consisted of "guided group" (Yalom & Leszcz, 2005) and homogeneous learning groups based on academic capabilities (Barber & Mourshed, 2007). Each "guided group" was assigned a suitable instructor or teacher, who served as the group's facilitator. The groups met periodically to discuss their problems and progress within their learning group. It has been claimed by Levin and Wadmany (2006) that listening to the voices of adolescents, together with teachers and administrators helps researchers examine teacher support for motivation. The homogeneous learning groups were offered differential instruction strategies and resources were allocated between groups and used to adapt learning to the needs of the pupils (Weissblei, 2006). Data on student achievement during the previous school year and examination results from the beginning of the current school year were used to assign students to the homogenous learning groups. The data were also used to make informed decisions regarding allocation of resources to the learning groups and to devise specific instruction strategies. The "TBWY" program was designed to apply a holistic approach to educational design, rather than the piecemeal approach which had been used in Israel in the past.

1.5 Objective and scope

"TBWY" is a structural and pedagogic reform program, based on interfaces between three philosophical and psychological theories adjusted at a practical level. The program was initiated in high schools in the centre of Israel, with the purpose of addressing the diversity of student population groups, and is premised on the importance and application of equal educational opportunity for all students (Harkaby & Mendel-Levy, 2014).

The objective of this study is to examine the reasons for the disparity of attainment between students from different social and cultural backgrounds, and to describe the actions taken through the application of "TBWY" principles to narrow this disparity.

This study will examine the consequences of operating the "TBWY" program on the following questions:

Is there a change in the perception of responsibility and capability of teachers regarding student achievement following the reform?

Do teachers recognise that variation of learning methods relating to individual learners might help each student to advance in heterogeneous classes (Brady. 2008)?

Do students feel a sense of capability or responsibility for their achievements?

Is there a reduction in the gap between different student groups according to their socio-economic levels?

What was the impact of the "TBWY" on the number of students eligible for the matriculation certificate?

2. Literature Review

2.1 Literature introduction

The present literature review aims to present a practical model alongside established empirical studies, which will examine the connections between various factors related to the social, emotional and educational functioning in schools, including students' perceptions of themselves (Eccles, 2004).

The rationale of the literature review appraises philosophical and psychological theories based on "equality of opportunities in education". In the review, I will attempt to find connections and links between philosophical and psychological theories, which complement one another. Also, I will present relevant features of learning and teaching divided into general categories (Jonassen & Grabowski, 2012), including general mental and cognitive abilities, reflectivity, cognitive style and ways in which individuals perceive, organize and store information and solve problems in the learning situation (Price, 2004). The literature review will emphasize teaching methods and styles, learning processes, ways of learning mediation, and teaching strategies and methods adapted to various student groups (Weis, 2010). The literature review will examine diverse teaching methods, highlighting the differences between students and checking the implications of ways of teaching and learning.

I will also clarify how humanistic education (Life Education, 2011) can be translated to practice and which additional philosophical and psychological theories will contain interconnected ideas unable to exist in isolation. The effects of teaching processes in homogeneous and heterogeneous learning groups, the distribution of learning groups and their characteristics (Chorzempa & Graham, 2006), the effects of types of student groups

on the social and educational group (Chorzempa & Graham, 2006) and the emotions experienced in the learning process and their effect on all involved in learning achievement will be presented.

The literature review will also describe the teacher's central role in creating the classroom environment (Hopson & Lawson, 2011; Zullig, Koopman, Patton & Ubbes, 2010). Also described is the climate in the learning group (class) and its effect on the climate of the school and vice versa (Adelman & Taylor, 2005) together with the effect of student-student and student- teacher interaction on the educational and social environment within the learning groups and within the school.

The review will examine the effect of the assumption of responsibility by the teachers for the success or failure of the students (Croninger, King Rice, Rathbun & Nishio, 2007; Rivkin, Hanushek & Kain, 2005).

The contribution of the literature review reveals a unique theory of the connection between them which ,creates a synergy, enabling, creative and innovative thinking, which, in turn, creates a challenge as to how to construct a pedagogical and organizational, innovative model containing these complementary ideas into practice.

2.1.1 History and goals of structural reforms of education in Israel

In September 1949, the Israeli Knesset enacted the Compulsory Education Law, which provided for compulsory education for all children between the ages of 5 and 14. The subject of equality as defined in section 2(8) of the State Education Law of 1953 determines that the goals of education are "to give equal opportunities to every child, to enable children to develop in their own way and to create an atmosphere that encourages and supports 'the other' (Weissblei, 2006).

In complete contradiction to the theoretical legal discourse, "equality of opportunity in education", various studies, position papers and reports of professional and public committees indicated clearly long-standing discrimination in the allocation of resources between Arab education compared with Jewish education – from kindergarten to higher education (Jabrin & Agbaria, 2010; Abu, 2007; Golan-Agnon, 2004; Arar & Chag, 2007). From the social point of view, the right to influence the educational content is linked to the collective right to preserve a collective identity. In order to preserve the unique characteristics of their cultural identity, unique groups in a society need a certain ability to influence the content that they teach their children (Rabin, 2004: Raday, 2003).

Between 1963 and 1965, an attempt was made to reduce the cultural and scholastic gaps through "integration". In order to do this, six-year primary schools (1st - 6th grade), middle (10th -12th grade) schools and high schools (10th - 12th grades) were created. The Compulsory Education Law was broadened such that it applied to the 9th grade as well. This reform was not implemented fully. In 1971, in light of the non-implementation of the "integration" reform, the scholastic gaps continued to grow (Vargan & Fiedelman, 2009). The failure to implement complete integration occurred due to disappointment with the process and the widespread public feeling that integration was "finished" or "successful" and mainly due to powerful social processes, sometimes called "transition from a modern to a post-modern society". These processes included democratization (Resnik, 2007), the distancing of central government and increasing suspicion towards authorities, including educational authorities, the return to social communal, local and ethnic structures, as a part of a multicultural society and free market economics. It is clear that the reform had more profound social aims: an attempt to minimize social gaps and reduce alienation between various social ethnic groups by means of the education system, to reduce the gap between socio-economic background and educational attainments (Heller, 2002).

When the integration processes attempted to combine groups of ethnic minorities or other weak groups within the strong, central stream of the middle class, the complete opposite occurred, it was seen as a challenge to the values, culture and achievements of the central stream. The opposition also derives from the fact that integration is a reform of the systematic, centralized educational process and includes different types of education, school organization and programs for the range of groups involved (enrolment policy) (Gibton, 2002).

Another reform (Adler, 2009) that came into being was "autonomy in the education field", in which the new model of the autonomous schools was called "the self-managed school". The intention was to give schools the possibility of using their resources to improve scholastic achievements in the school. This process evolved through 1992 with the help and support of the local authorities.

Subsequently, the "New Horizon" reform (2008) was proposed. The New Horizon reform improved teachers' salaries, changing their work-week and hours and enabling a form of differential distribution of educational resources.

Actually, this involves a salary and terms of employment contract for the teachers, which does not include pedagogic or systematic changes. Most of the agreement was supposed

to be implemented gradually by 2013. There will be a shortening of the work-week for teachers to five days or 36 hours, and in exchange, new teachers would receive a significant increase in salary (Vargan, 2007).

This reform covered mainly primary schools and some middle schools. However, the reform was only partially implemented in 2009 and it did not include all schools because of budget considerations and political differences between the teachers' unions and the Department of Education.

At the beginning of the nineties, two proposals for structural reform of the education system were suggested to Yitzhak Navon, the then-Education Minister, one by David Chen, (2005) the Minister's scientific advisor and the other by Shimshon Shoshani, the Ministry's Director-General. Both proposals emanated from the dissatisfaction of parents and pupils with the education system, a decline in the prestige of teachers and the teaching profession, lack of suitability of the curriculum to the challenges of the time and cutbacks in education budgets (Dror, 2006).

According to these proposals, the education system would be divided into four sections: pre-primary –ages 4–8; primary – ages 8-12; middle school – ages 12-16, at the end of which matriculation examinations would be held; and high school - ages 16-19. At the high school level, a second opportunity would be given to students who had not completed all or some of the matriculation examinations. The proposed structure was intended to be uniform and lead to a cancellation of all of the parallel systems, and thus, advance equality of opportunity within the framework of the state system.

A further reform, the "Shoshani Reform", presented in 2009, was based on four principles: excellence, school autonomy, ideological and pedagogical pluralism, and opening up of registration areas.

The "scholastic autonomy" approach in the context of which the Education Ministry transferred to the schools responsibility for areas which had, until then, been under their responsibility, notably, management of the school budget, taken from the world of business, and particularly the conversion of each school into a "profit centre" which is self –supporting. However, the autonomy is significant only as long as it is possible to realize it. In contrast to the world of business, where the basic assumption is that each autonomous unit has a chance of producing profit, the world of Israeli education is full of schools and local authorities, which have no such chance. If this were not enough, then in the context of the process of "scholastic autonomy", schools are allowed to raise funds

above and beyond the budget that they receive from the Education Ministry, from sources which are not available to all schools: donations, parental contributions, local authority groups or a school structure as a business operation – such as the rental of classrooms, something which is possible in major cities, where there is broad business activity, and as a result, a lively demand for rooms and buildings, but less possible in towns which are small or a long distance from the centre of the country, where is no similar demand. To all of these, one needs to add that under the management administrative autonomy concept, the head teacher reluctantly becomes a business manager concerned with relationships with government bodies, with suppliers and donors, with communication, etc. In other words, the "administrative autonomy" diverts the work of head-teachers from pedagogy to administrative work.

The use of registration areas (State Comptroller, 2009) apparently creates a market situation and "free" choice of schools for parents. Actually, because the schools in the various neighbourhoods are unequal, competition is limited. And thus, when several students compete for a limited number of places in those few competing schools which are considered to be good, the result is that these schools choose (and not the opposite) the best students and leave the remaining students to the other schools. In other words, the educational market created as a result of opening the registration regions is a market which is controlled by the strong. In such a manner, the opening of the registration regions regulates, and even increases inequality in the system (Ariav & Drora, 2008).

2.2 Polarity (difference) in scholastic achievements in Israeli schools

In spite of an overall general increase in educational achievements in all ages, races and gender groups in the general population in Israel in recent years (Dovrat, 2005), there is still inequality and there are social and economic differences between the various groups in the population. An educational achievement gap has emerged and widened between people who come from high and low socio-economic backgrounds, between wealthy and poor communities, between Jews and Arabs, and between people who have been in the country for many years and new immigrants (Adler & Blass, 2003; Dovrat, 2005; Gazit, 2006; Dagan-Buzaglo, 2007).

A significant difference ($p < 0.005$) was found between the scholastic achievements of students who come from different socio-economic backgrounds in data that was collected from the Israeli education system (Svirsky & Atkin, 2004). The data was recorded in

publications of the Department of Education and the National Authority for Measuring and Evaluating Education. Among the data, the existence of considerable differences between scholastic achievements in various fields of knowledge can be discerned. An analysis of the data pertaining to the matriculation exams, based on socio-economic cluster and place of residence, showed that the achievements of students from lower socio-economic levels were significantly lower than those of students from higher socio-economic levels (Zussman & Tsur, 2008). This was expressed in the proportion of students who took the examinations, the proportion of students eligible for matriculation and the proportion of students who met the threshold requirements of the universities. Comparative international examinations (Schayek & Ben Asulin, 2003), in which students from the education system in Israel participate, also clearly indicate the wide differences between groups and sectors in society and between students from different socio-economic backgrounds. The examinations also found that the difference in the students' achievements in Israel is one of the largest, if not the largest, differences among the participating countries. These examinations found a large difference between the schools and an even greater difference within the schools. In light of this ongoing situation, one of the main objectives declared by the education system in Israel is to reduce the scholastic differences and improve the achievements of students who come from disadvantaged populations, including students from low socio-economic backgrounds. To illustrate this, the second of the Department of Education's five goals recorded in the (Department of Education's report, 2010), was to reduce the differences in scholastic achievements by prioritizing the development of students from low socio-economic groups advancing low socio-economic. The subject of reducing the scholastic differences also occupies a central place in the comprehensive program presented to the Education, Culture and Sport Committee of the Knesset by the Minister of Education, Gideon Sa'ar, in August 2009 (Education, Culture & Sport, 2009). The subject of socio-economic differences in society in general, and scholastic achievements in the education system in particular, was widely discussed in the Parliamentary Investigation Committee on the Matter of Social Differences in Israel which operated during 2001 and 2002 under the direction of former Knesset member Ran Cohen. The report submitted to the Chairman of the Knesset stated that; "The committee is of the opinion that a reduction in the differences in education is immeasurably important, in particular as a lever for reducing the socio-economic differences in Israel in the long run" (Education, Culture & Sport, 2009). The committee was not satisfied with a mere declaration of the importance of education; it also stated that "the education system in Israel has not managed to

overcome the background differences between the students and in its present structure it aids the perpetuation, deepening and inculcation of the differences for future generations" (Education, Culture & Sport, 2009) . Moreover, the committee emphasized that *"education is not the only lever and it cannot exist in an empty space but rather together and simultaneously with changes in the labour market and wages and with larger changes such as capital market taxation"* (Education, Culture & Sport, 2009). The committee recommended to the 16th Knesset the establishment of a special committee for the consolidation of practical recommendations based on the Parliamentary Investigation Committee's findings and recommendations for establishing 'a national program for reducing social differences in Israel.

Alongside the education system's declared objective of a reduction in the differences, there is a lack of clarity about the ability and suitability of the policy to attain that objective (Central Bureau of Statistics, 2009). A variety of findings on the subjects of society and welfare emerge from the report (Central Bureau of Statistics, 2009). In 2001, 33% of all children in Israel were from a low socio-economic level, and by 2007, this had increased to more than 40% (Kaplan & Alpandry, 2003).

In reference to the "MEITSAV" (Growth and efficiency indices for schools in Israel) examinations, the report (Central Bureau of Statistics, 2009) states that a positive connection was found between the socio-economic level of the community of each school and the students' achievements in all of the subjects studied (the strongest connection was found in English). Moreover, when examining the students' achievements according to the variable "socio-economic background" (the mother's years of education, the parents' income and the socio-economic level of the area in which the student resides), it was found that higher student socio-economic status correlated positively with higher achievements. This finding is not unique to Israel, but has been confirmed by recent studies reported by the American Psychological Society (Noddings, 2014).

In relation to the matriculation examinations, it was found that in most cases all of the indices of success in the matriculation examinations – the number of students who took the examinations, the number of students who were eligible for a matriculation certificate and the number of students who met the threshold requirements of the universities – rose proportionately according to the student's position on the socio-economic index. Since the vast majority of students took the matriculation examinations, no connection was found between the socio-economic index of the place of residence and the proportion of students who took the examination. However, a positive connection was found between

the socio-economic level of the place of residence and the proportion of students eligible for a matriculation certificate and those who met the threshold requirements of the universities (Central Bureau of Statistics, 2009).

In 2008, the International Institute for Educational Planning of the United Nations Educational, Scientific and Cultural Organization (UNESCO) published a special report on the subject of poverty and education (Van der Berg, 2008). The report discussed the mutual effects of education and poverty. In the introduction to the report, it was emphasized that poverty means not only a lack of monetary resources, but also a lack of ability to function efficiently in society. Later in the report, it is argued that absolute poverty, that is a lack of sufficient monetary resources, usually harms children's possibility of learning in developing countries, due to, among other things, an inadequate diet, a lack of proper health care, a home environment that does not support learning – for example a lack of textbooks, a lack of conditions suitable for preparing homework and the parents' low level of education. However, relative poverty also negatively affects children's learning in developed countries, principally due to social exclusion which leads to low motivation of poor children to persevere in school and to invest in acquiring a good education, resulting in a reduction in their opportunities to receive future returns on the education they have acquired (Halfon, 2007). In addition to this, the report states that the students' home background is the single variable that most affects scholastic achievements and that poverty is only one of the components of this variable. The report states that, until now, researchers have been unable to consolidate a general model of educational intervention that can deal with the ramifications of the; home background variable which limits the possibility of learning. Nevertheless, there is substantial evidence (Halfon, 2007) that indicates that education can reduce the negative influence of poverty through three principal mechanisms: (1) the acquisition of education has a proven return, (2) giving better education to young people encourages economic growth and broadens economic opportunities, and (3) the acquisition of education has broad positive social ramifications. Although the report notes the importance of a public policy for allocating resources to schools to contend with a difficult home background, particularly with poverty, it also emphasizes that the school's ability to overcome the ramifications of poverty by itself is limited.

Despite the fact that much experience has been accumulated in the world in a wide range of educational and social interventions such as remedial teaching, social work in the community, educating parents and so forth, it is difficult to arrive at conclusions that can

be uniformly implemented in different places and in many of the unique circumstances under which poor children learn. A comprehensive study (Raffo, Dyson, Gunter, Hall, Jones, & Kalambouka, 2007) of the connection between poverty and education, carried out at Manchester University, showed that it is impossible to identify any single factor to explain the lower achievements of poor children.

In an analysis of poverty's place in school reforms (Nichols, Glass & Berliner, 2005), it was evident that severe poverty places limits on what can be attained through school reforms. (This article, which analyses the situation in the United States, relates principally to reforms that were initiated as part of the comprehensive federal program called 'No Child Left Behind'). Therefore, a social-economic policy that aspires to bring about an improvement in scholastic achievement must focus on reducing poverty in its broad sense including the students' environment, among families and young people. This does not mean that improvement in the institutions of education can be neglected but, rather, this improvement must be integrated into additional processes, some of which are directly connected to the education systems and some of which are not directly connected to them, but which affect them in a far-reaching way. For example, an improvement in a certain local school has to be implemented in parallel with provision of quality education to pre-schoolers (so that the pupils will be in a stronger position when they start school). In addition, suitable and attainable housing must be provided, which will have a positive effect on the student's environment; and the level of parental income has to be increased (Nichols, Glass & Berliner, 2005). Studies in the United States have found that changes of this kind brought about an improvement in scholastic achievements at a higher rate than any educational reform (Nichols, Glass & Berliner, 2005).

In recent years, an understanding of the centrality of the characteristics of the students' background is evident in the publications of researchers and of public bodies in Israel. For example, in the Bank of Israel's Annual Report (Bank of Israel, The Poverty Report, 2008), the following was written: *"Although it appears that the characteristics of the students' background such as the parents' education have a larger influence on their success in school than allocating resources to education, these characteristics are usually not included in the immediate circle of the public policy's influence, at least, not in the short run"* (Nichols, Glass & Berliner, 2005).

2.3 Implemented "TBWY" reform with staff

There is a perception (Oplatka, 2010) that teachers resist change due to their conservative tendencies and their reluctance to abandon known teaching patterns, and that the resistance of the teachers derives from their exclusion from educational initiatives and the planning of the change process within the school.

The process of change, in my school, was a complex process that required me to fight constantly to win over the hearts and minds of the teachers, in order to create a common change process and hence reduce the objections of the faculty staff. Phase one included addressing the faculty staff and presenting the vision, goals and principles of the "TBWY" reform plan. I explained my position to the faculty staff in accordance with the school's goals and the vision of "equal educational opportunity". To emphasize my point, I presented data about the school, including student satisfaction with teaching methods, school spirit, satisfaction level of teachers in the classrooms, the sense of responsibility of teachers towards students regarding failure rates and qualification rates for matriculation certificates. Drafting the teachers into partnership in the change process, on a practical level was done in stages: in the first stage, I lobbied for the program among the faculty staff by presentation of the data regarding the school. In the second stage, I held philosophical discussions with teachers about the need for closing the educational achievement gaps between students while acknowledging the differences between student groups. We debated the topic of equal educational opportunity and the understanding of the meaning of differences between students. The discussion was a preliminary stage towards winning their hearts and minds prior to a democratic vote of the entire faculty staff on entering the reform process with all its consequences. The discussion stage took the form of a round table debate, with all the teachers taking part in the process. The benefit of the teachers' involvement in the process of change and leadership came from their practical wisdom, sense of duty and lifetime experience. This demonstrated that a meaningful process of professional evolution of teachers in a suitable time-frame and place, led by peers, ensures successful integration of practical knowledge with academic knowledge (Lieberman & Freidrich, 2010). At the conclusion of several rounds of debates, which addressed the questions and concerns of the teaching faculty, save for a single absentee vote, the complete, but gradual, implementation of the reform over a period of three years was adopted.

The implementation of the "TBWY" reform program was a multi-dimensional complex process – starting with defining the need for change to the faculty, the choice of partners for the entire process, brainstorming the formation of the principle of equal opportunities

in education to a sustainable, deep-rooted change in the school culture. It was clear to me that in order to advance the process of the reform there was a need for the growth of the administrative and school culture in order for the teachers to undergo a personal process of constant change and growth in their teaching together with the evolution of the art of teaching. In this way teachers could lead a meaningful learning process while understanding the differences between students (Ben-Peretz & Shulman, 2014). My basic hypothesis was that the entire faculty staff must be part of the change process. This form of change would have been difficult or even impossible to execute, if I had not considered the staff as those who can support and correct each other, leading to mutual cooperation, where the attributes of one can complement the other and vice versa. The strategical thinking of the process of the implementation of the reform was of significance, therefore, in the presentations given to the faculty, which introduced my motive for change as well as the strategies needed to lead to meaningful change within the school. Through all the phases of the process I would check my strategies in cooperation with the faculty to implement the "TBWY" reform, as well as its effectiveness in achieving a successful process of change. It was clear that the strategies driving the changes were those that would determine whether the change would produce effective results over time. The changes in the organizational and administrative structure supported a substantial pedagogical change. This "substantial pedagogical change", as expressed in the centre of this study, is a wider perception of a pedagogical line which nurtures teaching and learning processes, which, in turn, is based on a deep and complex understanding of knowledge (Egan, 2009), from the role of the facilitator to changing teaching methods allowing for different learning groups with a new attitude towards methods, pedagogy and didactics. Pedagogy is manifested through student-oriented methods and teaching processes while creating a continual change to fit the nature of the learning group and allowing for the diversity of population groups among students (Fullan, 2011). My goal was to create a complete and long lasting pedagogic change on the assumption that change, is dependent upon the teachers. To create change through teachers, within a system, I needed to identify and single out leadership among the faculty members, those who would accept the burden of leading the pedagogic change and would have the professional ability to initiate an improvement of teaching qualities in the school. The activity of the teachers was accompanied by an outside independent professional organization, which helped ground the status of the teachers as the creators of new pedagogic knowledge and address the pedagogic knowledge acquired by the

teachers, in order to make it useful and accessible to the entire teaching community (Ben-Peretz & Shulman, 2014).

The leadership by the teachers assisted me in implementing the principles of democracy, partnership and advancement of change to the structural culture, which helped build logic into the learning process of the students (Cavanagh, 2008). This leadership was derived from an enabling organizational culture.

The processes I created, starting with the recruitment of the teachers to the process of change, through including the teachers in the implementation of the "TBWY" reform, were the basis of an advanced dialogue on the role of a teacher in the 21st century.

The introduction of the "TBWY" reform was an opportunity to satisfy the curious and critical mind, by learning through searching and questioning, by identifying and solving problems, by activities planned through uncertainty, innovation and creativity through learning analysis, learning from success and failures, utilizing a variety of techniques and methods for teaching, learning from knowledge and information sources, managing projects, evaluation and review methods, cooperation at all levels, team work, professional output, responsibility, measuring and evaluating, and professional accountability (King, Williams & Warren, 2011). These skills were aimed at full implementation of a different pedagogy which is derived from the understanding that schools are ill-equipped to cope with the educational, civil, social and economic challenges facing them in the early stages of the 21st century, without a transfer to teaching and learning processes oriented at understanding and identifying the identity and values of the student (Carroll, 2010). This realization is joined with the hypothesis that pedagogy demands a substantial change in the normal teaching process practiced at schools and that this change is extremely difficult to achieve (Carmon, 2010).

The "TBWY" reform plan is based on all the above understandings and assumptions, as well as recognition of the right to equal opportunity in education, while recognizing the differences between students (Fullan, 2011). After implementing the change and recruiting my partners for the process I decided to conduct a pilot with one class, together with teachers who had expressed their interest in participating in the process of change and who could enlist the entire faculty staff to the program. I recruited an advisor from the "Adler" institution, an independent institution which specializes in group mentoring. I recruited outside experts on various teaching methods, techniques and teaching styles. Every Sunday, from 18:00 to 22:00, the teachers participated in seminars over a period of

three years. During the training process, the teachers were exposed to different instruction methods and styles.

Training courses were designed in all professional areas, with various teaching methods and teaching styles to turn the teachers into experts in pedagogy who could achieve pedagogical targets according to the goals and purposes of the "TBWY" model. The teachers also specialized in developing diverse teaching methods, adapted to the student population, according to the homogeneous learning groups which had been built. They worked in professional teams, observing one another's lessons, providing observational feedback where the entire team could observe the recorded lessons of any teacher (there was a camera in every lesson, which filmed the teacher teaching). Thus, the teachers observed and learned from one another, without limitations of time. Observation of colleagues was part of the organizational culture of the school, such that the teachers had the responsibility of forming a partnership with all the other teachers, creating accountability for the success of the students. The teachers shared the learning experience every Sunday for three years, specializing in areas of pedagogy in learning groups and as group moderators.

I designed a measuring and evaluating tool at the school and all stages of the reform implementation were evaluated. At the end of the process a summary evaluation was performed consisting of feedback questionnaires about the process completed by the faculty and the students. The real life implementation of the plan began with the senior staff class coordinators, administrative staff and other professional coordinators, homeroom teachers and faculty members. In this way, more and more teachers began to appreciate the change process and began collaboration with me in order to facilitate the process. I delegated responsibilities to administrative personnel thereby freeing myself to deal with other issues involving the promotion of the program. While implementing the "TBWY" reform, the teachers began developing teaching methods and techniques suited to the student population who were divided into different study groups. They constructed creative syllabi suitable to the features of the study group while initiating and incorporating new ideas into their work to advance the school (Inbar, 2009). The teachers developed social and moral programs that were in harmony with the "TBWY" program based on equal opportunity in education. They were constantly expected to plan more assignments within and outside the learning group and develop a range of meaningful and social activities.

The democratic mood of the school, the formation of a new administrative culture, based on autonomous thinking, sharing, human love, education, critical thinking, evaluation and

values created a common base for teacher cooperation and, ultimately, total commitment by all teachers to the reform plan.

2.4 Differential instruction and scholastic achievements

Teaching approaches represent philosophical paradigms, which include consideration of optimal aspects guiding teacher behaviour in the classroom. These include the positivist, the constructivist, the social-constructivist, the pupil-focused, and the teacher-focused or content-focused approach (Meyer & Eley, 2006).

Some researchers have expanded the limits of the term, epistemological perceptions, and include within it perceptions that contain teaching-learning processes (Yoad & Levin, 2007). There is agreement according to which epistemological perceptions influence the consideration of the teaching approach, in motivating learning and teaching methods (Louca, Elby, A., Hammer., D. & Kagey, 2004). Diverse instruction methods and curricula are important for the successful integration of different populations (in terms of cultural and socio-economic differences) (Cifuentes & Shih, 2001).

The success of all students must be considered, and action has to be taken to establish conditions where caring can flourish (Noddings, 2007). In addition to the difference between strong and weak populations, the population of students with learning disabilities is especially salient. Their cognitive neurological mechanisms fail to function, which makes it difficult for them to express their scholastic abilities (Margalit, 2000). Differential instruction has been proposed as an adaptive pedagogical strategy enabling the teacher to implement various teaching/learning paradigms and strategies of practical instruction to suit a variety of learners (Ben-David, 2009).

2.5 Models of instruction

Today, many educators work with progressive approaches to learning, including instruction methods known as "student-focused" methods: group work, inquiry-based learning and individual/personal learning. "Teacher-focused" instruction, where the student is passive, is reflected in "the banking method" (Applebee, Langer, Nystrand & Gamoran, 2003) where students mechanically memorize the material. Education becomes an act of depositing, in which the student is a temporary deposit site and the teacher is the mechanical fork-lift bringing materials to the student. This method transforms the

students into "receiving vessels", which the teacher must fill with content. The teacher, and not the students, is the subject of the learning process. How and where to implement the student-focused method of instruction must be examined, as well as the students' preparedness for different teaching methods, as opposed to those methods to which they have been accustomed (Hativa, 2003). If the method is carried out effectively, it will contribute more to the students than merely acquisition of information. This method (Applebee *et al.* 2003) may arouse increased interest among the students, because it is able to focus the lesson on important subjects. The stronger the teacher's sense of capability, the more willing he/she will be to experiment with innovative teaching methods (Egyed & Short, 2006). There is a special connection between the complexity of the teacher's work and the teacher's ability to control or manage his/her feelings.

A sense of professional capability can create "integrative ability", encouraging teachers to construct new learning strategies and teaching methods (Egyed & Short, 2006) thus increasing their readiness to cope with difficult teaching situations. The general picture bears witness to the scholastic and social advantages of instruction by coordinated methods as opposed to frontal instruction.

To better understand, the concept of differential instruction, the following criteria are helpful:

- a. The extent to which the teacher directs the learning process.
- b. The size and composition of the learning group.
- c. The method of instruction chosen by the teacher.

The teaching strategies are:

- Instructional teaching– where knowledge is imparted to the student passively.
- Dialogue teaching – where learners are active partners in the construction of knowledge through dialogue.
- Group teaching – where students are taught in groups according to various criteria.
- Differential teaching – where the teacher responds to the individual needs of his/her students.
- Remedial teaching – where the teacher is required to rectify or improve learning.
- Teaching for active learning – where the student is an active participant in the learning process.

- Teaching for understanding – where the aim of the teaching process is comprehension of a topic.

In principle, each of the strategies, can be implemented and integrated in each of the approaches. Despite research, which shows an increase in teachers' epistemological perceptions of pedagogy, limited research has been carried out on the relationship between epistemological perceptions and the practice of teaching (Kang, 2008). Teachers' perceptions of teaching approaches were presented by means of narratives (Hofer, 2001; Schraw & Olafson, 2002). The teachers' narratives include their thoughts on teaching methods, which reflect their personal and professional experience and guide them in their instruction-planning actions (Shkedi, 2003). The narratives of the teachers derive from their life story. Accordingly, several researchers who wish to describe teachers' information and professional life stories have turned to the narrative research approach (Shkedi & Nisan, 2006).

Teachers and their perceptions influence their teaching (McGrath, 2006; Shkedi, 2006, Kang, 2008); for example, direct instructional teaching characterizes a teacher-focused teaching approach, while individual instruction (or teaching adapted to the pupils) will be appropriate for the pupil-focused teaching approach (Hativa, 2003).

Similarly, teaching methods can be integrated into different teaching approaches. Thus, for example, in all teaching approaches, teachers write on the board, read out text or ask questions. However, the difference is in the content of the method implemented. For example, a review of visual text or the presentation of a display can be a part of teaching according to the teacher-content-focused approach, or part of teaching using a pupil-focused social-constructivist approach. In content-focused teaching, the visual text is a source of knowledge, the details of which are conveyed to the pupil by the teachers, while in the social-constructivist approach, the visual text is the means for constructing collective knowledge in the interactive process of interpretation and construction of meaning (Nuthall, 2002, 2004; Brophy, 2006).

Teaching-learning activities in the classroom are many and varied. Some are intended for active participation of pupils in cognitive and in real physical actions and others are integrated as part of instructional delivery of knowledge and "passive" activities, such as listening and copying. In cognitive activities, the intention is to divulge meaning, to evaluate, to interpret, to compare, to implement, to listen to others and to articulate the insights created (Zohar, 2006).

2.5.1 Approaches were considered for the model "TBWY"

The policies and strategies for reform in education for training and mobility of teams to improve teaching have had many names and forms in the last 33 years (Spillane, Halverson & Diamond, 2001). Recently, within a short time, policies on development of teacher leadership changed focus in three stages (Little, 2000). At first, teachers' leadership is perceived as part of an initiative to create both development and careers for teachers, to reward outstanding teachers, to develop commitment to the profession (and to prevent drop out) as well as utilization of the expertise of these teachers in supporting new teachers (Silva, Gimbert & Nolan, 2000). "Teacher leadership" is based on the initiative and innovation of teachers regarding goals and content, determined by the teachers themselves, mainly by the team leader, although the impact of the team leader was on the team only and not on the whole school. The "second stage" in the development of "teacher leadership" was connected to policy and investment in "whole school reform" (end-1893, start 1893–USA). This policy was distinct from its predecessor in two important ways:

- a. Transition from a focus on the classroom to the whole school, for improvement.
- b. Transition from leadership, meaning autonomous personal initiative, to leadership directed by effects external to the primary starting teacher.

In other words, they involve coordination within the school, and, sometimes, compliance with agendas from various previous reforms. A central dimension of this reform was the creation of new professional roles for teachers involved in the management of the school, including collaborative decision-making at school level and the development of programs. At this stage, despite policy changes, which were mostly empirical, no new roles were created and the structure and working norms in schools remained similar to those that preceded them, i.e. despite the policy of norms being based on local cooperation and voluntarism and innovation of independent teachers they have, in fact, remained unchanged.

The third stage in the change in "teacher leadership" provides context for the definition of teachers, master leaders in this period (from 83 years ago until today) and is defined as the period of policy standardisation or accountability (high stakes). Teacher leadership in this age is perceived as leadership in accountability within the public service. The two trends of whole school observation and of leadership in the "service" of agendas were

determined externally for the teacher and for the school. Leadership is focused on the service of teaching and learning improvement. If, in the past, leading teachers developed initiatives and also gave their opinion on educational purposes, today the focus is on teaching and expertise in the area of teaching and the improvement of achievements of the whole school.

In relation to formal and non-formal leadership, the concept of the prevailing leadership is seeing the role of the teacher, in depth, beyond the formal role, with an emphasis on their ability and willingness to work in concert with other teachers and in collective responsibility, vis-à-vis the whole school (York-Barr & Duke, 2004). Presentation of the policy development approach concerning teacher leadership and the perception of the implementation of the role derived from that policy is important in understanding the context of the idea of teacher leadership and its variants. First, it is important to understand the term "leadership in service" of teaching and learning. Second, the leading teacher's role is an expanded function with commitment towards the school as a whole, based on commitment to quality teaching, and learning. However, teacher leadership is not a formal function or responsibility or series of tasks, it is being active in the world, within the framework of which teachers are empowered to lead development, which directly influences the quality of teaching and learning (Muijs & Harris, 2003). Murphy, in his book "Connecting Teacher Leadership and School Improvement" (Murphy, 2005) points to three dimensions characterizing teacher leadership:

- The teaching dimension – ensuring improvement in teaching accomplishments within the school.
- Relationships – the creation of positive relationships within teams of teachers.
- Facilitation and development – the creation of conditions for learning for others.

From a review of the literature (Muijs & Harris, 2003) in the area of teacher leadership, four dimensions which unite the role of the teacher-leader are proposed:

1. The responsibility for translating theoretical principles into action in the improvement within the school of practices within the classroom for each class. Within this framework, teachers create strong connections in the school maximizing opportunities for meaningful professional development of teachers.
2. The responsibility for creating a partnership of all the teachers in school improvement, in particular the "ownership" experience of teachers in the

process. Teachers are helping teachers to crystallize programs and work in collaboration, a source of expertise in teaching and knowledge, creating close personal relationships with teachers through which shared learning is effected. Katzenmeyer & Moller (2001) propose an additional division relating to the channels of influence of the teacher-leader.

3. Leading students and/or teachers – mentor, coach, expert curricular, leading learning groups. Maintaining progress towards targets via functions such as coordination, actual research in school, team membership.
4. Membership of teams for school improvement, promoting cooperation within higher education institutions or businesses, member of committees.

Leader-teachers take responsibility for creating a partnership of all the teachers in school improvement; in particular the "ownership" experience of teachers in the process. They are helping teachers to crystallize programs and work in collaboration, a source of expertise in teaching and knowledge, creating close; personal relationships with teachers through which shared learning is effected. Katzenmeyer and Moller (2001) propose an additional division relating to the channels of influence of the teacher-leader; leading students and/or teachers – mentor, coach, expert curricular, leading learning groups; maintaining progress towards targets via functions such as coordination, actual research in school, team membership; member of teams for school improvement, promoting cooperation within higher education institutions or businesses, member of committees.

As argued above, teacher leadership is perceived as leadership in the development of scholastic ability in the area of teaching, and hence, the teacher leaders' purpose is to promote teaching and learning in the whole school (as against improvement in the class, with a colleague or in teaching and achievements in specific areas of knowledge) to which they belong. Specifically, the purpose of teachers' leadership and of teacher-leaders is to influence what is done in their colleagues' classrooms. The difference in the perceptions of the theories for advancing scholastic ability in leaders is fundamentally erroneous. Every teacher, given the correct environment, circumstances and organizational conditions, can advance leadership within the school community (Lambert, 2003). Fitzgerald and Gunter (2008) claim that leadership of teachers includes the opportunity area of teaching. Pursuant to this, every teacher is a leader, that is, according to the humanistic rhetoric, whose foundation is the key driver for teachers to

take work upon themselves. Accordingly, it is independent of the theory of scholastic improvement and education policy.

The literature on the subject of expert teachers is largely derived from that of teacher leadership. In this context, three terms emerge - Master Teachers, Expert Teachers and Accomplished Teachers, interchangeably. This literature review examines outstanding teachers and their characteristics, from the point of view of; abilities, knowledge and what these teachers do in order to improve their students' learning and achievements in the classroom. However, the definition of "accomplished teachers", as it appears in the U. S. National Board for Professional Teaching Standards, also relates to partnership in learning communities, i.e., it is beyond the internal classroom space, although it is important to note that this participation is in the service of improving learning and achievements of the teachers' students and is not directed to the effects on their colleagues. The definition of Highly Accomplished Teachers as it appears in the Australian Professional Standards for Teachers goes beyond expertise to the contribution of teachers with high expertise in creating learning opportunities as well as professional development. These areas mostly overlap in their central claims concerning pedagogical expertise and expert teachers. According to Berliner (2004a), expert teachers:

- Develop automaticity and routine of those actions carried out repeatedly.
- Are more sensitive to the requirements of the tasks and to their social context when solving pedagogical problems.
- Identify and utilize educational opportunities in the classroom and are flexible in their teaching.
- Have the ability to identify quickly and accurately structures/patterns which they experience and have the ability to give them significant meaning.
- Solve problems more slowly, but bring to the solution personal resources and rich information
- Grasp the complexity of a situation in teaching and learning and are able to simplify it (Berliner, 2004b).
- Are able to identify main ideas, and present them in various and inter-connected ways. There is a qualitative difference between their presentation and that of other teachers. (Findell, 2009).
- Have the ability to listen to students and are expert in asking scaffolding questions in the
process of structuring meaning with students and in the development of independent

(Findell, 2009).

From these descriptions, one can distinguish that the "Teacher Leadership" approach, which is presented in all its manifestations, is contained within the philosophical and psychological approaches which comprise the "TBWY" reform program. This includes teachers who are expert in their field, creative in their teaching methods and ways of instruction with pedagogical and professional autonomy, teachers who are attentive to students and maintain a dialog within the humanistic approach with responsibility and accountability for their students' success.

2.6 The Connections between three philosophical and psychological theories on a practical level

2.6.1 The eclectic model of the "TBWY"

In this section, I will present the connections and interfaces of key values "borrowed" from various philosophical and psychological theories. This action, the "borrowing" of key values, enabled me to prepare the process of constructing a pedagogical, emotional and social model at the practical level in a three-form high school. Using this eclectic model, we would attempt to provide solutions to complex pedagogical issues, social and emotional questions in the school life of a wide range of teachers and pupils within its framework. The eclectic model harmonises pedagogical, social and emotional tools in order to utilize the potential inherent in each and every student. It will enable teachers to realise their professional ability and increase the level of care and professional responsibility for the students' success.

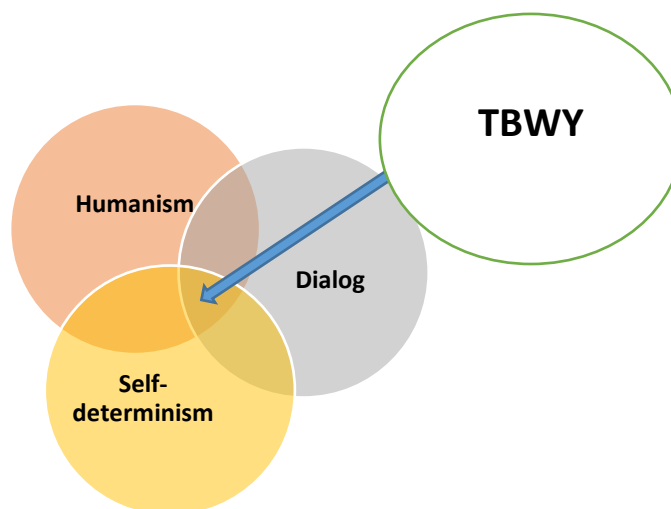
Most research efforts are invested in examining the cognitive achievements of students in ways to guarantee their optimal performance (Justman & Bukobza, 2010). Since scholastic success requires more educational skills (DiPerna, Volpe & Elliott, 2002), studies are focused on examining the connection between student achievement and various academic coefficients, e.g., social skills and emotional ability, self-perception, motivational factors and the level of involvement in learning, which are likely to advance students' educational achievements and to influence students' general functioning, both within and without the portals of the school. Accordingly, the current literature review seeks to present a practical model alongside empirically based studies that would examine the connections between various coefficients related to emotional, social and

educational functioning in the school, including the students' self-perceptions (Eccles, 2004).

Considering and understanding the creation of a "pool of resources", by "questioning key values" from philosophical and psychological theories and by constructing a relevant connection between them, allowed for the creation of an eclectic model for pedagogical, social and emotional solutions and provided an answer to the question of equality of opportunity in education for all types of students. The eclectic model would create optimal conditions for quality teaching and learning; learning processes, teaching methods, mediation methods for various groups of students, empowerment of professional capacity and capability of teachers; thereby increasing the care and responsibility of the teachers for their students' success (Chen Hwang, Yeh & Lin, 2012), nurturing the students' mental welfare, as well as the teachers' professional welfare, providing intellectual autonomy to teachers and students and creating a sense of confidence among the students. These conditions have created a basis in the search for connections between key values of philosophical and psychological theories as solutions on the pedagogical, social and emotional plane (Yeager, Walton & Cohen, 2013) of students in school.

In the deliberation process of constructing the pedagogical, social and emotional model, it was important to direct the teachers and students to a change in their perception of learning and teaching according to the central principles through which it is performed (Harkaby & Mendel Levy, 2014).

Diagram 1: The eclectic model of the TBWY



2.6.2 The rationale of the key values from philosophical and psychological theories on learning

In this section, I will present the rationale of the key values, taken from philosophical and psychological theories derived from several studies (Douglas & Grabowski, 2012), which deal with the description of students' personal traits and their relevance to learning. A long list of relevant traits for learning were divided into a general category, including; general mental and cognitive abilities, cognitive flexibility, reflexivity, degree of impulsiveness, cognitive style and personal variables related to the way in which the individual perceives, organizes and stores information and solves problems – how they cope with frustrations and uncertainties, changes in motivation, risk-taking and prior knowledge (Price, 2004).

The range of features needed for learning indicates that every student is unique and, hence, it is difficult to create a "representative learner" on the basis of their statistical association to an ethnic, economic, gender or other group (Aguado, Ballasteros & Malik, 2012). The complex perception of the learner and of the learning processes is also based on the effect of the social and cultural environmental factors in which learning takes place, with the socioeconomic-cultural approaches influencing the learning process itself (Flecha, 2010). One way of examining the differences between students is by defining the gaps in educational achievements among them, on the basis of standardized tests. (Southerland, 2013), and measurement tools and, through them, to assign learners to homogeneous groups according to various rules and correlations between achievements and background factors (Harkaby & Mendel-Levy, 2014). The differences between students can also be characterized by approaches which emphasize the differences between them through personal assessment of each student, which focuses on the students' differential strengths and abilities, as reflected in the learning process, focusing on interests, varied personal needs and other additional aspects. This approach is based on evaluation of the abilities, needs and unique features of the individual students. Evaluation of student learning outcomes will comprise planned teaching methods and the level of mediation. In this way, the various abilities of each student will be reflected.

Similarly, skills and abilities in content areas, relating to skills derived from personal features affect the preferences and interests of learners (Terzi, 2005).

Metaphorically, one can state that according to the "differences" approach, there is a consistent axis (standardized achievements) over which the distribution of the learners

(located on the groups in this or another decile) was spread. At the same time regarding personal assessment of each student, there are many scales to measure his/her achievement in accordance with all his/her personal qualities and abilities (Harkaby & Mendel-Levy, 2014) and each quality and ability is reflected in various strengths (Weis, 2010).

Reference to students' personal qualities enables them to realize their abilities and preferences in various fields of learning, This recognizes the legitimacy of alternative areas of learning, without reference to areas appropriate to students with high or low educational ability and, in this way, enables students to realize their varied abilities (Southerland, 2013).

The first approach is based on standardized tests, focusing on the system, while the second approach focuses on construction of scales appropriate to all students' personal qualities, abilities and welfare. Choosing between these two objectives is a value judgment for society, in that in building the "TBWY" program these considerations were taken into account. The difference between the two approaches is the ability to cope with differences while respecting the different personal qualities of each student. One of the main difficulties in constructing the "TBWY" reform program is inherent in an understanding of a number of issues, regarding the understanding of the natural learning potential of students and the nature of the principal values which needed to be "borrowed" from psychological and philosophical theories.

2.6.3 The nature of the "TBWY" reform program

In this section, I will present the nature of the "TBWY" reform program.

To understand the nature of the "TBWY" reform program it was necessary to adapt the main values that were "borrowed" from the philosophical and psychological theories in order to "pool philosophical and psychological resources" in realizing the various approaches, together with the understanding of the degree of potential, inherent or concealed, in each and every student. However, we will attempt to locate learning-retardant factors within the teaching and learning processes that are revealed when teachers already assume from the beginning that the learner's scholastic ability is weak or poor (Kidroni, 2011).

In order for us to be able to select key values of philosophical and psychological theories, we will also deepen understanding about perceived learning, which has three sources: cognitive, emotional and social. The cognitive aspect of perceived learning relates to a sense of acquiring knowledge and arriving at new insights. The emotional aspect of

perceived learning examines experiences and emotions during the learning process, for example, the degree of interest in the content or the ease of understanding. Perceived learning from the social aspect relates to the degree of benefit (enjoyment) achieved from interpersonal interactions in learning– focus points – during lessons (Caspi & Blau, 2011).

The "TBWY" program will rest on recognition of the differences between students in equality of opportunities in education (Harkaby & Mendel, 2014). Such as, for example, the multiple intelligences theory which discusses the realization of learning potential of students, theories which have contributed to a change in position of teachers regarding the educational potential of students (Kidroni, 2011). From key values of philosophical and psychological theories, we will be able to understand various learning strategies on a physiological, cultural, cognitive and emotional level. These values have created alternative means of instruction to advance equality of opportunities in education, for example, adaptation of differential learning, at various academic levels and students' interest, promotion of interaction between teacher and student, and learning-focused communication between colleagues (Blau, Peled & Nusan, 2014). Recognition of the importance attributed to increasing the scholastic expectations of the student also contributed to increasing, educational and scholastic inputs from under-achieving students. This has resulted in accelerated improvement in achievement, provided motivation for searching for improved teaching methods, and increased faith in the vision of equal opportunities in education, as an essential and achievable social, cultural and economic requirement (Silvernail, 2011).

According to the pragmatic perception, the practical significance of equality of opportunity in education is reflected in the realization of varied pedagogical opportunities which have permitted pedagogical advancement for each and every student to an appropriate and desired level. One can explain the value of equality of opportunities in education in a number of ways: *No child left behind* on the scale of achievements, claims it is possible to advance each student to the best of his ability (Kidroni, 2011). In addition, we will clarify whether reducing achievement gaps relates to a binding achievement threshold, or to an achievement ceiling in which the education system has no interest. Is it possible that there is a situation where the notion of a reduction in educational gaps will lead to a situation in which the student will not be required to soar to high achievements beyond the educational program?

The "TBWY" program, to which the reform refers, will be reflected in the realization of equality of opportunities according to a multi-directional educational model leading to an

improvement and advancement of individuals also on a linear achievement scale. This is instead of the linear model which indicates the learning quality to which the learner is exposed (Kidroni, 2011) from educational aspects, inter alia, from educational philosophy and from a value and social position vis-à-vis various education differences (Paris, 2012). Realization of equality of opportunity therefore necessitates recognition and correct implementation of the educational inputs for each student, according to their unique learning methods. In fact, there is no need for a single-value match between each student and each teaching method, in order to create dynamic and creative teachers developing a variety of methods and ways of teaching. This all requires control of the repertoire of different means of instruction and education, the ability to stay up-to-date with ever-changing knowledge, the capacity for learning practical knowledge in performing value and empirical assignments as one, in nurturing and developing students from a different socioeconomic background and creating a comprehensive learning environment. Other requirements include creating a sense of responsibility of the teachers for the success of the students and bringing them to a high level of achievement, development of critical thinking skills, encouragement of learning skills and language achievements, the adaptation of teaching methods to multiple intelligences, creating motivation and interest among the students, nurturing the student's self-image, creating a sense of belonging and protection, as well as creating a challenging educational environment (Harkaby & Mendel-Levy, 2014), allowing student autonomy, creating a significant bond between teachers and students, and students with students, including emotional involvement of students in the learning processes (Park, Holloway, Arendtsz & Li, 2012). The teacher will act as moderator guiding the students in the investigative process in a variety of areas of learning (Noddings, 2015).

2.6.4 The humanistic model

In this section, I will present the complexity of the "TBWY" program. The struggle is in the implementation, at the practical level, of the philosophical and psychological educational key values in the theories and in the understanding of the complexity of the "TBWY" program which combines these values in order to create a structure which contains all of the advantages, such that the total sum is greater than its parts. Humanistic education, throughout various periods in our lives, has developed the most portentous educational dream, the most sublime and most difficult image of the fulfillment of the educational dream (Life Education, 2011). It will be asked whether humanistic education, currently, has reasons to exist as it was in the past and what elements will support it?

Humanistic education is not human education, in other words, personal, sensitive, therapeutic education of "the child in the center". There is a tendency to confuse humanistic education with human education. In order to avoid this confusion, we will locate humanistic education and human education in their natural families (Life Education, 2011). According to one approach, humanistic education belongs to the "acculturation" family, which aims to mould young people's personality in a spirit of values known as "preferred cultures" Human education belongs to the "individualization" family –the aim of which is to enable the unique character of each child to develop in his/her own way. The two families represent tension, if not real hostility, in that they are opposite to each other. According to the concept of classical humanistic education, humanistic values do not mould people out of nothing, but rather, assist their human nature to realize the human ideal embodied within them. In contrast to Harpaz, Matiash (2004) claims in (Life Education, 2011) that there is neither acculturation, nor individualization here, let alone any socialization. In Matiash's opinion, individualization is a product of a certain culture, which elevates nurturing of a person, and without criticism there is no humanistic education. Criticism is the way to learn, to cope, to judge, and thereby, to change the present. The role of humanism is never disconnected from the world of the present. Education, Harpaz argues, is not in charge of our dreams. It does not remind us of what was, but rather it tells us what we want it to be. The duty of education is to create human beings who are capable of changing themselves, an enlightened change, which is not a consequence of the present, in which he is a part, because this is everybody (Life Education, 2011). Humanistic education is intended for the development of independence, critical thinking, individualism, freedom of choice, authenticity, the feeling of ability, self-confidence, responsibility, and leadership skills, which have developed variously, and these will be perfected by means of the dialog between education and critical pedagogy. This includes the development of a sense of wonder, curiosity, investigation, imaginative ability, adventure, courage to try the new and unknown, positive thinking and even an attachment to situations of ambiguity and ignorance (Douglas & Grabowski, 2012).

Our modern way of life, in which reality is segmented, random, shifting, free and immediate offering infinite assorted possibilities, exacts a heavy price from the quality of our life in general, and from the quality of our educational outcomes. This way of life is an alternative to humanistic education (Gur-Zeev, 2004). The post-colonialist alternative seeks to suggest, not only a vision of a rich life and symmetrical co-existence, but also

the shaping of a just equality. In the democratic education systems there is a constant internal conflict between the democratic educational aspiration of attaining an optimal level of individual achievement and the democratic educational systems that try to ensure equal opportunities for all (Aloni, 2005a). It seems that opposing forces are constantly striving to reduce the educational gaps between individuals and between social groups by ensuring equal educational opportunities for all and thus, equality in outputs, while claiming to relate to the individual as a 'sovereign' organism who constructs his/her world (Aloni, 2005b).

In the past three decades, the concept of "human dignity" has become the basic and dominant moral principle in today's culture (Kaniel, 2000). In addition, specific abilities such as personal autonomy, rational thinking, critical thinking, creative imagination, and moral judgment have become the focus of the educational system in Israel.

Commitment to humanism as a worldview, or as a set of ethical principles, determines the advancement of the students' development, their welfare and their dignity as the supreme purpose of human thinking and action. This perspective relates to the human being, as a sovereign organism who builds his/her world and who is responsible for his/her destiny and it ascribes to each individual a value that is unconditional and equal to that of his/her fellow being (Aloni, 2005b). The humanistic approach supports this point of view by calling for a return to teaching values, authenticity, culture, education and shaping the nature of thinking (Harpaz, 2006). There is also orientation towards development of the student's personality through influencing his/her affinity to the society and the culture he/she lives in.

According to the humanistic model, the outcome of the approach and its significance are based on moral education, as opposed to professional instruction, in which there is professional training, which is not always commensurate with educational activity but rather, it is commensurate only with scholastic achievements. Therefore, according to this approach, curiosity, learning aptitudes and a healthy mind are to be nurtured (Aloni, 2006). In order to have liberal-humanist education a facilitator is necessary, someone who is able to draw out, with dialogue, the nature of things, the imaginative knowledge of a person, the latent universality of the empirical. In order to connect to humanistic education, we must use dialogue (Adler, 2005).

2.6.5 The creation of a dialogical connection

In this section, I will present the creation of a dialogical connection. Martin Buber asserted that the human being exists as an object created and formed within a dialogue. The existence of modern man in the technological world is tenuous; creative freedom is missing and moral choices are limited (Playdon & Schner, 2001). This reasoning culminates in the abstract notion that the human being is somewhere between a subject and an object.

According to Martin Buber, the object is measurable and useful and exists on the rational level, while "I and you" relations are on the spiritual level and they exist solely between people.

Relationships between people are not defined through the technological scientific world. According to Buber, the subject is created from dialogical relations, between him/herself and society. The human being's inner feelings are mysterious and psychology has been unable to control human behaviour, despite all the knowledge that has so far been collected.

Language expresses the human being's creation, which expresses his/her humanity. Dialogue means 'a conversation between two people'. According to Webster's Dictionary, "dialogue" is an exchange of ideas and opinions, and a discussion between representatives of parties to a conflict that is aimed at resolution. Dialogue implies that the person who states an argument has tried to understand the matter in question and is using powers of reason as to how and why evidence supports his or her position.

On February 5th, 2013, United Nations Secretary-General Kofi Anan said: *"I see...dialogue as a chance for people of different cultures and traditions to get to know each other better, whether they live on opposite sides of the world or on the same street"* (Salih, 2013).

Through dialogue, we will expose the difference, which provides an alternative to the fixed point of view, which characterizes this enlightenment and classic humanism. The dialogue indicates a possibility of free flow between *"The I"* and *"the other"*, without a fixed point of view or without any pre-arranged result. "The other", according to Buber, is created from dialogue interactions. The objective thinking of modern humans is incapable of touching the internal nature of the person, in his/her subjectivity to give it meaning. Even psychology tries - as part of the science - to focus on a person, in general, and on each person, in particular, how much he/she knows, objectively, that would enable him/her to control that person's behavior or, at least, to understand it (Shner, 2012).

The creation of a dialogical connection in the full meaning of the concept in a relationship will likely be achieved only when there is a high level of communication in that relationship. The conversers need to care about the well-being of each other and make substantial contributions to each other's growth and development. Caring is what distinguishes the concern approach to education from the character approach (Bergman, 2004). The value of "concern and caring" is based on Nodding's 'American Philosophy' (Noddings, 2002).

The values of generosity, assistance, sincere aspiration for the welfare of others, tending, cultivating attachment relationships and accepting the other are at the centre of the ethics of caring. Both of the participants in the dialogue speak and listen. During the dialogue, hands are outstretched beyond the ideological gaps between them. In order for a person to connect with a friend (Noddings, 2002, 2003, 2005, 2007), they have to accept each other unconditionally and without the mediation of words.

Roorda, Koomen, Spilt and Oort (2011) in a meta-analysis of student/ teacher relationships found a definite positive relationship between positive relationships and increased motivation and achievement. The individual perceives the other person according to narrow and self-serving criteria and relates to him/her as an object of observation and purposeful use. The individual seeks to take control of his/her friend to the point of possible damage to his/her autonomy. This is a technical dialogue that lacks meaning (Kaplan & Assor, 2001).

The two styles or ways of speaking mentioned above and the connection with the other create two different spiritual realities. Buber's philosophy of dialogue relates meaningfully to "speech" (Playdon & Schner, 2001). Speech is the existence space of the human spirit and when there is no dialogue, the human being does not exist as a spiritual organism. In his view, a human being comes into being as a spiritual self through his speech. A dialogue exists when an additional layer of meaning is added to the conversation, a different quality of communication in which the participants meet.

Banathy (2003) views dialogue as a disciplined, consensus-building process of collective communication based on shared values and beliefs. From these definitions, it can be said that dialogue among students belonging to two different cultures requires the students to comprehend, discuss, argue, use logic, collect relevant information and provide evidence that support their position concerning the topic under discussion.

The meaning of dialogue is a significant conversation from which the conversers emerge with significant insights beyond a usual conversation (Atterton, Calarco & Friedman, 2004). A dialogue that is faithful to ethics requires speaking with others who are not seeking to build an identical platform for a conversation between them (Atterton, Calarco & Friedman, 2004). In an innocent conversation in which two people desire the realization of their mutual good, it is possible that one of them is subordinate to the other (Friedman, 2001).

True self-expression is possible only where there is a real connection, characterized by reciprocity, by sharing the other's internal world and in the absence of control. It is a question of building an infrastructure for an environment that supports autonomy in which the values, needs and experiences of the other are accepted. These conditions of trust and openness enable an expression of the authentic self (Ryan & Deci, 2000). At the basis of the theory are the following fundamental psychological needs: the need for autonomy, the need for a sense of capability, the need for a sense of connection, belonging and security. Ryan & Deci (2000) argue that people relate to one another as social objects and as instruments for satisfying personal needs on their way to achievements and successes. Being connected to the other as an object is an artificial form of connection that contradicts the individual's autonomy. True self-expression is possible only where there is a real connection, characterized by reciprocity, by sharing the other's internal world and in the absence of control. Thus, the educational goals derived from these viewpoints are education for independence, curiosity and personal autonomy (Brandes & Issachar, 2013). The connections are reflected, therefore, between teachers and students, when the network of connections between them impacts motivation and feeling of capability of the student. It has been found that students who value themselves more highly are capable of higher achievements in academia and are more likely to achieve higher grades in comparison to those who lack this characteristic. If this high self-evaluation continues, it can also extend to other areas of learning such as the ability to regulate motivation and activities in their studies (Di Giunta, Alessandri, Gerbino, Luengo Kanacri, Zuffiano & Vittorio Caprara, 2013).

The teacher's behaviour is significant in the support of basic needs insofar as arousing the students' internal motivation is concerned (Roche & Marsh, 2002).

The sensitivity of a teacher is defined (Ahnert, Harwardt-Heinecke, Kappler, Eckstein-Madry & Milatz, 2012) as awareness of educational and emotional needs of a student, and their degree of responsibility for the achievements of their students. This sensitivity

can increasingly motivate the students to succeed, and increase their feeling of capability (Van Ryzin, 2010). Research has shown that the teacher-student relationship contributes to the self-worth of the student (Aloni, 2014; Schnarch, 2015), in the social aspect, in student support and guidance, in social connections in the classroom, and even guidance in the prevention of unhealthy associations, and it often leads to optimal social behaviour. The learning aspect is self-directing and helps the student fulfil tasks in the framework of the school. It was further found that poor relationships between teachers and students could lead to students failing to complete tasks at school. Therefore, the quality of the relationship between a teacher and a student has been found to be more important than a simple personal relationship and it is relevant and has a greater effect on other relationships and conduct in different areas. A student may feel he/she is being criticized, neglected or not involved by the teacher, an experience that can cause him/her to feel he/she does not belong. Such a feeling can damage his/her motivation and quality of investment in his/her studies for a long period (Yeager, Walton & Cohen, 2013). Research has shown that the need for encouragement of self-esteem, as reported by students, can lead to an enhanced self-image and hence higher achievements in studies (Aloni, 2014; Schnarch, 2015). In other words, a relationship between a teacher and a student can lead to a feeling of being loved, wanted and important in the school, and feel that his/her presence contributes to the class and the school community – students and teachers, leading, also, to behavior which contributes to adaptation and good feelings. Moreover, positive feelings with significant others are the corner stone of a student's ability to study productively in a social setting, to academic feelings, whereby academic achievements in the maturing process of a student also contributes to social roles, such as acceptance by peers and connection to society (Oberle & Schonert-Reichl, 2013).

Research directed at exploring the efficiency of the educational system in fulfilling its goals (Pedhazur & Kanti, 2002) highlights the radicalization among teenagers and their disengagement from democratic principles (Arian, Barnea & Ben-Nun, 2004), which are the basis of a formal democracy (Carmon, 2004).

There is also a distinction between "respect" and "self-respect" and negative and positive pride. Pride is perceived as negative and is liable to exclude the individual from the social environment because it expresses an exaggerated (Kaniel, 2000) need to get self-esteem from the environment. An exaggerated need constitutes a personality dimension that drives the individual to unacceptable (negative) behaviours. On the other hand, "self-respect" manifests the normative and desirable personality required in order to receive

esteem from the environment. Humiliation is a manifestation of taking the person's self-esteem away from him (Kaniel, 2000). Students' self-esteem is closely connected to their self-perception and the extent of their ability to learn. When students' self-esteem as it pertains to their ability to learn is threatened, they demonstrate a motivation to avoid failure so that their self-respect will not be damaged and so that there will be no reduction in the amount of the environment's esteem toward them. In other words, the students will not make an effort and they will not devote time to learning. Since failure has been obtained without effort and without investing in learning, it has no negative significance regarding their ability because they have attained "failure while guarding their self-respect" (Kaplan & Assor, 2001). The development of self-esteem is connected to the socialization process in the frameworks in which the individual is situated, beginning with the connection between the individual and his parents and a connection with an age group that is identical to him. Development is also affected by the network of other significant adults in the individual's environment through a process of mutual influence between the individual's estimation of himself and others' estimation of him.

High self-esteem will create a high sense of self-efficacy relative to a given task and it will reinforce the student's inclination to choose a certain task because of his self-respect and to persevere in the task when he encounters difficulties, to perform the task well and to assess the task as important and enjoyable (Kaplan & Assor, 2001).

2.6.6 The need for learner autonomy

In this section, I will present the connection between humanist and dialogical approaches, which talk of the creation of autonomy among students and teachers. That is, the humanist theory and the dialogical approach provide an answer to the basic needs of students, and allowed me to discern the significant need for self- autonomy by means of self-regulation, that is to say, the authentic needs of the student could be achieved by understanding the importance of independence and freedom of choice. At a deeper level, we are talking about the need for the self to feel that the central activities in their lives match their basic needs – their tendencies and values. Since a person feels the need to use his/her abilities and leanings to actively pursue his/her goals, standards, values and programs and in total to crystallize his/her identity (Reeve & Assor, 2011).

Translation of needs that derive from humanist philosophy and dialogue is among one of the leading motivational theories of self-determination, that I chose in order to initiate the

"TBWY" program at a practical level since they serve, in the autonomy of the self, a basic and universal psychological need, no less than the need for capability (Deci & Ryan, 2012). When the student's basic need for autonomy, ability and capability and a sense of belonging are satisfied, the student will understand that the desire to perform the tasks he/she is required to do comes from within him/herself and not from the compulsion of others (Kaplan & Assor, 2001). The need for autonomy is significant for the realization of potential (Assor, 2001) and it includes three types of aspirations: performing an action according to the student's personal temperament and inclinations in order to realize his inborn potential; solidifying a set of goals and ideals that suit the student's character; and giving the student the possibility of choosing goals, ideals, attitudes and commitments. It is believed that all of these support the student's needs and that they will contribute to his sense of freedom, self-determination and independence, which will lead to high self-image and self-esteem. A person feels the need to utilize their ability and propensities combined together in an active way in order to achieve their goals, standards, values, plans, that is, to crystallize their identity (Reeve & Assor, 2011).

Processes of reflection facilitate the solidification of a more coherent system of values. Additional elements of autonomy are possibilities of choice (Assor, 2001). Actualization of choice, in fact, expresses the self, as opposed to the group to which the student belongs. This component, as it is emphasized in western cultures, is individualism.

By helping a friend, an individual realizes his/her need for autonomy. Later this will lead to the feeling of ability. Hence, values enhance a student's sense of wellbeing and ultimately ability.

In the connection between the teacher and his/her students, emphasis is placed on giving the student autonomy as opposed to control of the student. Students whose teachers have allowed them more autonomy become students who have higher motivation and higher self-esteem than students of teachers whose orientation is control (Assor, 2001).

Reflection by students also helps solidify the set of goals and ideals for optimal satisfaction, while taking the student's personal inclinations into account (Flum & Blustein, 2000).

The additional component of autonomy (Assor, 2001) allows for the option of choice. Actualization of choice expresses "the self" as opposed to the group to which the student belongs (Assor, 2001).

Students are able to distinguish between different kinds of teacher behaviour that support autonomy, such as promoting relevance, providing an opportunity to criticize and evaluate, and giving students a choice. Teachers' behaviours that repress autonomy also repress expression and compel specific behaviours (Assor, Kaplan & Roth, 2002; Assor & Kaplan, 2001).

The teachers act as a model continually initiating and addressing the emotional reactions of their students. They are warm and supportive, providing their students with a sense of belonging to the school environment and a sense of confidence for investigating new ideas and exploring unfamiliar situations, thus, in this way they develop the basis for independent and inter-personal learning. By acting in this way, the teachers connect to an optimal classroom climate, characterized by few conflicts and disciplinary problems. By transitioning quickly from one activity to another, with appropriate emotional support, with dignified communication solving problems, with intense interest and focus on tasks, as well as supporting and addressing the varied needs of the students.

A connection has been found between students' perceptions of compelled autonomy and negative feelings towards learning in all age groups.

Negative feeling can also be experienced by students because of an approach of a teacher who urges them to think, feel and work in certain ways appropriate to that teacher, when making demands from them without explanation. Also from a teacher who does not allow the students to work at their "personal speed", does not provide an external motivation to learn, stifles the students' freedom of expression and assesses them judgmentally (Reeve, 2006). In further research, it was found that teachers who diminish students' autonomy arouse within them feelings of anger and anxiety and hence loss of motivation for learning (Assor, Kaplan, Kanat-Maymon & Roth, 2005).

From studies (Reeve *et al*, 2004b), it appears that support for autonomy leads to an individual's internal motivation, while the giving of material rewards and reinforcement impairs internal motivation. In a comparison between students whose teachers supported their autonomy and students whose teachers diminished such autonomy, it was found that the achievements and investments of the former in learning were higher.

Roth and Weinstock (2013) found that when teachers have epistemological beliefs which allow for multiple perspectives on knowledge among students, students will perceive their instructors as autonomy supportive.

2.6.7 A sense of connection and belonging

In this section, I will present the need for belonging and connection. Contained within this is the need for security in the school, which relates to the ambition of each student to feel that there are, in the school, teachers and students who like him/her and enjoy his/her proximity, who will help him/her and will be able to understand him/her and accept him/her "as he/she is". A sense of belonging is defined as the extent to which students report a personal sense of being accepted, respected, included and supported in their social environment in the school (Willms, 2000).

A sense of belonging to the school, which is necessary for many educational processes and other school activities, is a significant human need (Willms, 2000). A lack of a sense of belonging will harm the student's development, well-being and learning process while its presence ensures growth and learning.

The need for belonging refers to an ambition to feel that there is a group of students and a place where the student feels that he/she is a part of them, and this provides him/her with a sense of belonging and protection. This need is considered as a basic need since dissatisfaction impairs development of spiritual welfare and learning and since satisfaction promotes growth. A process was built by means of instruction groups and learning groups as part of the "TBWY" program. When a pupil has feelings of not belonging or lack of connection in relation to other students and to the teacher, he/she cannot have time for learning. Positive relationships with others promote not just social, emotional and intellectual functioning, but also a positive feeling of self-image and self-esteem (Assor, 2003). A feeling of belonging relates to the significant need to feel loved and accepted by others within the framework of the school. This means that the student will feel warmth and caring on the part of the teachers and will feel a part of a group of his/her contemporaries (Erhardt, 2001). It was found that the students' feeling of belonging – both to the school and to the society of the school - of necessity, influences their feeling of control and welfare. Good relations with peers create a feeling of community – by contrast, criticism, feelings of abandonment and lack of appreciation are experiences which prove that he/she does not belong. This is likely to increase tension and adversely affect motivation and investment in studies over time (Yeager, Walton & Cohen, 2013). The feeling of belonging in the school allows students to adapt themselves to the essential beliefs and values of effective functioning in learning environments. These beliefs direct behaviour in such ways as persistence, achievements of goals and self-regulation (Martin & Dowson, 2009).

Lack of confidence together with a lack of a sense of belonging was found to stem principally from physical and/or verbal violence in schools (Assor, Kaplan & Kanat-Maymon, 2001). Researchers in western countries reported similar findings (Juvonen & Graham, 2001). The need for connection and belonging appears in the form of a need for connection with other people and the need to be part of the community. Students' sense of belonging to the school has social implications and it significantly contributes to the school climate. Students' sense of belonging is related to their expectations about their success in school (Willms, 2000).

A sense of belonging is the source of the increase in the individual's self-worth. The individual also builds his self-worth through his belonging to a group and comparing his group to other groups.

2.6.8 A sense of general security

In this section, I will argue that an intervention designed to improve the quality of learning outcomes, such as the "TBWY" reform program will lead to a reduction in the level of school violence and significantly improve the ability of teachers to prevent violence and to handle the phenomenon when it occurs. This prediction is based on the premise that students with high self-esteem will be helped to achieve and their expectations will be fulfilled, thereby negating their violent reactions. At the same time, students with low self-esteem and low expectations will be encouraged and guided to higher achievements, thereby boosting their self-confidence and self-esteem.

One indicator of school climate is the incidence of violence in schools (Skiba, Ritter, Simmons, Peterson & Miller, 2006). The traditional approach asserts that low self-esteem is connected to violence and young people who behaved violently often came from classrooms that provided little emotional support to the students (Spratt, 2004). However, modern approaches assert that violence is a result of high self-esteem coupled with a feeling of alienation from the school system and not low self-esteem (Baumeister, 2005). Research conducted in various countries, shows that there appears to be a connection between the scholastic achievements of aggressive children and their involvement in bullying, a direct connection between a sense of general security among students and their ability to function academically, and a connection between negative attitudes toward school and the involvement of students in school activities (Klein-Allerman, Kracke, Noack & Hofer, 2001). Gofin, Palti and Mandel (2000) found that a lack of support from

teachers or overly high expectations for achievement were catalysts for occurrences of bullying and violence together with a deterioration in the feeling of general security among students.

A connection has also been found between bullying and deficiencies in well-being, a sense of belonging and love for school (Seeley, Tombari, Bennett & Dunkle, 2009).

Teachers who convey messages of negative expectations are liable to create a harmful effect. Their students tend to adopt negative expectations with subsequent creation of a negative self-image. These expectations decrease their self-confidence and lower their ability to learn. Eventually, these students are liable to fail in school (Roche & Marsh, 2002).

The main assumption in the study of social environments is that environment influences the behaviour of the population in that environment (Zirpoli, 2008) Social frameworks exhibit characteristics through which the environment's atmosphere and the behaviour of the people in that environment can be predicted.

In Israel, it was found that 25.8% of boys reported that they had bullied another student in school three or more times during the school year (Harel, Walsh, Boniel-Nissim, Tesler & Shteinmitz, 2002). One third of high school students reported low-level physical injuries. Approximately 16% of these high school students reported that they had been kicked or hit at least once a month. Approximately 25% of high school students think that there is a severe problem of violence in the schools (Benbenishty, Zaira & Astor, 2000).

2.6.9 Self-actualization and self-worth

In this section, I will present the need for self-actualization. Self-actualization and self-worth, are concepts inherent in the individual's perception of whether they have reached their full potential (Assor, 2001). The need for self-actualization – the individual's need to use his unique talents in order to realize his latent personal potential – is the fifth level in Maslow's hierarchy of needs and the most important source of motivation. According to Maslow, this is the highest level and is achieved by very few (Maslow, 1970).

Maslow's theory assumes the existence of universal needs that are common to, and that motivate, all human beings. These needs are likely to be expressed in different ways, according to the particular cultural situation. According to this theory, there is a hierarchy of needs that are organized according to their order of importance. The theory assumes

that when a certain level of need is realized it will no longer act as a motivating factor. When a level of need is achieved, the individual attempts to realize the next, higher level. Maslow asserts that it is nearly impossible to get to the highest level of the pyramid and indeed, reality shows that very few people can say they have arrived at self-actualization in their lives. The possibility exists, but the likelihood of achieving this is small.

Self-worth can be considered to be the core of personality (McLeod, 2007). The concept of "self-worth" answers the question, "How much do I think I'm worth?" and translates the answer, self-image, into terms of "How much am I worth"?

Self-image, self-identity, point of control and internal motivation include the concept of self-worth. It is important to emphasize that self-worth is established through reciprocal relations between the way in which the environment relates to the individual and the individual's own interpretation of these relationships. The person who knows his/her "self" in social roles has impressions of their self-attributions and personal traits and can describe traits that characterize him/her, such as being relaxed or shy in a social situation, being rebellious or conservative, being clumsy or athletic.

The educational system emphasizes the development of cognitive-instrumental skills of computation, analysis, deduction, etc. and neglects existential and more material aspects of the learning process, such as internal observation and insight (Hart, 2001). Accordingly, this is not reflected in the consideration of the purpose and significance outside the educational discourse at the practical level. The development of thinking skills, in the short term, does not permit the creation of a stable internal identity ("Who is the person that I want to be?") and does not advance the development and commitment for an inspiring purpose ("To what do I aspire in my life?"). Without a direction or meaningful purpose, there is no point and motivation for action (Rousso, 2013).

According to the phenomenological humanistic approach (Rogers, 1973), self-actualization is the main motive for personal growth and for optimally developing personal talents. The inclination for self-actualization is the main power that motivates us. Self-actualization is responsible for the development of all of the individual's latent possibilities and it is the individual's inherited inclination to be the best possible self that his/her inherited nature allows him/her to be. Self-actualization is also expressed in maintaining our physical existence and in our personal growth. Physical existence is common to all human beings, but personal growth is unique to each individual according to their aspirations for advancement. This aspiration is what leads to achievements.

A person obtains meaning when experiencing the purpose and intention of a social action, when a feeling of purpose, which exceeds his personal needs, motivates his life. Such an experience addresses the most basic psychological needs – autonomy, a feeling of self-capability and a feeling of belonging and self-worth. Sufficiency of these needs raises their importance and their contribution to their fellow human beings and to society as a whole (Steger, Oishi & Kashdan, 2009).

Autonomy in the choice of style, pace and teaching methods in learning groups is the basis for the "TBWY" program. The program provides an answer to differences between students and the whole process provides professional welfare for the teachers and mental welfare for the students. The class environment addresses the psychological needs of the students and determines how students will become involved in learning and self-realization (Blumenfeld & Paris, 2004).

I argue that, in this framework, the student constructs standards of self-esteem that are fed by expectations from themselves, others' expectations and reactions, and a comparison between themselves and others. This is an interconnected process of reciprocal relationships in which the individual behaves according to beliefs and expectations developed for themselves, while those around perceive and react to their behaviour.

The student behaves according to a "self-fulfilling prophecy". Beliefs developed in relation to him/herself and others and his/her behaviour cause beliefs to be actualized. Positive self-worth motivates effort leading to success and additional effort. Negative self-worth prevents investment of effort and leads to failure and a decrease in self-worth.

2.7 Self-esteem and coping with failure

In this section, I will argue that self-directed learning predicts improved academic results and motivation as the students acquire autonomous learning characteristics, adapted to increase involvement in the learning process and the successful performance which results from that process (Clark, 2012).

Self-assessment refers to the everyday language of feeling, perception and assessment that an individual has in connection with his/her experiences. Self-assessment is the value a person places on him/herself (Ferda, Gamze, Orhan, Nesim, 2004) and it is the scope (yardstick), by which people see themselves in a positive or negative light. Self-assessment has its origin in the system of our relationships with others (Gentile, Grabe,

Dolan-Pascone, Twenge, Wells & Maitino, 2009) and in particular, in reference to the system of relationships between students and teachers.

When adolescents feel they have no control over the challenges they face, they are likely to experience helplessness. On the other hand, when they have a sense of control, they see failure as a challenge and are motivated to succeed in learning. This sense of belonging increases an individual's self-worth.

In addition, attribution of success and failure to internal factors ensures high motivation (Weiner, 2010) and this then increases self-assessment (A.Y.L.H, 2009).

A positive assessment of the "we" group increases self-esteem. The students' self-assessment of their ability is usually shaped by the written and verbal feedback, and the level of the teachers' expectations from them in school (Burke & Stets, 2009).

Some students "absorb" consistently low expectations from their teachers; their behaviour or scholastic achievements reflect these expectations resulting in the students becoming passive.

Students learn better when they understand their teachers' expectations and their intentions and the reasons for learning tasks. Parents' negative expectations also contribute to students' low self-esteem and to the development of helplessness in the learning process.

The student's academic self-concept is influenced by teachers' feedback and assessment of past performances (success and failures) as well as the feedback received from other people who are important to him/her such as parents and friends (Roche & Marsh, 2002).

2.7.1 The three theoretical perspectives chosen for the "TBWY" model

Within the pages written to describe the philosophical and psychological theories which affect the learning process I found connections, between the three theoretical perspectives chosen for the TBWY model and how these work together, which enabled the construction of a pedagogical model reflecting the humanistic – liberal approach to education, together with ethical, aesthetic and intellectual sentiments (Life Education, 2011). These connections contained the components necessary to produce a theoretical infrastructure, as a foundation for a practical curriculum within the educational system.

Several conditions needed to be met in order to produce these connections, which were the basis for the pedagogical model - to produce this image of an educated person, the

universal symbol of the empirical individual. It is a process, which is the product of a dialogue (Adler, 2005), to provide the optimal conditions for; quality learning, independent learning, education for the curious, education which provides personal autonomy and critical thinking (Brandes & Lissachar, 2013), to provide feelings of capability, feelings of confidence and development, to create social adequacy, such as acceptance in peer groups (Oberle & Schonert-Reichl, 2013) and social integration, to produce an environment of learning which fosters confidence, capability and connection, parameters which increase student motivation and long-term learning (Yeager, Walton & Cohen, 2013).

- i. The humanistic approach to education (Skinner, 1974; Aloni, 2006), which is based on educational values and skills such as: critical thinking, social fairness, conceptual autonomy, personal autonomy, self-actualization, sensitivity and democratic education.
- ii. Martin Buber's philosophical approach (1960), which is the basis of the concept of dialogue and its meanings.
- iii. The self-determination theory (Ryan & Deci, 2000), which is based on four fundamental psychological needs: belonging and security, capability and autonomy.

2.8 The effects of the "TBWY" reform program and its components on a change in the school climate

Two principles can explain the students' greater involvement in learning and their pro-sociality behaviour in the classroom (Finn, Pannozzo, & Achilles, 2003). The first principle is the students' sense of visibility and the second principle is based on a sense of belonging. Visibility will be expressed in the group as long as the group is small and intimate. In this situation, more responsibility and commitment is required from the student and he/she can no longer "hide" behind a large group of students. The second principle is based on relationships between individuals and the group. Group norms influence the individual's behaviour (Finn *et al*, 2003). Social cohesion occurs in small groups and it affects the focused behaviours of the individual in the group.

The support group significantly contributes to the social climate that will serve as a lever for actualizing the optimal extraction of the student's potential, including an improvement in behaviour norms, group cohesion, performance of moral tasks, prevention of aggression between individuals, improvement in self-image, increase in motivation and

improvement in scholastic achievements. A positive assessment of the "we" group increases self-esteem. The positive perception of the group is relative to other groups. The students' self-assessment of their ability is also usually accepted, according to written and verbal feedback and the level of the teachers' expectations from them in school.

The individual's motivation decreases in direct relation to a perceived enlargement of the group (Latane, Williams & Harkins, 1979). This loss of motivation is called 'social loafing'. The social loafing phenomenon is real and credible and is not limited strictly to motor tasks (Jackson & Williams, 1986); it can also occur when groups perform cognitive or conceptual tasks. Social loafing can be prevented if the task that the students are required to perform is a task that requires a sufficient amount of involvement of all members of the group (Brinkner, Hacham, Zahavy & Yosifoon, 1994).

The question that emerges from the findings is, can maximum engagement in the classroom be brought about when there are between 36-40 students in the classroom? This study seeks to examine the effects of the "TBWY" reform program and its components on a change in the school climate, including group cohesion and interpersonal affinity vis-à-vis hostility and rejection, leadership concentration, performance of moral tasks, prevention of aggression between individuals, a change in the students' personal feelings, and an improvement in scholastic achievements. The issue emerged against a background of social processes, similar to those that have been characterized in other countries, – disappointment with the educational system's achievements, an atmosphere of alienation between the institution of education and the students, a loss of students' trust in educators, and the lack of an accepted and respected adult in the institution of education, a decrease in the relevance of school in the eyes of the students – leading to a strong desire to significantly improve the climate in the school.

2.8.1 The concept of the "TBWY" program

When students are placed in homogeneous learning groups instead of being allocated to heterogeneous learning groups, even when groups are small, the quality of the learning outcomes produced is higher (OECD, 2004; Barber & Mourshed, 2007). Coping with various types of populations will be successful only if teachers' performance is good and if they respond to students in all areas of interest and in the entire spectrum of their abilities and socio-economic contexts.

An analysis of the TIMSS data that was conducted in 1999 (Mevarech & Lieberman, 2004) showed the existence of a negative correlation between the average achievements and the level of polarity. The level of polarity is defined as the difference between excellent students' grades and failing students' grades. It can be seen that in countries in which the achievement average was high, the polarity was low and that in countries in which the achievement average was low, the polarity was high. Therefore, it can be suggested that in learning groups in which the differences in grades are high, achievements will be low, and that the more the differences are reduced, the more the achievements will rise (Alpert, Bachar, Bran & Moskovyts, 2004). This suggestion was the basis of the composition of the learning group in the "TBWY" reform program. The learning groups were constituted on the basis of the students' proven learning skills and were homogeneous. Therefore, this reduced the differences in the students' achievements. In this way, it was possible to focus on teaching methods suitable for the learning group in a uniform and focused way.

From the research carried out by Packer (2013), it was found that advancement of students is realized through the existence of flexible and integrated study groups which are not labeled, for example, streaming (Widislavsky, 2009).

The concept of streaming is contrary to the concept of the "TBWY" program at the ideological level and at the academic level. Streaming influences the academic self-perception of the students, but not their general self-perception. It was found that the academic self-perception of the students was more positive in schools in which there was less learning in streams (Ireson & Hallam, 2009). Research has shown (Packer, 2013) that in schools where there are streams, the academic self-perception of the students was lower (Liu, Wang & Parkins, 2005). In the "TBWY" program, the students are integrated into flexible homogenous groups (Cotton, 2002; Ireson & Hallam, 2009), groups which combine varied teaching methods in specially adapted learning groups with adapted differential time resources. In the "flexible groupings", students from one class or from a number of classes are allocated to a group according to their level of ability in the specific area for variable study periods in accordance with the students' adjustment to the teaching methods (Dubé, Dorval & Bessette, 2012). The nature of the groups is likely to change in accordance with the requirements of the situation and the needs of the students, which will allow the students to learn at the various levels of difficulty and open various and varied learning opportunities for them, both within the groups and between the groups.

Flexible homogenous groups refer to the personal process and natural rate of learning of each student, within equal groups with a similar level of ability, with the students gaining specially adapted instruction to their degree of ability and progress and their specific educational needs (Dubé *et al*, 2012). Various studies have reported on the effectiveness of learning in flexible groups and its contribution to the students' achievements (Castle, Baker, Deniz & Tortora, 2005). It appears that learning in a small group of this type contributes to motivation and self-confidence, as well as contributing to students' concentration (Dubé *et al*, 2012). In addition, it was found that adapted teaching in the framework of flexible homogenous groups contributes to an increase in the feeling of ability, self-image and in involvement of the students in their learning (Packer, 2013). For students with high achievements and particularly high ability, there may be some academic advantage in learning in a homogenous framework (Cotton, 2002). Research conducted among 333 teachers in the United States assessed the frequency of use of various teaching methods (frontal, individual instruction and allocation to the ability group). The researchers concluded that, notwithstanding the disadvantages, allocation to ability groups within the classroom is still beneficial in schools, particularly in the area of reading (Chorzempa & Graham, 2006) and the allocation to the groups assists teachers in addressing the needs of the students on the social-educational arena (Chorzempa & Graham, 2006). They reported that in each one of the groups, they emphasize other reading skills, in varied teaching styles and methods in accordance with the students' ability. Many factors in the learning environment with which the student is in interaction, in which a group of peers use various teaching methods, affect educational results among the students. The teaching methods are likely to influence their motivation, behaviour, self-perceptions and students' achievements (Areepattamannil, Freeman & Klinger, 2010; Ysseldyke & Christenson, 2002).

Employing various teaching methods which emphasize the differences between students, as well as their inter-relationships enables the study of the implications of these relationships on learning, the feelings experienced and the learning achievements.

The size of the average classroom group is directly related to the quality of the learning outcomes within the education system (Krueger, 2003). The average number of students in the classroom affects the system's output, but the return on lowering this number changes according to the size of the classrooms. In Israel, the average number of students in the classrooms is 32.8 students. The size of the learning group is significant in the

learning process. Size and composition of the learning group facilitates pedagogical processes (Achilles, 2005).

The assumption is that there is a direct connection between the numbers of students in the group and the students' behaviour in the group and the extent of interaction that can exist between the teacher and the students. The teacher has to believe, without hesitation, in the students' ability to learn, and he has to reflect this belief to the students. The teacher's belief in his students will affect their belief in themselves (Heiman & Shemesh, 2004). A distinction has to be made between studies that deal with student-teacher relations and studies that deal with the size of the learning group (Achilles, 2005). Studies that focus on "the ratio of the number of students to the number of teachers" do not indicate a significant connection between the size of the learning group and scholastic achievements. Studies that focus on the size of the learning group show significant findings with regard to their scholastic achievement. A connection has also been found between the size of the learning group, as measured in the student-teacher ratio at the school level, and the students' decision to continue their studies after high school (Dustmann, Rajah & Van Soest, 2002).

In schools in which the size of the learning groups was smaller according to the above indices, more students decided to continue their studies after high school. The differences were apparent in the quality time given to each student relative to the number of students in the group, the extent of the students' "visibility" in the group and the number of opportunities that were given to each student to express himself. These things created an optimal climate in the learning group.

The extent of scholastic and social involvement of the students in small groups leads to an improvement in the students' achievements, and their attitude toward learning becomes positive and effective (Finn *et al*, 2003). Likewise, discipline problems decrease and the teachers are occupied more with teaching. The polarity in scholastic (Appendix 16) achievements was reduced between various types of populations in which there were socio-economic differences (Krueger, 2003). In spite of this, studies show that teachers still do not take advantage of the size of the group in order to implement suitable pedagogy (Blatchford, 2005).

Students' understanding and their potential can be increased by matching the nature of the instruction to the students' emotional and intellectual needs and abilities (Schweid, 2000). This process will affect the student's self-confidence and elevate his/her self-image.

A connection has been found between the teacher's capability and the size of the group. Gibson and Dembo developed the TES (Teacher Efficacy Scale), a tool to measure their capability and efficiency. They found that highly capable teachers devoted about half of the time that less capable teachers devoted to working with a small group (Gibson & Dembo, 1984) because a less capable teacher is more likely to be distracted by disturbances during the lesson, he/she is less able to communicate directly with the students and eventually, he/she loses the students' interest and they begin to be preoccupied with other things. Their findings were found to correspond to what Bandura had termed outcome expectancy.

On the other hand, a highly capable teacher is unafraid of working with a large group: they are relaxed and flexible, keep the students focused, answer more of the students' questions, and orientate the students towards individual work and thus, the students are more task-focused during the entire lesson (Achilles, 2005).

The extent of the influence of the number of students in the learning group on their scholastic achievements has been examined (Achilles, 2005). The findings show that learning groups of 20-30 students attained higher achievements than learning groups of 30 and more students. The effect of an increase in scholastic achievements appeared principally in groups of students from weak socio-economic levels. On the other hand, there were students whose scholastic achievements did not change following a reduction in the size of the group. In an examination of 4th to 8th grade students in 18 countries, with the exception of two countries, no significant influences of small groups were found on the students' achievements (Wößmann & West, 2002). In the two exceptional cases, it was found that the influence of small groups on the students' achievements was a result of the interaction that existed between the quality of instruction and the size of the classroom. The size of the learning group was found to be a significant and important variable in every learning process.

However, from this study, it is evident that this variable alone is not enough to affect the outcomes in the domains of achievement and social behaviour.

The 'TBWY' program was designed to provide a solution to the problem of large class size, extreme heterogeneity and student-perceived dissatisfaction and differential achievement.

It was anticipated that the division of students into smaller groups with varied teaching methods would provide autonomy for students, who would be able to choose the mode of

instruction that best suited them. This perception of autonomy would then lead to greater achievement in terms of academic success with an accompanying increased sense of self-esteem.

In terms of the teachers, it was assumed that there would be a corresponding sense of autonomy accompanied by an increased sense of capability in terms of their relationship with their students.

2.8.2 Organizing the teaching environment into groups

In recent years, the group process has also been studied through the qualitative research method (Katz & Kahanov, 1990), which has shifted attention to group processes in learning that occur during the sessions. Typical characteristics repeat themselves in the context of an inter-group encounter: tension between the internal reality in the group and the external reality, between the desire to conduct a discussion on the interpersonal level and to conduct a discussion on the group level, and power struggles between individuals seeking to determine the group's agenda, in parallel with the development process which the groups go through (Maoz, Steinberg, Bar-On & Fakhereldeen, 2002). Even if the group has few structural limitations, it will still develop into a microcosm of the people who participate in it. After a while, the members of the group begin to be themselves. Their negative social behaviour patterns will draw the group's attention to them (Yalom & Leszcz, 2005). In the context of the present study, the concept of the nature and size of the "homeroom" in the school in the traditional format of its size and character presents dilemmas that arouse disputes among social psychology researchers and educators in relation to social cohesion and nurturing equal opportunities.

Some early experimental research studies in social psychology that were conducted by (Triplett, 1898) examined the "group's" influence on the individual's tasks. There is an assumption that the group's composition and character influence scholastic achievements. This assumption is based on a theoretical analysis of educational and social-psychological processes.

Researchers (Resh & Dar, 2000) claim that these processes shape the student's learning-social environment and in relation to the level of the group's composition, the learning influences the student's behaviour and his/her scholastic and moral achievements

On the other hand, in individual research in the field of psychology, the assumption is the opposite: cognitive processes occur within individuals more than between individuals. In a study that was done in Israel on the subject of classroom intervention in order to

improve the classroom climate (Schechtman, 1993), an increase was found in the level of involvement and in the group's cohesion in the classroom as a result of the intervention which focused on group processes in the classroom. The processes included discussions and activities designed to increase student awareness.

The assumption was that, in a group in which there is a positive social climate, there will be a good chance of developing a student's personality that suits life in a democratic society (Talshir, 2005) and of developing in the student's personality personal characteristics of initiative, responsibility, social involvement, ability to stand up for his/her rights, ability to make decisions and an internal locus of control. Although their findings are as yet inconclusive, Kaplan and Assor (2012) assert that autonomy-supportive dialogue in the classroom enhances students' positive feelings and feelings of well-being in the classroom.

From these studies, it appears that a positive climate increases students' self-esteem and promotes their scholastic performance. The assumption is that in groups that have a competitive climate of hostility and estrangement, there will be an atmosphere of anxiety and discomfort and the scholastic development of many of the students in the group will not be possible. On the other hand, in groups in which there is mutual support between the students and between the teacher and the students, it is possible to discern a change that has led to the development of students' self-esteem and a sense of security. In addition, the group feels a personal responsibility, readiness to be involved, and an intensification of the sense of belonging (Watson, 1966).

2.8.3 Student perspectives on learning

An individual's sense of self-efficacy is defined as the extent of his/her belief in his/her ability to perform the behaviours required in order to attain what he/she considers to be the desired results (Bandura, Adams & Beyer, 1997; Deci & Ryan, 1991). A sense of efficacy comes from the student's desire to feel effective. A sense of self-efficacy can be connected to a sense of competence (Skinner, Wellborn & Connell, 1990) through contingency knowledge, i.e., the factors that bring about the student's successes are his capacity beliefs, enactive mastery experience and direct strength with no mediating factors, instilling in the student a belief that success factors can be developed through practice and training.

The educational environment plays a significant part in bringing the student to believe in his personal abilities in order to create a sense of competence and efficacy (Ryan & Deci, 2000).

A student's sense of efficacy develops as a result of their past experiences, observing others who are like them, and observing the behaviour of other people who cope with tasks and succeed.

A connection to self-capability was found among students from groups of various ages and genders in a wide range of adaptive, educational results, such as high levels of effort and persistence in the performance of exacting tasks, in both experimental and correlational research (Pintrich & Schunk, 2002). It was found that high self-capability at the age of 13 was positively related to higher marks in high school and negatively to a low probability of dropping out of school (Caprara *et al*, 2008). In addition, the feeling of capability of high-school students was found to be positively related to involvement in the process of learning (Caraway, Tucker, Reinke & Hall, 2003). It was found that students who value themselves in a more positive light have high self-capability and succeed in their academic performance, and there is a higher probability of better study performance in comparison to others who lack these characteristics. These students frequently tend to assess their control of varied areas of learning better, such as their ability to regulate their motivation and learning activity (Di Giunta *et al*, 2013). It was found that there is a positive relationship between the beliefs of the students who are capable of regulating their learning and their academic accomplishments (Pajares & Urdan, 2005). The research findings demonstrate that if a child perceives his/her learning capabilities in a more positive light, the more he/she will invest in learning and thus, the higher will be his/her learning achievements (Marek, 2007). On the other hand, in a study conducted among students at risk of dropping out who were participating in the "Towards Matriculation" program, it was found that the perception of low capability of the student, like low achievements and poor attendance at school, are significant variables in predicting 'dropout' from the learning framework (Cohen, Ellenbogen-Frankovits & Reinfeld, 2001). In addition, the relationship between failure in final examinations in tenth grade and subsequent grades in the school was examined, as well as educational involvement and the feeling of belonging to the school (Benner, 2013). It was found that failure in the final exams led to poor academic performance, lack of academic involvement and a feeling of a lack of belonging. It is possible that failure leads to a student feeling that he/she is not capable of meeting academic requirements, which will

lead to difficulties in studying and detachment from the school (Benner, 2013). Furthermore, it is possible that failure in the final examination leads to a lowering of the level of expectations of the teachers and the subsequent behaviour, which follows in its wake, is like a self-fulfilling prophecy and leads to poor academic performance (Jussim & Harber, 2005). Self-capability has a predictive influence in the school context with an improvement in academic performance, and as a consequence it is likely to be a goal of any intervention program to improve performance by raising the level of self-capability (Lane, Lane & Kyprianou, 2004).

The sense of competence is the central factor in motivation, through which growth can be achieved (Ryan & Deci, 2000). Many students never experience success and consequently at a certain stage they stop believing in their abilities and they develop a sense of frustration and despair and eventually, a negative self-image relative to others. Intensification of the sense of competence is according to the extent to which the learning tasks and the social climate that characterizes them are perceived by the student as capable of satisfying his/her needs or alternatively, of repressing his/her motivation.

The experience of repeated failure also harms the sense of capability. When this happens, it will cause the student to recoil from performing the task again or alternatively, they will perform the task with low motivation (Ryan & Deci, 2000). Frustration of needs by the environment will lead to behaviours such as avoidance, passivity, opposition, aggression and concession. There is a connection between internal processes through which the student shapes his opinions and perceptions in the classroom that are connected to each of the needs and his investment and his scholastic and social behaviour in the classroom (Kaplan & Danino, 2002).

When psychological needs are satisfied, they will positively affect self-processes such as the willingness to experiment with new learning skills and strategies and investment in them, social adaptation and feelings connected to the student's well-being. Pronounced differences can be discerned between the teachers' and the students' perceptions in relation to preliminary learning processes in the classroom (Kaplan, Assor, Orenstien, and Shtarkman, 2000). It has been found that students' reports regarding support by teachers of the three basic needs – belonging and security, capability and autonomy – predict achievements (Assor & Kaplan, 2001; Assor, Kaplan & Roth, 2001).

2.8.4 Teachers' perceptions of accountability and responsibility for student achievement

Teachers in Israel perceive their sense of professional responsibility or efficacy as composed of three dimensions: their ability to increase students' achievements in learning, their ability to promote the students in the emotional domain and their ability to promote the students in the moral domain. However, the teacher's concept of personal capability often goes beyond the classroom, into the domain of relationships and in decision-making processes in the school (Spillane, 2004).

The teacher's sense that he/she can affect the students without relating to possible independent difficulties, environmental difficulties or the students' personal difficulties and to take responsibility for success or failure is defined as the extent to which the teacher believes he has the ability to affect the students' achievements (Bernett, 2003) and "the teacher's sense of personal power" or belief that he/she can affect students' behaviour in the classroom and their learning processes (Turner, Christensen & Meyer, 2009).

Another aspect is the teacher's belief in their internal conviction, defined as internal motivation. Responsibility for success is expressed by the sense of general capability in the teaching profession (Goddard, Sweetland & Hoy, 2000). A mechanism promoting learning and motivation among the students must be created. The characteristics of teachers who are considered to be "effective" are their assimilation of goals, beliefs, stances and motivational thinking patterns into their students. These characteristics contribute to a high level of involvement in learning and self-directed learning (Kaplan & Assor, 2001) or an "academic self-concept", and motivation is a product of the entire education process and high achievements of students result from their teachers' greater commitment. On the other hand, teachers who worked in schools with a history of low achievements reported a low perception of the effectiveness of their instruction (Moore & Esselman, 1992). The teacher's perception of the climate, on the one hand, and his/her beliefs on the other hand have a significant influence on his/her behaviour, being dependent on external and internal factors, both of which influence the teacher's behaviour and the extent of the students' success (Stanovich & Jordan, 2002).

Teachers in schools that provide a great deal of assistance to the students have a strong sense of efficacy and they sense a great deal of responsibility for the students' achievements. According to statistics in Ontario (Fullan & Knight, 2011) literacy and numeracy increased by 14% across elementary schools and high school graduation rate

rose from 68 to 81%. This was achieved by "coaches", who together with school principals worked closely with pupils to improve their performance. In schools that do not provide assistance to the students, and where the level of achievements is low, the teachers expect little from their students. From the teacher's point of view, responsibility for the student's success or failure depends on other factors and not on the teacher. Teachers who agreed with the statement, "*If I work really hard, I will be able to reach students who are having difficulties and who lack motivation*", were expressing their belief in their personal talents in spite of external obstacles.

Self-efficacy is a concept derived from Bandura's social learning theory (Bandura, 1986). This can evaluate the extent of teachers' feelings when considering their professional ability, according to the extent of the students' performance.

The teacher efficacy scale, (Gibson & Dembo, 1984) composed of 30 items, reflects the two-dimensional construct of this concept and focuses on the teacher's ability to encourage students' achievements. The teacher efficacy scale was also constructed according to the teacher's ability to maintain good interpersonal relations with other staff in the school and his/her perceived ability to affect what occurs in the school. In the scale, there is a distinction between the teacher's sense of self-efficacy, which includes the teacher's responsibility for failure and success and the teacher's sense of the general efficacy of teaching as a profession.

An additional aspect of the sense of efficacy is seen from the "collectivism" of the teacher (Bandura *et al.*, 1977), i.e. teachers' beliefs about the ability of the school in which they work to promote the students' achievements.

- The task domain deals with the teachers' ability to promote students' achievements and includes command of knowledge, planning and performing the lesson and the teacher's ability to maintain relationships with the students (Friedman & Kass, 2001). In the task domain, studies can be classified according to various categories: a connection with the students' achievements, coping with students who are experiencing difficulties in school, the content that the teacher is required to teach, teaching methods and particularly cooperative instruction and the ability to use innovative means in instruction, the size of the classroom, and the effect of intervention programs in professional learning.
- The interpersonal relationships domain deals with the teacher's ability to affect others in his professional environment.

- The organization domain deals with decisions within the organization and the extent of the teacher's ability to connect to and derive strength from the organization.

The premise is that a teacher can improve his/her students' performance by influencing them, by their ability to maintain good relationships with them and his/her ability to influence the decision-making processing (Friedman & Kass, 2001). It was found that high self-capability is connected to three aspects: the first relates to teachers' perceptions in the classroom. It was found that self-capability is connected to teachers' perceptions to varied approaches to the students (Woolfolk-Hoy & Burke-Spero, 2005), to the ways of increasing their students' autonomy, to spending more time in instruction itself, and less in controlling discipline and order (Onafowora, 2004). The second relates to teaching methods; it was found that high self-capability is connected to the meticulousness of the teacher in inculcating new teaching methods (Friedman & Kass, 2001), to a positive school climate (Chong, Klassen, Huan, Wong & Kates, 2010) and to a high commitment of the teacher to the teaching profession (Milner, 2002). According to the third aspect, which refers to the effect on student behaviour, it was found that high self-capability is connected to a low degree of criticism by teachers of students and the inclination of teachers to assist students with behavioural difficulties (Poulou & Norwich, 2002), and by maintaining a high level of diligence in learning (Good & Brophy, 2003).

One of the important predictors of the relationships between students and special teachers is sensitive behaviour on the part of the teachers, when that sensitivity is reflected in their awareness of the educational and emotional needs of their students. Accordingly, a sensitive and responsible teacher is a teacher who consistently provides support and encouragement, who is aware of emotional distress of students and reacts responsibly to students' difficulties in lessons. When teachers are sensitive, it is apparent that the students feel comfortable with the support and guidance of their teachers. Therefore, the students participate in the lessons freely and do not fear mistaken or erroneous assertions in the learning process (Pianta, LaParo & Hamre, 2009).

A meaningful emotional tie with the teacher can also be a support for children who are potentially at risk, for example, as in the case of students who come from a low socioeconomic social background or students who begin school relatively unprepared, or with emotional or cognitive difficulties. Thus, for example, it was found that in classes where emotional support was high, the differences in achievements between the

normatively developing students and the students suffering from difficulties in adapting diminished (Hamre & Pianta, 2005).

Direct interaction by the teacher with his/her student can be significant in several aspects: from the personal aspect – studies show that the teacher-student relationship contributes to the student's self-esteem (Schnarch, 2015). From the social aspect – support and guidance for the student in his/her relationships with his/her friends in the class, by helping him/her avoid harmful relationships leads to more success in the social arena. The teaching aspect – reflected in the encouragement for the student to perform tasks within the school framework. It was also found that non-meaningful relationships between teacher and student can lead to avoidance of commitment to performance of tasks (Aloni, 2014). The teacher's commitment and responsibility for the student's welfare affects the student's feelings and functioning in the learning process. Research by Archambault, Janosz and Chouinard (2012) demonstrates that support by teachers for students is connected to their feeling of ability and, consequently, for persistence in teaching tasks and improvement of the academic achievements of the students. Moreover, empirical findings (Skinner, Kindermann, Connell & Wellborn, 2009) show that students are sensitive to their teachers' responses and commitment to their success or failure, their capability, and to the commitment of the students to the learning process (Patrick, Turner, Meyer, Midgley, 2003).

Assessment of grades also helps a student understand his/her ability and helps them improve. Thus, even if a student has no good grades, from an academic point of view, he/she will feel the need for improvement of achievements and internalize that he/she is not perceived as a failure, but as a person with ability which will help him/her to improve his/her accomplishments (Lavigne, Vallerrand & Miquelon, 2007).

2.8.5 "TBWY" refers to other current programs

Other current programs whose aims resonate with those of the "TBWY" initiative

The United Nations' Declaration of Human Rights supports educational initiatives for all age ranges and education, encourages a strong commitment between member states whose programs and methodologies embrace education for Human Rights, which are reflected in all areas of education, both formal and informal. The Universal Declaration of Human Rights was ratified by the United Nations General Assembly on December 19, 2011. The Declaration provides in Article 1: *"Everyone has the right to know, seek and*

receive information about all human rights and fundamental freedoms and should have access to human rights, education and training." (Human Rights Council, 2011).

The Human Rights Friendly Schools Project sets out to empower young people and encourage active participation of all members of the school community, integrating them in the realization of human rights values and principles into all areas of school life. The Human Rights Friendly Schools Project is a global educational project of Amnesty International aimed at all schools throughout the world. The project encourages and supports the development of the global culture of human rights by empowering students and teachers around the world to create communities of friendly schools for human rights. The project goes beyond the borders of the classroom outside of the community, attempting to change the way in which people think, thus encouraging the community to take an active part in dealing with human rights problems. The project is based on the belief that by spreading knowledge and changing opinions and behaviours amongst the communities as a whole this will change the global culture in the context of human rights. On a practical level, the project is reflected in the empowerment of individuals and communities when they are equipped with knowledge, opinions, values and skills by which they are able to realize their rights and to respect and honour the rights of others.

Education for human rights involves:

Knowledge and understanding of the principles and values upon which the norms of human rights are based; teaching and learning to enable the realisation of rights in everyday life and to empower people to enjoy and to realise their rights in order to respect and honour the rights of others.

The Human Rights Friendly Schools promote the following:

- Knowledge and understanding of the principles and values upon which the norms of human rights are based.
- Teaching and learning to enable the realisation of rights in everyday life and to empower people to enjoy and to realise their rights in order to respect and honour the rights of others.

The Human Rights Friendly Schools promote the following:

- An atmosphere of equal rights, non-discrimination, inclusion, respect, partnership, a democratic approach, full participation of all communities within the school, with all members of the school community being involved in the decisions that affect the running of the school.

- Significant empowerment of students, teachers and team members with partnership in the creation and implementation of working methods in the school.
- Increasing the feeling of mutual inclusion which nurtures local and global mutual agreement and solidarity.
- Involvement of students in discussions on human rights and social change.
- Educational and experiential wealth in and out of the classroom.
- A "whole-school" approach which combines human rights within the areas of life in the school.
- Learning processes and teaching methods which aim to create a culture of equal rights.
- Increasing awareness of students of social issues, as well as the development of leadership skills and partnership in school policy and activity.
- Cooperation between teachers and students.
- The acquisition of enhanced skills for discussion while finding innovative ways of defending local and global human rights.
- The creation of a feeling of belonging and responsibility for increasing growth within the school.
- Transparency and responsibilities for improving relationships between members of the community and between teachers and students.
- Respect, cooperation and acceptance of the other, resulting in less violence and bullying.
- The creation of safer and more appropriate places to learn, particularly for marginalised students from distressed backgrounds.

A modern school, Summerhill (Reichert, 2012) was founded in 1921 in Leiston, Suffolk, England by A.S. Neill. "In Summerhill, we do not force any child to go to lessons. We believe in learning out of choice." (Pallas, Entwisle, Alexander & Stluka, 1994), and indeed, the teaching in Summerhill is based on student choice. At the beginning of each term, every student can choose how many lessons he/she wishes to attend out of the program which is offered to him/her. There are ordinary lessons in Summerhill, such as geography, and history, and less common subjects, such as music and Tai Chi. The morning is intended for ordinary lessons, and the afternoon is designated for what in Israel is called "groups - chugim". Apart from the lessons, centres operate in the school, such as the center for plastic arts, carpentry, a computer room and a music room, which are offered as the students' free activity. The ordinary lessons are usually frontal, although the atmosphere within them is free and flowing. A teacher begins on a topic, for example,

a grammatical question, and allows the lesson to develop according to the students' responses. In mathematics, for example, everyone works separately, at his/her own rate. French is studied almost alone. Most of the students come to about half of the lessons, which prompted Neill to write *"The children can go to class or not for years according to their age, but sometimes also according to what interests them."* Neill claims that the children's happiness and welfare is dependent on the approval and love which significant adults give them. *"We have to be on the side of the child."* Being on the side of the child means to give him/her love, not just possessive love, but emotional love, interact with the child in such a way that he/she feels that he/she is loved and is given approval. Neill describes the "private lessons" which he gave to the Summerhill students; *"There were times when most of my work was not teaching, but giving private lessons."* Most of the children needed psychological attention, but always, there were some children, as there are now, who came from other schools, and the private lessons were intended to help them adjust to their freedom. If the children were full of internal difficulties, they would not be able to adapt themselves to a life of freedom. The private conversations were informal fireside conversations. Primary schools in Finland have also made a significant improvement in the area of human rights in the schools. Timetables were mainly built up on a personal learning program; each student advanced at his own rate in accordance with the modular structure and built his/her own study plan which comprised various courses and various subjects according to his/her personal choices and preferences (OECD, 2011).

The teacher can choose the teaching method which is appropriate to him/her in the implementation of the objectives of the national study program. The study programs provide instructions as to how to select the appropriate method for everybody. In addition to the generally accepted frontal teaching mode, there are several more progressive methods within the student him/herself; for example, the teacher can stimulate discussion on a certain subject and the students can then carry out investigative tasks in order to learn about various topics independently, in study teams or in a group. In some areas the students prepare presentations, games or demonstrate separately or in a group on the basis of their personal research (Bronkhorst, 2007). The teachers are charged with the responsibility of managing the classroom and exercising professional judgment, adapting teaching methods and styles in such a way that will provide a solution for the groups of students in the class and will enable them to succeed in their studies and achieve their full potential (OECD, 2012). The National Study Plan represents a rubric by which educators

and teachers are granted latitude and autonomy to interpret and build the specific study program which is appropriate for their class and the lessons being studied. The teachers may choose the study books and other ancillary tools and they can design a rich learning environment within their class, which is adapted to the needs of the children, to their areas of interest and learning styles. Since the construction of the study plan takes time, in some schools a study plan development process is carried out in conjunction with working teams of a number of teachers, while in small schools responsibility falls mainly on each individual teacher (OECD, 2011). In Finland the greater the equal opportunities the more successful the school is considered. A school will be considered to have high achievements if all the students therein achieve high performances in relation to what would be expected from them in consideration of their cultural and socioeconomic-economic background. Alternatively, in Finland the absence of equality in the educational timetable signifies a school's failure to reflect the creative and cognitive potential of its students (Sahlberg, 2012). The teachers learn to detect learning and emotional difficulties as part of their university training and receive training in the development of individualized, adapted study programs, each student according to his/her needs and skills. Teachers have a wide autonomy in the design of study programs.

3. Structure and principles of the "TBWY" program

3.1 Theory and practice

Translating an educational theory into practice is a complex and challenging process, which often results in many theories which remain without practical implementation and which are not reflected in classrooms, schools, and in the educational system (Lieberman, 2000).

The "TBWY" reform program was built on the principle of "equal opportunity in education" (Southerland, 2013). The program is based on the pedagogic aspect, as well as on the mental welfare and growth of the students. The first part of the introduction to the chapter will outline the structure of the learning process pedagogically, while the second part of the structure of the program is from the aspect of the mental welfare of the students.

The pedagogic aspect of the reform "TBWY" program is structured by homogeneous learning groups, which take into account the differences between the students (BenPeretz & Shulman, 2014). The school divides the total number of students arriving at its gates

into homogenous learning groups with approximately 27 students in each group according to relevant learning attributes. For example, mental and general cognitive abilities and cognitive flexibility, reflectivity, degree of impulsiveness, cognitive style and personal variables of the students related to the way in which the individual perceives, organizes and stores information and solves problems. For example, learning style – the way in which the individual perceives and processes information in various learning situations. Personal characteristics – the individual's ability to cope with frustration and uncertainty, the individual's changing motivation – risk-taking and prior knowledge, educational achievements – channels of mediation in learning and educational gaps (Fullan, 2011). The relevant qualities for learning with the students were examined over a long period, even in middle school, before the transition of the students to high school. The information was passed from the middle school to the teaching staff, of the high school, in order to construct the preliminary homogeneous learning groups. The teachers were assigned to the various homogeneous learning groups, adapting their time-tables according to the method of instruction, teaching practices, learning mediation practices and test-taking practices according to the characteristics of homogeneity (Chen, Hwang, Yeh & Lin, 2012).

Approximately 220 students in each age group (10th, 11th, 12th grades) study the core subjects: literature, civics, language (Hebrew), history, as well as mathematics and English, which are studied according to study units (3, 4, and 5 study units). In addition to these subjects, the students choose at least one subject major, as well as up to two additional chosen subjects.

Each age group is divided into two blocks. In each block, there are 110 students. In each of the blocks, all of the core subjects are studied, each core subject is studied in four different homogeneous learning groups simultaneously. Within each homogeneous learning group, there are about 27 students. History, for example, one of the core subjects, is studied in four different learning groups simultaneously, with different teachers (Chen, Hwang, Yeh & Lin, 2012) using methods and teaching practices adapted to the learning group. Methods of test-taking are adapted to the group's characteristics and the rate of learning varies from group to group, by means of allocation of resource hours per subject, which also varies differentially according to the characteristics of the homogeneous learning group (Osher, Dwyer, Jimerson & Brown, 2012).

The feeling of autonomy (Park *et al.*, 2012) is a central component of the "TBWY" program, both among the teachers and in what is provided for the students. Autonomy for the students is reflected in "hearing the voice" of the students, both in the degree of personal feeling of the students to adaptation and their belonging to the learning group. This is in order to create conditions where a feeling of capability is felt, as well as a feeling of confidence and developmental growth, taking into account the predictors of social functioning, such as acceptance in peer groups (Oberle & Schonert-Reichl, 2013) and social belonging. This in turn can create an environment with a teaching aspect which reflects reinforcement of the sense of confidence, strengthening capability and the sense of belonging, parameters which are likely to increase the motivation of the students as well as increase their investment in studies over time (Yeager, Walton & Cohen, 2013). The program enables them to have a controlled transition from one homogeneous learning group to another homogeneous learning group, which is learning simultaneously. The method of instruction and ways of teaching (Weis, 2010) vary from group to group and the students are able to try another group, and subsequently ask to transfer to a group, which better suits them. The transition process is controlled and requires a process of approval by the teacher of the subject, coordinator of the year and the personal moderator.

The second part of the program is based on the mental well-being and growth of the students. At a practical level, all traditional parent classes are broken up, those with a class of 36 to 40 students in a class. Each age group is divided into instruction groups of 15-17 students: each instruction group has a group moderator (there is no relationship between the characteristics of the instruction group to the learning groups and the students are not necessarily placed in the same groups). In the age group, which numbered around 220 students, as in our case, two blocks (groups) were created of 110 students, which account for between seven and eight instruction groups.

In each instruction, group students are assigned according to the following characteristics: interests, friendship, hobbies, choice of similar subjects or simply the desire to be together with friends.

The social psychology on which the "TBWY" program is based believes that the individual is an integral part of a larger social unit, such as the community, family and work circle. The moderator of the instruction group is crucial in building the mental well-being of the students (Noddings, 2013) in accordance with the needs of the students in the

group, such as the location and focus of problems with the individual and the group, the recognition of situations created in the process and help in understanding the interaction in the instruction group. The moderator is attentive to the students and creates a dialogue between him/her and the group and between the group and each student (Kossmann, 2012). The moderator introduces the student to the group, which provides a stage for the feelings of the individual and for his/her development within the broad instruction group and as a part thereof. The 'well-being' theory supports the view that a positive collective climate will have a good effect on the study (educational) achievements of the student (Noguera, 2010).

The range of instruction methods which the group moderator learns places an emphasis on the student's understanding from various angles and the creation of an opportunity for personal growth and a change from within personal choice. The moderator is aware of the academic and emotional requirements of the students, responds to them accordingly, and encourages personal expression (Hamre & Planta, 2005). Here, too, autonomy is provided for the students in the changing between instruction groups. A transition from one instruction group to another instruction group is controlled and requires approval, where the support of the moderators for the students is likely to provide the students with personal resources and social capital necessary for them to succeed in their studies and to cope with academic challenges (Osher *et al*, 2012). For this purpose, the instruction group meets twice a week for an hour, at the beginning and at the end of the week. In addition, personal follow-up meetings are held between the moderator and the student. The meeting is built upon the student's personal requirements, the building of a personal work program, the placement of short-term and long-term goals and the creation of the student's commitment and personal social contribution to the group, to the school and to the community.

Educational approaches, traditional and progressive, are fundamentally distinct in education. For example- in the setting of objectives, in education, in the role and place of teachers and pupils and their approach to teaching and learning, in the character of the curriculum, in the methods of instruction and evaluation, in the organization of the learning environment and in the pedagogical beliefs of the teaching staff (Reeve, Jang, Carrell, Jeon & Barch, 2014a), Progressive pedagogy is focused mainly on placing the pupil at the centre of the educational process. This is an approach that challenges existing cultural, social and educational arrangements and has emphasized educational relationships outside the classroom and school, including the complexity of the

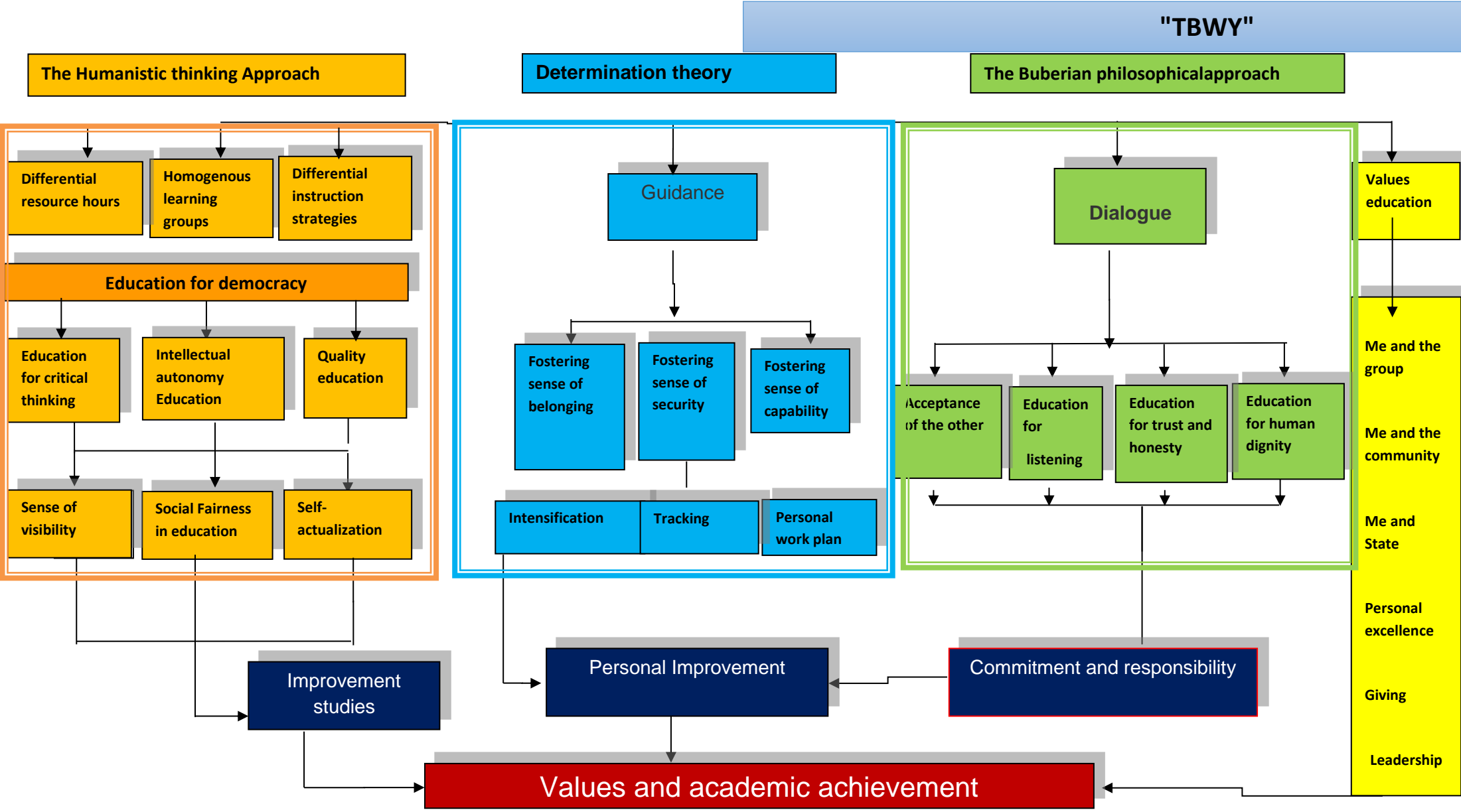
relationships between education and society. The assumption of the proponents of critical pedagogy is that social release is the basis for release of the individual, and with a change in the sources of power, a more just and egalitarian society will be created (Popkowitz & Lynn, 1999). According to critical pedagogy, it is desirable for teachers to be aware of the cultural and social influences on their activities and actions. The teachers must be aware of these influences and the criticism of them.

The core of educational practice, according to Elmore in City, Elmore, Fiarman and Lee (2009) is composed of teaching approaches and teachers' methods of instruction and the role of the pupil in the teaching-learning process. The practice also includes structural mechanisms within the school, for example: learning environments, physical conditions, and the responsibility of the teacher for study groups of pupils, teacher-pupil relationships, interest groups and management personnel. Pedagogic practice may be examined from two angles:

- a. The desired practice in the educational system in a post-modern era
- b. The practice currently adopted in schools.

The use of "authenticity" emphasizes the relevance of regular learning and stresses preparation of the pupil for life. The use of the term "authenticity" points to a trend which examines the extent of the closeness of all educational processes to "real dimensions" in culture, in the community and on a personal plane (Hamo & Yehoshua, 2000). Teachers, also, have an important place in realizing the notion of "equality of opportunities", thus weakening the forces dividing population groups. According to Ben-Peretz (2000), teachers become servants of the economy and testers of achievement, while the humanistic-moral aspects lose their validity in everything connected to their role as teachers. Nodding (2014) claims that nowadays educators neglect the true aspects of education and rather than produce morally competent individuals who are intellectually curious, they churn out students whose prime aim is a place in a good college and a well-paid job in the future.

Diagram 2: The "TBWY" Reform Program - Theory into Practice



3.1.1 The research

Although learning and teaching depend upon the student's capacity to learn and the teacher's capacity to teach, cognitive factors alone cannot sufficiently explain the success and failure of most students and teachers (Becker & Luthar, 2002).

Clearly, for students to be able to learn, they must possess cognitive and linguistic skills, and obviously, for teachers to teach effectively, they must master the subject matter as well as appropriate pedagogies. Still, powerful social and emotional factors influence learning and teaching. Students need to be able to attend to learning, which will not happen when they experience stress that can make them less receptive to instruction.

Teachers need to connect with student interests and find the right balance of challenge and support for every student, what has been called personalization.

In effective schools, teachers believe that all students can learn, that teachers can teach students, and that teachers are collectively accountable for student success (Murphy, Beck, Crawford, Hodges & McGaughy, 2002).

The research seeks to test a model which deals with equality of opportunities (Fullan, 2011) in education. The research seeks to test the impact of teachers and teaching styles in the school, the change in the students' personal feelings in their self-confidence, the capability, belonging and autonomy, their behavioural norms, their sense of visibility, the school's optimal climate and ultimately, their scholastic achievements in school and the programs' influence on teachers' accountability and responsibility (Chen, Hwang, Yeh, & Lin, 2012) for cases of success and failure among students.

3.2 Pilot Study: A partial trial of the "TBWY" reform program in the 12th grade

Prior to the birth of the "TBWY" reform program, a limited pilot program was carried out in a number of 12th grade classrooms.

The students who took part in the experiment were tested in Year 12, at the beginning of the academic year. Before initiating the reform, and at the end of the year, they answered the educational questionnaires. The total number of students in the year was 244, 115 of whom took part at the start of the experiment and 154 who completed the process.

Heterogeneous classrooms were dismantled into homogeneous groups learning Hebrew grammar and composition, Bible studies, civics and literature. Differential resources were allocated to the subjects and differential instruction was fitted to the groups. In addition, a

preliminary explorative study was carried out, in which the characteristics of the group climate, cooperation, interpersonal affinity, leadership, group cohesion, competition and hostility between students were examined. A comparison was made between the groups of students who learned in the regular traditional format in homerooms and groups of students who learned in the format of "guided group". The questionnaires used to measure changes were based on other studies, by Walberg and Anderson (1968) on the subject of the influence on the classroom climate and individual learning and a study by Iluz (1999).

3.2.1 The pilot study's hypotheses

1. There would be an improvement in the optimal climate of small learning groups in contrast to the traditional homerooms. This would be reflected in a decrease in bullying and violence with a corresponding increase in student motivation and attitude (Laufer & Har-El, 2003).
2. There would be an improvement in group cohesion in comparison with traditional homerooms groups. This would be reflected in an increased willingness of students to help each other with a decrease in violence and bullying.
3. The hostility between the students in the "guided group" would be reduced in comparison with students in the traditional homerooms.

3.2.2 The purpose of the pilot study

To describe the level of the group's perception of the social climate according to three dimensions:

- A climate of cooperation as opposed to a competitive climate
- Cohesion and interpersonal affinity as opposed to hostility and rejection
- Leadership concentration and the group's influence

3.2.3 Questionnaire: Type of questions pilot program

The questions were 30 closed-ended items, 12 of which examined cooperation, 11 the answers, were on a scale of 1 to 5.

3.2.4 Distribution of the questionnaire

The questionnaire was distributed to the 12 grade "guided group" before the pilot program and after the pilot program, at the end of the year.

3.2.5 The research pilot conditions

- The age group
- Identical learning site
- Common organization culture
- The same teachers in the same age level
- Identical code of ethics and procedures

The students filled in the questionnaires, which assessed their perceptions of the characteristics of the 12-grade instructors who were in the pilot program as opposed to the characteristics of the 12 grade educators, who were not in the pilot program before the pilot program. The findings of the pilot show that the teaching approaches chosen as the basis for the program were implemented on the practical level, and that they reflected the amount of time the instructor paid attention to and listened to each student in the group; the focused emotional response, the intensity of communication, the communication between the instructor and the parents, the support and follow-up in the scholastic domain and in the extent of the "guided group" general satisfaction.

3.2.6 The analysis and findings of the Pilot Study

The research was then carried out using a similar format, which is explained in this report. The characteristics of the group in terms of cooperation, interpersonal affinity, leadership, group cohesion, competition and hostility between students were examined. The questionnaires were based on other studies, by Walberg and Anderson (1968) on the subject of the influence of atmosphere on classroom climate and individual learning and a study On Counselling Intervention for Consolidating Views against Violence among Students in School and the Influence of the Classroom Climate (Appendix 6).

Table 2 Student sample and teacher sample before and after the pilot

Before the pilot program 2006	After the pilot program 2009
The size of the student sample 12 th grade students Age 17-18 N =115	The size of the student sample 12 th grade students in 2006 Age 17-18 N =154

Table 3 Students' perception of a climate of cooperation as opposed to a competitive climate in the classroom before and after [shaded] the pilot program, average and standard deviations

Item	Before the pilot program Average (Standard deviation) (N= 115)	After the pilot program Average (Standard deviation) (N = 154)
Summary index :a climate of cooperation vs. a competitive climate	2.59 (0.55)	2.77 (0.93)
In my classroom, the students are considerate of each other.	3.20 (1.04)	2.89 (0.72)
I can depend on my classmates to give me help when I need it.	2.86 (1.18)	1.61 (0.80)
It's important to the students that the class will learn well and that it will progress with the material.	2.64 (1.14)	2.43 (0.97)
Every student in my classroom can say what he wants without the others mocking him.	2.30 (1.23)	2.45 (0.98)
In my classroom, the students help each other even without the teacher's intervention.	2.94 (1.10)	2.68 (0.91)
Most of the students in my classroom participate in social activities.	2.07 (1.13)	2.92 (0.92)
Most of the students in my classroom help keep the classroom clean.	1.53 (1.04)	2.96 (0.97)
In my classroom, the students understand and pardon the misbehaviour of other students.	1.85 (0.91)	3.28 (1.22)

Table 3.1.1 Students' perception of a climate of cooperation as opposed to a competitive climate in the classroom before the pilot program (N=115) and after [shaded] the pilot program (N = 154) in percentages

Item	Always	Often	Sometimes	Rarely	Never
In my classroom, the students are considerate of each other.	3.48%	33.04%	46.96%	13.04%	3.48%
	1.30%	26.62%	54.55%	16.23%	1.30%
I can depend on my classmates to give me help when I need it.	34.35%	20.87%	32.17%	4.78%	7.83%
	38.05%	29.61%	10.39%	10.95%	11.00%
It's important to the students that the class will learn well and that it will progress with the material.	15.65%	32.17%	34.78%	10.43%	6.96%
	20.78%	28.57%	38.96%	10.39%	1.30%
Every student in my classroom can say what he wants without the others mocking him.	26.09%	26.96%	25.22%	16.52%	5.22%
	18.18%	35.06%	31.82%	13.64%	1.30%
In my classroom, the students help each other even without the teacher's intervention.	10.43%	25.22%	31.30%	26.09%	6.96%
	10.39%	29.87%	42.21%	16.23%	1.30%
Most of the students in my classroom participate in social activities.	39.13%	26.96%	20.00%	12.17%	1.74%
	42.86%	29.22%	18.83%	3.9%	5.19%
Most of the students in my classroom Help to keep the classroom clean.	51.30%	26.52%	0.87%	12.61%	8.70%
	41.56%	26.62%	20.13%	8.44%	3.25%

In my classroom, the students understand and pardon the misbehaviour of other students.	20.61%	36.52%	0.87%	25.22%	16.78%
	27.27%	20.78%	24.68%	19.48%	7.79%

This dimension was expressed, for example, in the students' belief that the students in the classroom cared about each other. On the one hand, the students actually perceived that the degree of consideration and mutual help among them was higher before the implementation of the program (See averages and standard deviations for statements 2 in Table 3 (before the pilot the average=3.2, after the pilot the average=2.89), before the pilot (Table 3.1.1, Always, Often and Sometimes=83.48%) and after the pilot (Table 3.1.1, Always, Often and Sometimes=82.47%); for statements 3 in Table 3 (before the pilot the average=2.86, after the pilot the average=1.61), before the pilot (Table 3.1.1, Always, Often and Sometimes=87.39%) and after the pilot table 3.1.1 (Always, Often and Sometimes=78.05%). On the other hand, 90.91% of the students, after the pilot (Table 3.1.1, Always, Often and Sometimes), compared with 86.09%, before the pilot (Always, Often and Sometimes), think that following the implementation of the program, there was more participation in social activities. In Table 3 (before the pilot the average=2.07, after the pilot the average=2.92), as well 88.31% of the students, after the pilot (Table 3.1.1, Always, Often and Sometimes), compared with 78.69% before the pilot (Always, Often and Sometimes), think that following the implementation of the program, most of the students in the classroom help to keep the classroom clean; in Table 3 (before the pilot the average=1.53, after the pilot the average=2.96), and 72.73% of the students, after the pilot Table 3.11 (Always, Often and Sometimes), compared with 58%, before the pilot (Always, Often and Sometimes), think that following the implementation of the program, there was more patience and understanding towards students who misbehave. In Table 3 (before the pilot the average=1.85, after the pilot the average=3.28). Nevertheless, it is important to note that the summary index is higher after the pilot than before the pilot (before the pilot the average=2.59, after the pilot the average=2.77). In general, cooperation between the students is higher and the competitive climate in the classroom is lower after the program.

Table 3.2 Students' perception of the leadership concentration and the classroom's influence before and after [shaded] the pilot program, average, standard deviations

Item	Before the the pilot program Average (Standard deviation) (N = 115)	After the the pilot program Average (Standard deviation) (N = 154)
Summary index: leadership concentration and the classroom's influence	3.10 (0.85)	2.33 (0.92)
The students in my classroom argue a lot with each other.	2.27 (0.93)	1.88 (0.94)
Some of the students in my classroom boast about a good grade when they get one.	3.31 (1.32)	3.05 (0.77)
Some of the students in my classroom always try to show that they are better.	3.38 (1.36)	2.26 (0.90)
The students in my classroom behave in a certain way so that others will like them.	3.17 (1.16)	1.80 (0.92)
There are students in my classroom who ridicule others.	3.71 (1.24)	2.35 (1.18)

Table 3.2.1 Students' perception of the leadership concentration and the classroom's influence before the pilot program (N=115) and after [shaded] the pilot program (N = 154) in percentages

Item	Always	Often	Sometimes	Rarely	Never
The students in my classroom argue a lot with each other	21.74%	40.87%	26.09%	1.30%	10.00%
	23.51%	31.17%	16.43%	1.95%	26.94%
Some of the students in my classroom boast about a good grade when they get one	13.04%	13.91%	24.35%	26.09%	22.61%
	1.95%	20.78%	10.65%	18.57	48.05
Some of the students in my classroom always try to show	15.43%	20.87%	26.52%	20.22%	16.96%

that they are better	13.38%	15.06%	23.77%	17.79%	30.00%
The students in my classroom behave in a certain way so that others will like them	6.96%	24.35%	27.83%	26.09%	14.78%
	1.3%	13.9%	23.99%	32,21%	28.60%
There are students in my classroom who ridicule others	6.09%	13.04%	34.78%	18.26%	27.83%
	6.19%	11.69%	24.68%	28.22%	29.22%

Table 3.2 relates to the degree of leadership and the influence of the classroom according to the students' perception before and after the pilot. Unlike the first dimension, the trend in this dimension is clear and indicates discernible differences in the students' perception following the implementation of the "TBWY" reform program. More specifically, the students thought that following the pilot program there were fewer quarrels; "The students in my classroom argue a lot with each other", before the pilot Table 3.2.1, (Always, Often and Sometimes=88.7%) and after the pilot Table 3.2.1 (Always, Often and Sometimes=71.11%). In Table 3.2 (before the pilot the average=2.27, after the pilot the average=1.88), and negative behaviour in the classroom such as bragging, "Some of the students in my classroom boast about a good grade when they get one", before the pilot Table 3.2.1, (Always, Often and Sometimes=51.3%) and after the pilot Table 3.2.1 (Always, Often and Sometimes=33.38%). In Table 3.2 (before the pilot the average=3.31, after the pilot the average=3.05), trying to look important, attracting attention and ridiculing other students, "Some of the students in my classroom always try to show that they are better", before the pilot Table 3.2.1, (Always, Often and Sometimes=62.82%) and after the pilot Table 3.2.1, (Always, Often and Sometimes=52.21%). In Table 3.2 (before the pilot the average=3.38, after the pilot the average=2.26), "The students in my classroom behave in a certain way so that others will like them", before the pilot Table 3.2.1, (Always, Often and Sometimes=59.14%) and after the pilot Table 3.2.1 (Always, Often and Sometimes=39.19%). In Table 3.2 (before the pilot the average=3.17, after the pilot the average=1.8), "There are students in my classroom who ridicule others", before the pilot Table 3.2.1, (Always, Often and Sometimes=53.91%) and after the pilot Table 3.2.1 (Always, Often and Sometimes=42.56%). In Table 3.2 (before the pilot the average=3.71, after the pilot the average=2.35).

Table 3.3 Students' perception of cohesion and interpersonal affinity vs. hostility and rejection in the classroom before (N=115) and after (N=154) [shaded] the pilot program, average, standard deviations

Item	Before the pilot program Average (Standard deviation) (N= 115)	After the pilot program Average (Standard deviation) (N= 154)
Summary index :cohesion and interpersonal affinity vs. hostility and rejection	1.89 (0.77)	2.77 (1.00)
I like most of the students in my class	1.80 (1.87)	2.81 (2.00)
There are no students in my classroom who don't have a friend in the classroom***	2.80 (2.11)	2.81 (1.78)
If I had the option, I would not transfer to another classroom***	1.90 (2.06)	2.94 (1.79)
The students in my class care if I come to school or not	1.50 (1.68)	2.49 (1.40)
I would like it if most my classmates got good grades	2.19 (2.25)	2.82 (1.54)

*** This statement appeared on the questionnaire in reverse phrasing and the phrasing was re-coded so that it would match the rest of the statements.

Table 3.3.1 Students' perception of cohesion and interpersonal affinity vs. hostility and rejection in the classroom before the pilot program (N=115) and after [shaded] the pilot program (N = 154) in percentages

Item	Always	Often	Sometimes	Rarely	Never
I like most of the students in my class	31.82%	13.64%	17.53%	17.53%	19.48%
	40.00%	25.22%	18.91%	9.57%	6.3%
There are no students in my classroom who don't have a friend in the classroom***	25.22%	13.91%	17.39%	9.57%	33.91%
	27.47%	14.94%	15.58%	18.18%	23.83%
If I had the option, I would not transfer to another classroom	14.78%	17.40%	14.78%	10.43%	42.61%
	27.28%	26.62%	18.83%	10.39%	16.88%
The students in my class care if I come to school or not	27.27%	24.68%	22.08%	16.23%	9.74%
	58.26%	18.26%	17.43%	2.83%	3.22%
I would like it if most my classmates got good grades	21.43%	20.78%	20.13%	18.18%	19.48%
	40.00%	20.00%	24.13%	6.09%	9.78%

*** This statement appeared on the questionnaire in reverse phrasing and the phrasing was re-coded so that it would match the rest of the statements.

Table 3.3 shows the students' perception of cohesion. Table 3.3 shows the students' perception of cohesion and interpersonal affinity as opposed to hostility and rejection in the classroom. Like the first dimension, "I like most of the students in my class", before the pilot Table 3.3.1, (Always, Often and Sometimes=62.99%) and after the pilot Table 3.3.1 (Always, Often and Sometimes=84.13%). In Table 3.3 (before the pilot the average=1.8 after the pilot the average=2.81). Clear differences were also perceived in this dimension; after the activation of the pilot, the students reported a sense of fondness, caring and friendship between them and a greater desire to stay and learn in the group than prior to the activation of the reform program like "There are no students in my classroom who don't have a friend in the classroom", before the pilot Table 3.3.1, (Always, Often and Sometimes=56.52%) and after the pilot Table 3.3.1, (Always, Often

and Sometimes=57.99%). In Table 3.3 (before the pilot the average=2.8, after the pilot the average=2.81), "If I had the option, I would not transfer to another classroom", before the pilot Table 3.3.1, (Always, Often and Sometimes=43.96%) and after the pilot Table 3.3.1, (Always, Often and Sometimes=72.73%). In Table 3.3 (before the pilot the average=1.9 after the pilot the average=2.94), "The students in my class care if I come to school or not", before the pilot Table 3.3.1, (Always, Often and Sometimes=74.03%) and after the pilot Table 3.3.1, (Always, Often and Sometimes=93.95%). In Table 3.3 (before the pilot the average=1.5, after the pilot the average=2.49), "I would like it if most my classmates got good grades", before the pilot Table 3.3.1, (Always, Often and Sometimes=62.34%) and after the pilot Table 3.3.1, (Always, Often and Sometimes=84.13%). In Table 3.3 (before the pilot the average=2.19, after the pilot the average=2.82). The differences in all of the statements and in the summary index were found to bear witness to a higher sense of cohesion and interpersonal affinity and a lower sense of hostility and rejection following the activation of the pilot. In conclusion, following the implementation of the "TBWY" program, in the exploratory study (Appendix 4), it appears that the students indicated less leadership concentration, less influence of the classroom, hostility and rejection and more cohesion and interpersonal affinity in the classroom. On the other hand, their perception of a climate of cooperation vs. a competitive climate was not unequivocal, indicating advantages before, as well as after, the activation of the pilot (Kaplan *et al*, 2000).

3.3 Organization of the teaching staff toward activating the "TBWY" reform program in September 2006

Following the pilot study, the school began the implementation of the "TBWY" program in the school year commencing in September 2006. First, the 9th grade students' achievements were mapped. These were the students who were to be absorbed into the framework of the reform program. The process of mapping the students' achievements was based on the students' personal data, the grades received in their middle schools, and comparative tests that were especially constructed in subjects that were planned to be taught through differential instruction. There were personal interviews with the students where the students were asked to indicate their preferences in subjects and to talk about their aptitudes and hobbies as well as their social and scholastic preferences. Then, their diagnostic evaluations were examined and the students' achievements were mapped. After

processing and integrating the data, the process of registering and placing the students was carried out.

The first "basic" mapping was intended to integrate the students into the differential instruction process and into homogeneous learning groups with suitable teaching methods and learning pace. In parallel, "guided groups" were constructed as an alternative to homerooms. A teacher/instructor was matched to each leadership group, who served as the "group's" facilitator. In most cases, the facilitator taught the group at least one of the subjects at least 4 hours weekly. There were leadership sessions with the group and personal sessions with each student in the group for the purpose of follow-up and constant improvement. The method of instruction was different from the familiar traditional method. The learning process occurred in homogeneous learning groups (Appendix 12) of between 24 and 26 students. The structure of the learning groups was different from that of a leadership group. The composition of the homogeneous learning groups was according to level of ability and capability, while the composition of the "guided group" was according to students' requests to be together with their friends in common areas of interest. The transition of the students from one learning group to another was flexible in that it was carried out according to the student's personal progress, his/her level of motivation and the personal ability that the student had demonstrated while in the learning group. The homogeneous learning groups were allocated differential resources and differential instruction formations were constructed. The entire process was implemented with a great deal of sensitivity to the students' requests and wishes. Each student had his own personal timetable, which was suited to the homogeneous learning group and to the leadership group to which the student belonged. The number of resource hours were allocated differentially to each group (they were different from one group to another) and were suited to the group's needs.

3.4 Definition of the research variables

The variables examined were the students' personal feelings following a change in the optimal school climate, which is also a dependent variable. The climate of the school is dependent on the attitude and methods of teaching implemented by the teaching staff. The variables that were chosen for the research are taken from the research's theoretical frameworks, some of which have been previously studied in other contexts (Babbie, 2006). According to the studies, which are detailed below, the following variables were chosen: Responsibility and caring, a need for a sense of ability and capability, a need for

connection and belonging, a sense of self-respect, a sense of autonomy, self-actualization and self-worth, a sense of general security

3.5 Presentation of the "TBWY" reform program and its birth

Following the results from the pilot, the "TBWY" reform program was born in its complete format. The program was presented for the first time to the teaching staff in the end of the year 2005, four months before the summer vacation. The program was presented to the teachers following a presentation to the teachers describing problems in their working procedures and the subsequent students' difficulties due to these problems. After a discussion that lasted about three hours, the complete outline of the program was proposed to the teachers and an opportunity was given for suggestions to improve the program by teams of teachers who were willing to be recruited. When the discussion was over, the teachers were asked to vote if they agreed to or rejected the implementation of the "TBWY" reform program in practice.

The activation and implementation of the reform program in practice depended on the unanimous agreement of all the teachers. Opposition from just one teacher could negate its implementation.

The reform program was approved except for two abstentions with no votes against. The results of the vote enabled the official birth of the "TBWY" reform program.

One week after the approval of the program, a staff of senior teachers and teachers who requested to take part in the implementation of the program met in order to prepare it for the following school year, September 2006.

3.5.1 The teachers' professional commitment to the implementation of the reform

During the year of the implementation of the program (2006), there were advanced study courses for training the teaching staff. During the first stage, these studies were carried out by external parties and research institutes that deal with guiding groups. The first advanced study course was presented by the Adler Institute, in addition to advanced studies for all of the teachers on the subject of differential instruction (Appendix 12) which described the different methods of instruction that each teacher preferred or adopted. As time went by, the school's internal consultation team was trained in order to train the teaching staff and the evaluation and measurement team was trained by the local authority with no connection to the program.

The consultation team prepared a program that suited the spirit of the program. The evaluation and measurement team also began to construct suitable evaluation questionnaires and did a follow-up of the advanced studies' structure and nature. Moreover, the extent of the students' and teachers' satisfaction was examined at every stage (Appendix 10) and qualitative feedback was given by the instructors at the end of the first intervention year (Appendix 13).

Four months after the implementation of the reform program, the evaluation team presented the results of the students' and teachers' satisfaction (Appendix 11). These results encouraged the teachers in the school to continue and broaden the reform program in the next school year.

3.6 Requests for budgeting aid from external parties

During the school year and toward the beginning of the planned 2006 school year, I contacted the Experimental Programs Branch of the Department of Education in order to propose the "TBWY" reform program as an experimental program. I was invited to present the program to a committee from the Experimental Programs Branch. One month after the presentation of the program, a negative answer was received. Neither the school staff nor I accepted the committee's opinion and the reform program went into implementation.

I then asked to present the reform program to the District Manager, who praised the initiative, but did not take a professional stand regarding its implementation and refused to provide budgeting aid, claiming that the district did not have the hours required for it.

Finally, I contacted the local authority, whose response was similar. "*The local authority grants autonomy to the school, but it cannot give aid for the implementation of the reform program*".

Since all of my requests for budgetary aid received negative responses, I decided to take the budget for the first stage of the program from the school's budget and to ask the teachers to forfeit the customary compensation for education hours, that is, a reduction of hours in the classroom from 4 to 1.5 hours weekly. After receiving the teachers' agreement, the school began to organize the first stage of the program.

Following an additional appeal to the local authority at the end of the first experimental year (2006) and prior to the beginning of the 2007 school year, the local authority sent evaluation (Appendix 3) and measurement teams to evaluate the reform program in order

to present it to the mayor for a final decision. The reform program was evaluated (Appendix 7) and the findings were sent to the Mayor. In addition, I was asked to present measurements of success (Appendix 5) and a budget of hours for the program.

A month later, final authorization was received by the education branch for aid amounting to 130 weekly hours at a total cost of 1,000,000 NIS (around £200,000). The aid was for one year, following which the program was to be evaluated and aid would again be discussed.

4. Methodology

4.1 Introduction

There are four sections in the chapter on methodology; the first section outlines the research and strategic approach of the study; the second sets out in detail the hypothesis; the third section deals with the research tools; and the fourth discusses the quality and ethical standards of the research.

I will argue that a mixed methods approach is the optimal approach for this study. Mixed methods allow for integration of different theoretical perspectives and enable "creating a more just and democratic society that permeates the entire research process, from the problem to the conclusions, and the use of results" (Mertens, 2009).

4.1.1 Research assumption

It was predicted that a relationship would be found between changes in the teaching model and the feeling of responsibility among the teachers towards their students as well as the feelings of pupils. This change of atmosphere would subsequently bring about an improvement in students' educational achievements.

4.1.2 Research questions

Following the implementation of the reform program, the following questions were explored;

- a. Will there be changes in the perception of responsibility and capability of teachers regarding student achievement following the reform?
- b. Will there be changes in teachers' recognition of the potential benefit of varying the educational inputs for individual learners?

- c. Will there be changes in students' perceptions of, and a sense of capability, for their achievements?
- d. Will there be impact of the "TBWY" program on the number of students eligible for the matriculation certificate?

4.2 Research paradigm - The philosophy of the methodology

At the basis of the approach stands the guiding principle that methods similar to those generally acceptable in natural science can be applied to the study of society (Mitchell, 1999), that is to say, just as there are laws of nature, so it is possible to find laws of society. This new concept, indeed, opened the door to the quantitative measurement of social phenomena, but at the same time, new reservations have been raised regarding the ability to quantify indistinct experiential phenomena (Jared & Jamesa, 2012). In other words, the approach has created difficulties in definition and measurement, both at the theoretical level and at the methodological level. This subject touches the heart of academic research and the epistemological disagreements between the various disciplines. Problems of measurement frequently arise within the framework of scientific discussions. These questions reflect the crisis and ever-increasing distancing between two different research traditions, one aspiring to objectivity and quantification of phenomena, while the other calls for subjective interpretation.

The positivist approach tried to establish social sciences alongside the natural sciences, following the demand for quantitative measurement of phenomena. This demand for the measurement of areas which are not usually quantified, such as public opinion, quality of policies, assessment of education and the effect of the law, emphasizes the limitations of positivist measurement. More and more questions arise regarding the involvement of the researchers and their impact on measurement, so I wonder if measurement can be objective? (Kline, 2004) On the other hand, is a quantitative index able to reflect a wide phenomenon, which is in essence a representation of values? Does such an index encompass the phenomenon and represent it?

In research today, none of the methodological approaches offers an unequivocal solution to the problem of quantification and measurement. Moreover, there is a broad tendency among researchers to stick to their principles of faith with regard to the correct way of getting to the scientific truth, or at least to its inter-subjective concept (Kline, 2004).

All systems are comprised of several factors among which there are simultaneously multi-directional connections, and each system is a part of another system, which is comprised of systems among which there are also simultaneous multi-directional connections. The concept of the system is salient when we speak of systems of the human body, systems in society (such as a family) or an ecological system, for example, between thinking, emotion, behaviour, personality, genetics, biology and the environment, there is an interactive multi-directional and evolving system (Sarafino, 2002; Forgas, 2001). It must be remembered that even the most insignificant phenomenon, such as the cell, itself constitutes a system within which there are simultaneously very complex, multi-directional connections.

In contrast to the causation-linear thinking there are theories which claim that processes within nature and in society are cyclical-circular (Lloyd & Rossi, 1992; Rossi, 1986), for example, the heartbeat, blood circulation, day and night, ebb and flow of the tide, the water cycle in nature, the circle of life, historical cycles and the movement of the stars. The parts which seem regular-linear are just parts of a very complex cyclical system. (Maxwell, 2004) criticizes the variance regularity approach and suggests the scientific realism approach and process theory, which deal with events and causative processes which occur between the events. This is a systematic approach, which deals with the processes in the context of their occurrence and searches for the causative mechanisms.

In 2002 a report was issued in the United States by the National Research Council, called "Scientific Research in Education" (National Research Council, 2002). The writers of the report developed a system of guidelines for managing scientific research in education.

The six general principles for scientific research include; posing significant questions that can be investigated by experimental means; the link between research and relevant theory; use of methods that permit direct investigation of the hypothesis; candid and coherent description of the chain of the inference process; examination of the results by repetition of the research; and the distribution of the research findings in order to allow examination and professional criticism.

In my opinion, these general research principles are also applicable in educational research, while noting the uniqueness of the field of education, which is multi-layered, constantly changing and taking place with mutual relationships between institutions, communities and families. Therefore, much importance is attributed to drawing

attention to the context in which the research is conducted, in order to understand the possibility of generalization of its findings to different times, places and populations.

(Shavelson & Towne, 2002) posit these principles as the "gold standard" for scientific research, which considers research with a scientific base as the same as research in education, which adopts an experimental arrangement in which pupils, teachers, classes or schools (and even review groups) take part.

Usually, statistical methods accompanying the various experimental arrangements are called "difference analysis". For every experimental arrangement, there are appropriate difference analyses, which are taken into account in the various sources of the experiment. In each experimental arrangement, there are various groups and various experimental conditions (some uncontrolled), such as differences among the subjects.

By controlling the various sources, the researcher is able to examine the relationship between the controlled and uncontrolled difference, which is called the error. (When the relationship between the two differences is large, the chances of finding true, i.e. significant differences are also large.) The experimental arrangements are research programs which are intended to examine relationships and differences between variables and various groups (Tennenbaum & Lidor, 2004). In general, these research programs are based on intervention programs: training, instruction, learning and rehabilitation. In order to eliminate the possibility that other undesirable factors may affect the results obtained, the research program must be internally and externally validated; for this purpose, the quality of the sample, intervention and measurement of the variables must be determined exactly (Slavin, 2002). It is important to stress that the use of the slogan "Practice-based evidence" requires consideration of these questions: What is the evidence? What is its importance to science? What is its importance to practice?

The well-known English dictionary, "The Heritage Dictionary", defines the word "evidence" as "one or more reasons for believing that something is or is not true, also; an indication that makes something evident, and also; stands as proof of or: shows by one's behaviour, attitude or external attributes". From here, one can understand that in the context of research into education, the term "evidence" may be interpreted as "data", "indicators" and also as "findings, testimony, or proof". These possibilities generally correspond with the concept of spokesman of the role of research in education and regarding the status of practice (Slavin, 2002).

Hargreaves (1996), one of the leaders of the movement calling for practice-based evidence in education, emphasizes that, "the role of research in education is to prove that when teachers change their practice from X to Y, this results in tangible improvement in teaching and in learning". Other theoreticians, also, who lean towards quantitative research interpret the word "evidence" in a positivist way. When they use the term, they are referring to findings that have been obtained in methodical and controlled research, in which random and transparent experimentation allows replication as the basis for their work.

Evidence is perceived as indications, or even as intuition based on theoretical knowledge and practical knowledge as one (Eraut, 2004). In the context of the debate on evidence-based practice on the side of those who call for scientific-based research, their voice has also overcome the voice of those that side with practice-based research. (Among them, we can find Whitehead (2002) from the University of Bath, and his colleagues, Lomax (1998) and Edwards (2002) who served as presidents of the British Educational Research Association).

What do those of the movement for evidence-based practice propose in response to this dogma? The answer may be found in the work of Simons, Kushner, Jones and James, (2003). Like Groundwater-Smith and Hunter (2000), they deal with the construction of a research arrangement in schools; they gathered evidence of learning and of the achievements of students in the schools, and gave them quantitative expression through evaluation scales which they developed. They succeeded in building generalizations of evidence that they gathered, which was anchored in the school context. It is a model of joint research of a lecturer from the university and teachers in schools, which was prepared in order to construct actionable knowledge in a certain educational field. Such research begins with a theoretical exposition of a certain educational question prepared by the lecturer, after which there was a discussion on the methodology of the research, as a result of which the teachers decide to examine various aspects of the educational question under discussion within their classes. After each one of them has presented their findings, a presentation is built up of all of the findings, presenting the research method and explicit consideration of the limitations of the research carried out in the classroom. Such a presentation usually concludes with a decision regarding the direction of thinking, research and future experience relating to the issue in question.

A quantitative paradigm suggests a procedural approach, which describes the events, guides them and explains what was involved in their case. The approach provides a wide space for cultural and social contexts in which processes occur; it captures the beliefs, values and concepts of the subjects as a material part of the phenomenon under investigation. Qualitative research promotes features that are likely to make a contribution to the implementation of educational policy. Evaluation research and studies deal with relationships between the teaching methods for study products, on what has occurred in the daily interactions between teachers and children in classrooms and in school (Erickson, 2005). In a discussion recently in the Teachers' College Record, a shot is fired against what is implied from this requirement, that only statistical research, based on experiments, addresses all of the criteria necessary for science.

It has been claimed that research experiments, quantitative research analytical methods, and the data collected from these studies are essential for the creation of a reliable process for making decisions in a wide array of areas of opinion. The researcher is required to supervise the reliability of the treatments, intervention or conditions of these experiments and to apply the appropriate statistical analysis to the experimental arrangement. In cases where the researcher is required to, or wishes to, gather information which also expresses the feelings, outlooks, opinions and emotions of the participants in the research, he/she should be encouraged to also use qualitative research methods to gather data.

The object of using the qualitative method is not to challenge the use of the quantitative method, but rather to encourage their use side by side, so that the researcher can provide the necessary information for his hypothesis. It is possible that the use of experimental research required for an effective decision-making process, in which qualitative research methods are integrated, will allow researchers to develop more valid theories and models, with much more sensitive measurement. There is no researcher who is uninterested in improving his/her research methods, measurements and ways of collecting data. The assumption is that this improvement is likely to enable the researcher to reveal phenomena that have yet to be uncovered.

Various opinions have been heard that occasionally contradict one another and, sometimes, complement one another. For example, some researchers stress that the qualitative researcher must adopt positivist and post-positivist quantitative research tests that have validity, reliability and generalization (Smith & Deemer, 2000). Since

the year 2000, more and more researchers are using a combination of methods in various ways. The combination of methods began with the addition of one method in order to generate further information from data and reach a merger (Greene & Caracelli, 2003).

In view of this extreme stance, other qualitative researchers emphasise that if there are no tests at all, the researcher is likely to lose his way in the moral space with no borders or roots in the post-modernist world outlook.

The modern position permits a combination of qualitative and quantitative research (Lincoln & Guba, 2000; Creswell, 2003). Some researchers stress that qualitative research represents exploratory research, which complements the quantitative research or supports it, but does not stand alone.

Qualitative research is a situational activity, which allows the researcher to maximize himself in relation to the world of his subject. The research contains interpretative activities, which turn the world into a series of representations comprised of field notes, interviews, conversations, pictures, recordings and memoranda. Qualitative research investigates things in their natural context, and tries to draw significance or explain phenomena as terms that human beings themselves use.

After reviewing some of the main and different advantages and disadvantages (that are part of the academic debate on qualitative research and quantitative research), can we say which of them is more appropriate for establishing evidence for decision-makers in the education system?

In my opinion, there is no need to decide. In this current research, I will use combined methodology. That is to say, mixed methods whose advantages complement each other, and whose disadvantages substantially negate each other.

When using mixed methods researchers maximize the strengths of quantitative and qualitative data while minimizing their weaknesses, the difficulty being how to integrate the different forms of data. These problems have been discussed in recent literature (Creswell & Plano, 2011) where they suggest ways of merging, connecting and embedding data. They suggest that this can be done by utilizing the discussion section of the research to report quantitative results and then using qualitative reports to justify or contest the findings (Sandelowski, Voils & Knafl, 2009). Data can then be displayed in both a qualitative and quantitative way.

The merging of different research methods therefore allows for a more complete understanding of a problem, where each type of research complements the other and allows examination of both processes and outcomes (Plano, 2010).

4.3 Research approach

In the first part of the research, I focussed on the change in perception of teaching among teachers as a result of the features of the "TBWY" reform program and present a description as broad and as rich as possible. Accordingly, the first part of the research was based on a qualitative approach, dealing with an investigation of the nature of personal experience. In this case, the experience of the teachers and their teaching methods in the classroom, a change in teaching perception is the event, as experienced by the subjects in the current study (Shkedi, 2003). The emphasis was on obtaining information from the subjects who experienced the change personally, using the reform program and the significance of this experience on their working lives (Creswell, 2003). In the longitudinal study, in the qualitative part of the research, the purpose was to compare similar and different characteristics. This enabled the retention of significant and holistic characters of a social complex phenomenon. The phenomenon occurs in a reality in which it is not possible to isolate the variables from the context, but its uniqueness is in the fact that it contains a specific component, in that each and every case, and in this context, each and every one of the teachers, reflects on experiences of a similar nature. In the present qualitative-constructivist research, it is generally accepted that the number of the subjects should be limited so that an appropriate picture will be obtained, representing the target population in the best way, with studies that can contribute to the understanding of the research topic and teach us about the phenomenon under investigation, and not those representing a representative sample. (Shkedi, 2005). It is the object of the research and the researcher leaves room for changes that may occur during the course of the research (Shkedi, 2003).

The second part of the research will have a comparative quantitative nature (Tennenbaum & Lidor, 2004). In this part of the study, we examined the changes that occurred in the feelings of the pupils, the extent of responsibility of the teachers towards the pupils, the change in the atmosphere and in the pupils' educational achievements, over two different time periods. The quantitative study is a complementary study to the qualitative research (Shavelson & Towne, 2002), an

approach which is based on the deductive process of confirmation or rebuttal of hypotheses aspiring to a generalization to the population as a whole (Shkedi, 2003).

4.4 Qualitative research tools

Observations were made during the lessons in the classrooms, the natural environment of instruction. These observations helped the researcher to become personally involved, providing access to the thinking processes, actions and emotions of the teachers (Shkedi, 2003). The observations in the classrooms were made by videotaping, transcribing and observing, in the course of which the researcher recorded comments, while describing the sequence of events that happened during the lesson. The interviews were conducted by means of the "in-depth interview" method (Miller & Glassner, 2004) which is a discussion focusing on the subject. The interview enables the interviewees to describe and explain, in their own words and terms, their world and the culture in which they live and work. The questions in the interview were open questions of various kinds: theoretical questions, comparative questions, completion questions, contrast questions, arousing questions, which appear in the appendices.

The interview opened with a general question, which invited the teachers to relate their story. While this was happening, the interviewer allowed the interviewees to speak and tried to help them to turn their subconscious thoughts to conscious awareness and to turn suppressed knowledge into overt knowledge.

Extensive portions of the interviews took place in a reflective interview format, in order to understand the phenomenon under investigation. In the reflective interviews, which were integrated into the interview (Shkedi, 2005), the observation was presented to the teachers, usually, on a video screen and they were then asked to think about parts of it and describe them as if they had been experienced and described by them. In the course of the observation, field notes were kept, recording what had happened during the lessons in which the teachers were active. In addition, the notes included the researcher's insights and reflections, which assisted in understanding and explaining the data. Documents, study plans and teaching materials, which were found to assist in comprehension of the phenomenon under investigation, including the teacher's attitude to tuition, were also gathered in the database of the study.

4.5 Participants and sample in qualitative methodology

For the purpose of the qualitative study, five teachers were recruited, from the disciplines Hebrew comprehension, history, civics, Bible studies and geography. All five held a Master's degree and a teaching certificate.

All five subjects chosen were in the 40-55 age range; they were experienced teachers who had worked in schools both before and after the introduction of the "TBWY" program. All five teachers also acted as group facilitators, spoke Hebrew and were articulate, which enabled the interviews to take place. The research was carried out in their working environment in school.

4.6 Data analysis of qualitative datasets

In this part of the qualitative research, the descriptions of the subjects and their stories were translated to the conceptual-theoretical system (Shkedi, 2005). The analysis focused on the description and explanation of the teachers under investigation. During the course of the research, emotions, thoughts, beliefs, personal experiences and personal knowledge were all documented. The data were gathered, and only then, the process of organizing the materials into categories was carried out. The materials were spread over a conceptual hierarchy, with the information received organized according to the appropriate category to the literary theory.

(a) Theoretical stage: Descriptions and explanations on the conceptual-theoretical area under investigation. At this stage, the interviews were divided into the important groups according to the relevant topics. The names of the significant groups were mapped according to narrative texts, and then mapped into categories.

(b) Second stage: Mapping was carried out in categories according to shared topics voiced by the subjects and the particular words spoken by each of them separately. Important sections identified at the previous stage were again divided into categories and to sub-categories. The main categories were organized according to a horizontal axis, in which all of the parallel topics voiced by the subjects appear, with the vertical axis indicating all sub-categories. In the data analysis process, after further mapping, links were forged between all the categories, which reflected the directions on the results of the research.

(c) Third stage: Several principal categories were selected. The categories chosen were connected to other categories which, together, significantly contributed to the

explanation of the phenomenon under investigation - the teaching concept of the teachers. The categories examined throughout the process created cut-offs between the actual data and conceptual-theoretical description.

(d) Final stage: Theoretical analysis was conducted, which resulted in categories which were identified according to the theoretical concepts. The data obtained were then re-examined according to the models in the research literature, with the link between the actual concepts and their theoretical translation being identified (Shkedi, 2003).

The division of the categories was based on the translation of the theoretical concepts: Instruction by direct delivery – teacher and content-focused instruction and positivist delivery instruction (Kang, 2008; Boulton-Lewis & Willss, 2007; Cuban, 2007), instruction by the clarifying delivery-teacher-content-focused approach, instruction delivery instruction and instruction by positivist delivery and presentation strategy (Sawyer, Rutter, LeFeavre & Margolis, 2005).

Instruction by activating delivery – positivist delivery instruction and on terms relating to strategies of activating instruction, for example, investigate and detect, discussion instruction for small groups and guided detection (Nystrand, Wu, Gamoran, Zeiser & Long, 2005; Darling-Hammond & Bransford, 2005; Zion, Cohen, & Amir, 2007).

Attentive instruction – relating to positivist delivery and also to concepts relating to the emotional aspects of the learning and consideration and to the strategy of caring instruction (Damasio, Grabowski, Bechara, Damasio, Ponto, Parvizi & Hichwa, 2000; LeDoux, 2007; Davis, Smith & Leflore, 2007).

Instruction by adapted delivery – based on the teaching concept by pupil-focused delivery and on the differential teaching strategy (Boulton-Lewis & Willss, 2001; Cuban, 2007; Van Driel, Bulte & Verloop, 2007).

Construction -encouraged instruction – based on the constructivist-learning concepts, active learning and pupil-focused instruction.

At the final stage, a theoretical analysis was carried out, in the course of which the categorical picture obtained was translated to the theoretical concepts and accordingly, the names of the categories were changed. The data were re-examined and found to reflect the models described in the research literature regarding the phenomenon under investigation and the link between the data and their theoretical translation was

identified (Shkedi, 2003), with the teaching approaches reflecting the content, function of the teacher, function of the pupils and place of the learning environment.

Of the categories, five teaching approaches were identified. The teaching patterns describe the behaviour patterns of the teachers in the process of instruction (See Table 4.1).

Table 4.1 Comparison between the teaching approaches of teachers and learning process of pupils

Approach	Function of the teacher	Function of the pupils
Clarifying delivery	Imparts knowledge to all of the pupils	To absorb processed knowledge
Activating delivery	Imparts knowledge with explanations and activation of all of the pupils in the class	To absorb processed knowledge
Attentive delivery	Imparts knowledge with explanations, displays attentiveness and consideration to the pupils	To absorb knowledge
Adapted delivery	Imparts knowledge with explanations and their differential adaptation and displays attentiveness and consideration	To absorb processed knowledge through personal-adapted activity
Construction-encouraged delivery	Encourages and invites all pupils	To produce active knowledge

(Darling-Hammond & Bransford, 2005; Hutchison, 2006; Baldwin, Buchanan & Rudisill, 2007)

4.7 Quality and standards of the research

This part of the study used the subjective research approach, according to which there is not one absolute reality pertaining to human beings. The reality is a reflection of the various concepts of (different) people, and therefore, there are actually several simultaneous realities. Qualitative research is a construct with a high degree of reliability using several methods (Yosefon, 2001).

i Accurate professional data collection:

The current research was conducted and presented meticulously (Alpert *et al*, 2004). In this qualitative study, close attention was paid, as far possible, to complete and detailed documentation, separating factual description from replication. The transcription of the interviews was carried out as close as possible to the time of the interview itself.

ii Using "enhanced description" and judgment by readers of the study

The disclosure of the findings enables readers to make a further validation by themselves according to their personal understanding or according to their familiarity with the subject under investigation (Yosefon, 2001).

4.8 Quantitative research tools

The data were collected through questionnaires and the results of matriculation exams for the school year in which the research was carried out, as compared to students who took the exams three years before the beginning of the program.

i. Teachers' responsibility for students' achievements and emotional results

The validity and credibility of the questionnaires were examined in (Guskey , 1988) Table 5.4. The students were examined using scales of variables which related to the teachers' willingness to take responsibility for the students' achievements in cases of failure, the students' emotional results in cases of failure, the students' achievements in cases of success, and the students' emotional results in cases of success. The questionnaire originally included 30 statements, and for each statement there were two possible answers: one answer describing the teachers' "extent of responsibility" and the second answer, the "students' contributing fault" (the teacher's lack of responsibility – the teacher's assertion that the failure is a result of the student's lack of responsibility).

The teachers were asked to give a grade (from 1 to 5) to each answer, and the sum of the two answers together had to be five. Statements that were relevant to the current research were chosen.

Thirty teachers who taught in the school were asked to answer these statements before they underwent the process of facilitating groups in the framework of the "TBWY" reform program and after the activation of the reform. In addition, Table 5.5 examined the teachers' responsibility for the students' scholastic achievements and emotional results before and after the program.

ii. The students' sense of belonging before and after the "TBWY" reform program

In Table 5.6, questions 1-6 are based on the Department of Education's Psychological Service's (*Shepy*) "Optimal Educational Climate" questionnaire (Appendix 8 & Appendix 9). The credibility of the summary index of a sense of

belonging prior to the program was 0.77 and following the program, it was 0.8. A total of six statements were presented.

iii. **The students' sense of self-respect and self-worth before and after the program**

In Table 5.7, questions 1-9 were based on the Department of Education's Psychological Service's (*Shepy*) "Optimal Educational Climate" questionnaire. The credibility of the summary index of a sense of self-respect and self-worth prior to the program was 0.74 and following the program, it was 0.83. A total of nine statements were presented.

iv. **The students' sense of capability before and after the program**

In Table 5.8, questions 1-5 were based on the Department of Education's Psychological Service's (*Shepy*) "Optimal Educational Climate" questionnaire. The credibility of the summary index of a sense of capability prior to the program was 0.74 and following the program, it was 0.7. A total of eight statements were presented.

v. **The students' sense of autonomy before and after the program**

In Table 5.9, questions 1-5 were based on the Department of Education's Psychological Service's (*Shepy*) "Optimal Educational Climate" questionnaire. The credibility of the summary index of a sense of autonomy prior to the program was 0.65 and following the program, it was 0.77. A total of five statements were presented.

vi. **The students' sense of self-actualization and autonomous expression before and after the program**

In Table 5.10, questions 1-7 were based on the Department of Education's Psychological Service's (*Shepy*) "Optimal Educational Climate" questionnaire. The credibility of the summary index of a sense of self-actualization and autonomic expression prior to the program was 0.72 and following the program it was 0.82. A total of seven statements were presented.

vii. **Verbal violence before and after the program**

In Table 5.11, questions 1-3 were based on the Department of Education's Psychological Service's (*Shepy*) "Optimal Educational Climate" questionnaire. The credibility of the summary index prior to the program was 0.89 and following the program, it was 0.9. A total of four statements were presented.

viii. **Students' perception of the teachers' ability to handle occurrences of violence before and after the program**

In Table 5.12, questions 1-3 were based on the Department of Education's Psychological Service's (*Shepy*) "Optimal Educational Climate" questionnaire.

The credibility of the summary index prior to the program was 0.89 and following the program it was 0.9. A total of four statements were presented.

4.9 Data analysis for quantitative methods

The results that were obtained from the questionnaires, the interviews and the matriculation exams were processed and analysed through:

- i. Data analysis based on a statistical analysis of the students' and teachers' questionnaires, material from the interviews with the students and the students' achievements that were collected from the years prior to, and following the program and during the course of the research. The data collected from the questionnaires were analysed according to the main research variables. The data analysis was carried out according to the hypotheses of the empirical model and the nature of the research variables. The data pertaining to the instructors/teachers and the students were analysed separately. The indices were constructed through factor analyses (indices that relate to the extent of the influence of external factors on personal characteristics).
- ii. A descriptive analysis that included percent distributions, a comparison of means and standard deviations of the variables according to the learning and "guided group" to which the students belong. The model relates to the nature of the influence of the independent variables on the dependent variables which are the students' and the teachers' feelings about various situations of reference (Babbie, 2006).
- iii. An analysis of eligibility for matriculation prior to, during, and at the end of the program was carried out through an analysis that compared grades in compulsory subjects in the years prior to, and following the implementation of the "TBWY" reform program, which were received from the Department of Education.

The present research included three categories: eligibility for matriculation, the school climate and the teachers' responsibility for cases of success and failure. In order to test

the statements on the various questionnaires, a reinforcing factor analysis was carried out through the principal component method according to a Varimax rotation (Kaiser, 1958). This makes interpretation simpler since each original variable is associated with only one (or a small number) of factors. An analytic criterion for rotation is defined. The scientific advantage of analytic criteria over subjective (graphical) rotational procedures is discussed (Carroll, 1958); criterion and the quartimax criterion are briefly reviewed; the varimax criterion is outlined in detail and contrasted both logically and numerically with the quartimax criterion. It is shown that the normal varimax solution probably coincides closely to the application of the principle of simple structure. However, it is proposed that the ultimate criterion of a rotational procedure is factorial invariance, not simple structure—although the two notions appear to be highly related. The normal varimax criterion is shown to be a two-dimensional generalization of the classic Spearman case, i.e., it shows perfect factorial invariance for two pure clusters. An example is given of the invariance of a normal varimax solution for more than two factors. The oblique normal varimax criterion is stated. A computational outline for the orthogonal normal varimax is appended.

4.10 The research population in the quantitative research

The size of the sample is determined by the type of population, and by the size of the error which the researcher is prepared to "tolerate" – it has already been stated that a heterogeneous population will require a larger sample, in order to faithfully represent the student population. Indeed, in a very heterogeneous school, in terms of educational achievements at various socioeconomic levels, and in order to faithfully represent the entire population and demonstrate the most reliable results, all the students in the age group are selected (Howell, 2013).

The most common figure in the social sciences for determining significance (both of relationships between variables and of differences between groups) is $p < 0.05$. (There are those who are more stringent and require $p < 0.01$.) This number allows us to derive a generalization from the sample to the population. Any research is carried out on a sample, mainly for budgetary reasons, but its purpose is to generalize results to the general population. The significance of $p < 0.05$ is actually, "the chance that I was mistaken and what I obtained in the sample is not correct and does not exist in the general population is less than 5%". In other words – I am 95% certain that what I obtained in the sample is also valid for the general population. The size of the sample

may also strengthen this confidence with the sample being the size of the population. Any tiny discrepancy is significant. In fact, there is no population to which I would like to generalize the results and therefore what emerges is the complete truth (Even, 2007).

In the main study there were 640 students, of 10th, 11th and 12th grade students in 2006 who learned according to the traditional program – in homerooms and in heterogeneous learning groups. The results of the questionnaires were analysed according to averages and standard deviations before and after the reform in 2009.

Table 4.1.1 The size of the student sample and teacher sample before and after the "TBWY" Program

Before the program 2006	After the program 2009
The size of the student sample Age 15-18 N =543	The size of the student sample Age 15-18 N =295
The size of the teacher sample, N=30	The size of the teacher sample, N=30

The students were from the middle schools, including feeder schools, located in the west, east and central parts of the city. There are approximately 220 students in each age level, with a balance in the number of girls and boys. The student population was heterogeneous from the standpoint of ability and socio-economic level.

The research population group included teachers who agree to be participants in the research, professional teachers and homeroom teachers. All the teachers (30) in 2006, before the "TBWY" implementation, took advanced studies in group instruction as a condition for their participation in the "TBWY" reform program, and agreed to be participants in the research again in 2009. Some of the teachers had been homeroom teachers in the past and others had no experience in homeroom teaching. When the program was activated, all of the teachers served as group instructors.

4.10.1 Composition of the research population

An equal number of boys and girls from various socio-economic levels, similar to the situation at school.

Thirty-six instructors participated in the 2009 school year. Thirty of them participated in the research, professional teachers and homeroom teachers, in 2006.

Twelve instructors in each class level from 10th, 11th and 12th grade students in 2009 who participated in the "TBWY" reform program; eighteen classroom teachers – six classroom teachers from each class level from 10th, 11th and 12th grade students in the 2006 school year, who taught the traditional homeroom program prior to the activation of the program.

4.10.2 Control groups for scholastic achievements

Control groups were used to compare scholastic achievements and the school climate before and after the implementation of the "TBWY" reform program. Thus 10th, 11th and 12th grade classes in the 2006 school year as control groups were compared with the same age levels (10th, 11th and 12th) in the 2009 (three years later), school year who participated in the "TBWY" program which began in 2006.

Students were integrated into homogeneous learning groups according to their ability. There was differential instruction in each group and each group had resources of differential hours suited to the character and the needs of the group.

4.11 Ethical Considerations

Rules of ethics and relations of trust and cooperation are important and significant principles for the research. Therefore, the questionnaires were anonymous in order to protect the privacy of the sample population, the student and/or the instructor. The interviewer must transmit an attitude of respect, interest, attention, trust, understanding and politeness.

The most important personal characteristic is to show real interest in other people, that other people's stories are valuable in themselves and that they are valuable because of their implications, The researcher's obligation is that the participants in the research agree to be interviewed and the findings published, that they know what they are to be interviewed about, and that the interview will not distort the meaning and content of what the interviewees said (Seidman, 1991).

4.11.1 The principles for the collection of data under the supervision of the Education Ministry

As a rule, collection of data for research within or connected to an educational framework requires the recommendation of the professional-ethical committee of the academic institution, the permission of the Chief Scientist and the consent of the principal of the educational framework in which or through which the collection of data is requested to take place. In some instances where the collection of data from or about students was not planned, the powers of the Chief Scientist for granting permission are delegated to principals of the educational frameworks in which or through which the collection of data was planned to be carried out. Wherever the request for examination by the professional-ethical committee in the academic institution was not submitted in the context of its work or its studies in which the researcher would like to collect data, the request was submitted to the Office of the Chief Scientist.

- The topic under investigation must serve as a potential source for the enrichment of the areas of knowledge relevant to the education system.
- The work for which the collection of data is requested must meet the generally accepted requirements (standards) for conducting scientific research in higher education institutions in Israel. Where the work is carried out by the student for the purpose of his studies it has to be done within the framework of studies in an Israeli institution for higher education.
- A student or office-holder in an educational framework in which the research is conducted should not participate in the collection or recording of data or in any other action as an executive arm of the person conducting the research, unless a permit is duly obtained.
- The subject should not be presented with questions and will not be requested to perform tasks or take part in intervening actions or in a program established by the ministry which could adversely affect the emotional and physical welfare of the subject or influence the subject negatively from an educational or any other perspective or transmit negative messages from an educational or any other perspective.

- No collection of data will be permitted which would prevent the performance of the fixed educational program in its entirety or which would disproportionately adversely affect the school day.
- The wording of the questions to the subjects, and the nature of the assignments, interventions and programs examined must match the participants' characteristics, abilities and physical and cognitive skills.
- The collection of data is subject to the free and conscious consent of the candidate to be examined, after he/she has been given clear, exhaustive and detailed explanations of the planned research and of the related actions. In cases where the information regarding the subject was collected from another person, the consent of the subject him/herself (the object of the assessment) is also required.
- The data to be delivered should include an exhaustive description of the action requested to be performed and of the related actions, and any additional data required for fulfilling the requirement, as presented in the instructions published on the Chief Scientist's website and in the permit document.
- Obtaining the student's free and conscious consent is also required where the consent of the parents for his/her participation in the research has been given.
- In general, the collection of data will not be permitted where the participant is subordinate to or dependent on the researcher if he/she has any other function within the education system. For example, a teacher will not be permitted, within an educational framework, to collect data for the purpose of the research among his students, and a principal will not be permitted to do so among the office-holders or among the students in the framework or a unit which he manages.
- If despite the existence of a relationship of subordination and/or dependence, as described above, between the researcher and the candidate under examination, the authorized official for granting the permit for collecting the requested data is of the opinion that, in the circumstances, there is a justification for permitting the collection of the requested data, he/she should apply in writing to the Chief Scientist with a request for an exception.
- If the Chief Scientist or the duly authorized office-holder decides that it is possible to permit the request, the researcher should do all that is necessary to ensure that the judgment and decision of the candidate under examination regarding the request that he participate in the research are not influenced by

external considerations, originating in the nature of his/her relationships with the researcher or in the way in which the request was presented.

- The person conducting the research and the management of the educational framework in which or through which the data is collected should do everything necessary in order to ensure that the candidate under examination will not be adversely affected, directly or indirectly, if he/she decides to refuse to take part in the research study.
- The researcher and the management of the educational framework must ensure that, while the data is being collected, all of the participants' rights are upheld, including their emotional and physical welfare, as well as their right to privacy. If the subjects are students, their privacy should be safeguarded, as far as possible, without impairing the duty of supervision of the staff of the educational framework over them.
- In general the collection of data or retention of data collected will not be permitted in a way that facilitates the identification of the subjects by any entity, including the researcher. A deviation from this principle will be permitted, subject to the approval of the official authorized to grant a permit for the collection of the data, at his/her professional discretion.

In order to safeguard the ethical principles of the research which was carried out within an educational institution, the research unit of the Ministry of Education had to take into consideration the sensitivity of the research, since I was both principal of the school and the researcher. The Education Ministry placed strict limits throughout the research process as a condition for conducting the study vis-à-vis the teachers and the students, such as: All of the questionnaires that I designed were sent to the Education Ministry's Research Unit as a precondition for carrying out the research. The questionnaires were examined both on a professional level and according to the ethical context of the questions of the research.

In the quantitative part of the research, representatives from the Education Ministry delivered the questionnaires to the students and teachers. The results of the questionnaires were first sent to the Research Unit, in the Education Ministry-photocopied and documented in the archives, and only then, sent back to me to process the results. In the case of the qualitative research, I again had to send the questions which I had written for the teachers to the Ministry's Research Unit. The Ministry sent

a number of representatives and it was they who presented the questions to the teachers and carried out the interviews. They documented and photocopied the materials and only then were the latter transferred to me for analysis and processing.

After processing the quantitative and qualitative data, I again had to send the findings to the Ministry's Research Unit in order to check the reliability of the data. After receiving the necessary approvals, I was able to publish the data in the teacher's room.

Throughout the entire process, I was under the control of the Ministry's Research Unit in order to ensure the required ethical principles of the study.

4.12 Ethical issues in the publication of an article

Some ethical aspects of conducting and disseminating research are as follows:

- i. **Privacy and anonymity:** The participants' anonymity has to be maintained. To this end, the researcher must identify information that could expose the participants. According to Deyhle, Hess Jr. and LeCompte (1992), if anonymity is maintained, the relations between teachers and students can be described in the publication notwithstanding the sensitivity of certain aspects. I completely agree with this opinion. The necessity of publicizing and exposing sensitive information has to be balanced, thus avoiding any possible damage to the participants.
- ii. **Possible damage to the participants:** What if the research findings can result in damage to the research participants? The researcher's ethical principles were based on honesty and an obligation to deliver the truth while showing the facts as they are (Aufderheide, Jaszi, Chandra, 2009). I also agreed that sensitive information should not be distorted when it is publicized.
- iii. **Informed consent:** The researcher must find out if the research participants agree to the dissemination of the results. Therefore, I obtained the participants' consent only after informing them about the publication of all of the research results, including unpleasant facts. (Smith, 1990) believes that the researcher should not rely solely on the consent obtained in the beginning of the research, but that he should have a dialogue with the participants during the course of the entire research process. In any case, the participants have to trust the researcher.
- iv. **Relations based on reciprocity:** To a certain extent, the results of a research belong to its participants (Deyhle *et al.*, 1992; Bresler, 1995). However, some researchers support the idea of setting rules about the collection and use of

information by the participants. As to dissemination, the researchers claim the sole right to publish the results (Lincoln & Guba, 1989). I also agree that the knowledge obtained in the process belongs partially to the participants, but that only the researcher decides the scope and character of the information to be published.

- v. **Credibility of publication:** In some studies, there is a tendency to emphasize positive results and to hide negative results. Such practice, along with improper use of statistical data, may result in an inaccurate analysis and inaccurate result.
- vi. **Participation of teaching staff:** To avoid the feeling of coercion on the part of the teaching staff (since I was the principal of the school), teachers were invited to a meeting and polled to ensure their free choice in participation.
- vii. **Multiple research cases:** Using the data obtained from several interviews, one can learn about the phenomenon under investigation and increase the reliability of the research (Yosefon, 2001). Reliability in qualitative research is related to the way in which we consider, gather, analyse and report data. Generalization can be constructed according to the ability of all the different researchers and readers to find significance in the research data and in its conclusions and to connect it to other phenomena.
- viii. **Honesty and self-criticism of the researchers:** In the current qualitative study, there were perspectives, or conceptual framework by which means the phenomenon under investigation was researched. In the current study, there was disclosure of criticism, and lack of personal involvement in the phenomenon being investigated (Yosefon, 2001).
- ix. **Cross-checking:** There was cross-checking between the actual data and the theoretical literary sources (Yosefon, 2001). The explanations and interpretative methods carry much weight, therefore, giving confidence to the research in how it was considered, gathered, analysed and reported by the researcher, the awareness of the researcher of the stages of the research and the effects on him (Shkedi, 2003), as well as the transparency of the interpretations vis-à-vis the readers (Morse, Barrett, Mayan, Olson & Spiers, 2002).

However, in this part of the research, use was made of the system of concepts generally accepted in quantitative research, although qualitative reliability was given to them (Kirk & Miller, 1986; Stake, 1995). The relevant significance of qualitative

research was examined by the ability to look back at the phenomenon under investigation in the researcher's declared perspective. The validity of the research was examined in the event that there was a coherent relationship between the conceptual perspective of the study and the research data and its conclusions.

5. Findings of the Observation, for qualitative research, of lessons and Interviews with teachers

During the study while observing five lessons, we distinguished changes in teaching styles among the teachers. The teaching styles differed from one learning group to another.

Personal interviews with the teachers illustrated their awareness of the character of the learning groups. We observed four teaching styles among four different homogeneous learning groups (with different levels of learning ability). The teachers' styles of instruction ranged from instruction by clear and direct delivery with low ability learning groups, to instruction encouraging organisation and study in high-level ability learning groups.

A. The Clarifying Approach

A civics lesson: students of low learning ability

The teacher expects the students to answer his questions and participate in learning activities. Teacher uses question and answer techniques to elicit information from the students as well as a visual presentation. Teacher summarizes the lesson verbally and then asks the students to prepare a summary.

In an interview, the teacher says; "I wanted to present the pupils with definitions and principles where they could see differences between populations and the creation of rules for affirmative preferential treatment. Since the group had a low level of learning ability, I adapt my style of teaching accordingly. In a good group, my teaching style changes accordingly. There, I can teach in another way. The level of analysis is more intensive."

He added, "Here, I adapt the method of instruction to the learning group and not, as in the past, that the pupils adapted themselves to the teacher. The "TBWY" program made me use new styles of instruction and adapt the level of mediation of the material to the pupils according to their levels of ability."

B. The Attentive Delivery Approach

A language lesson: students of average learning ability

Teacher B expects the pupils to reply to her questions and take part in learning activities that she conducts in the lesson, but in contrast to the direct delivery instruction, she displays special and attentive consideration to the individual pupil, which is intended to address the needs of different pupils. The teacher is responsible for the teaching process. The teacher is the initiator and leads it and its purpose is to deliver the material being taught. Teacher plays three songs that the pupils know.

Teacher addresses the pupils and asks, *"Here are three songs which have a common factor after hearing each of you should think about his or her world and decide what is shared by the songs."*

The teacher states: *"The personal conversation with each pupil is very important for me"*. The intimacy in the lesson is an important part, which encourages the pupils to participate and to be a part of the learning process. In the lesson, I am careful to see everyone, since the ability level of the pupils is not high. I build the lesson and in a part of it, I dictate rules or conclusions, watching films or playing songs.

"It is important for me that each pupil is connected to the lesson and that I have an opportunity to feel a sense of ability which will strengthen his self-confidence."

What singles out the teaching by attentive delivery is the personal regard for the student. The student's personal feelings profoundly influence the learning process. The teachers are occupied in strengthening the pupils' sense of ability and are aware of the objective difficulties of each student. Although the groups were "apparently" in a homogeneous structure, there were still differences between the pupils, both at the level of attention and emotion. Personal attention is paid to each pupil and the teacher's pace enables all pupils in the learning group to internalize the material at the individual level.

C. The Operative Delivery Approach

A Bible study lesson: students of high level of ability

The teacher energizes the pupils using various means, such as detection and decoding, listening and copying with a combination of varied teaching methods, including video

and presentations. In the lesson pupils are engaged in deciphering the meaning of a Bible narrative through story and simulation, in order to increase their understanding of and involvement with the message of the text. The pupils are invited to participate in a variety of actions involving active and intentional activity, mostly decoding and disclosure of information delivered through various questions and stimuli. During the lessons, the teacher devotes time to self-learning – the pupils learn in groups and talk to one another about the text, and later, also present the analysis of the text after the group has discussed it to the class.

In the course of the discussions, the pupils debated with one another. They argued and then drew agreed conclusions of the group's opinion. The teacher varied the process of the discussion in a special presentation with video clips, which encouraged the discussion.

At the end of the discussions, which were intriguing and challenging, the representatives of the groups got up and presented the opinions of the group to the whole class.

According to the teacher: *"It was important to activate the pupils at an intellectual level, to stimulate and arouse them with discourse and discussion. It was important to treat them as thinking people, to stimulate them and enable them to express their opinions, to train them in group discussion and how to persuade each other."*

D. The Encouraging Construction Approach

A Literature lesson: students of very high ability

The teacher describes her teaching style as active operation. Learning that includes interactive, emotional and cognitive involvement of the pupils, a learning process which enables the pupils to participate from their personal world and to connect between the learning process in the classroom and personal experiential processes from their social world. In this teaching process, there are learning processes which enable pupils to express their personal opinion and connect their personal world to the relevant topics being studied.

In order to create active involvement in the lesson, the teacher opens the subject, "Love" in the world of the pupils and from the pupils' point of view. She activates the pupils using various methods, such as asking questions, open questions, role-play, story dramatizations and reasoning questions.

The teacher says; *"The construction of ideas and thinking helps me to create an interesting lesson. The collection of ideas which arise on the part of the pupils enriches the lesson and turns it into the public domain."*

In the encouraging construction approach, the teacher imparts content, but also asks the pupils to react and express their opinions on the text. The teacher enables their varied opinions and diverse interpretations of the text to be heard. The teacher encourages creativity, which is reflected in the dramatization of the text and in the subjective significance of the pupils' feelings and opinions. The teacher encourages independent thinking and touches the personal world, which enables them to analyse, feel and interpret. In the "encouraging construction" teaching style, the teacher is not satisfied with activating the pupils; the teacher encourages the pupils in self-reasoning and in the creative process. The activities suggested by the teacher derive from an awareness of the fact that the various pupils will be able to bring up various ideas, each of which can be appropriate, in contrast to other teaching styles where the teacher mainly attempts to stimulate motivation and interest.

E. The Direct Delivery Approach

A Bible studies lesson: students of very low ability

The teacher expects the pupils to listen, and then, memorize and absorb the material.

The teacher states: "It's very important to give the kids the facts. I do this by using biblical texts. I also do this through presentations and films, providing I can give the pupils tangible facts."

Usually, I ask questions and expect an answer, and again I create stimulation through various methods, and repeat the process again.

"Because I teach in a learning group with a very low ability level, I try hard to deliver the material so that the pupils are able to memorize and remember the material and process it."

From the teacher's point of view, she is conveying facts. In the direct teaching approach, teachers have a personal epistemological perception (Kang, 2008). The knowledge which is conveyed by the teachers is presented as absolute truth and as an accumulated collection of tangible facts. The assumption is that the learning ability of the pupils enables them to remember and analyse. The teaching and learning process,

by means of which the knowledge is accumulated (Edgar & Sedgwick, 2007), occurs when the teacher creates stimulation, the pupil reacts and gets feedback from the teacher. Learning is a passive, technical and standard process that starts with stimulation, and by means of repeated experiences, the knowledge is absorbed and retained.

As can be seen, teaching by direct delivery is teacher-focused. The teacher directs the learning process. The teaching relates mainly to procedural knowledge, and less to propositional knowledge, which is related to understanding. The teacher in direct delivery teaching is considered an authority with didactic knowledge, such that learning occurs through absorbing, memorizing, remembering and applying.

Responsibility for the teaching process falls on the teacher, as he/she is the dominant and active image. In the learning process, the teacher brings together content and the pupils, whether this is indirectly by sending the pupils to read, practise, to gather information, etc., or by direct teaching. The success of teaching is measured according to the achievements in examinations which test the amount of knowledge which has been accumulated by the pupils.

In the examinations, the pupils "regurgitate" the knowledge, and it is the role of the teacher to test, measure and assess quantitatively numerical grades. The emphasis in teaching by direct delivery is placed on "how much" the pupils know and not just on "what" they know.

5.1 The analysis and findings for qualitative research

In the literature review, several teaching approaches were presented, ranging from teacher-focused to student-focused (Van Driel *et al.*, 2007). At one extreme was the direct, clarifying and attentive delivery, focusing on teacher quality, and at the other end, an active approach, a constructive student-focused method. The clarifying, direct delivery approach is described in the literature as beneficial, particularly in higher education, although it is also sometimes used in primary schools (Cuban, 2007). The educational system and the school learning environment are seen to be appropriate for direct delivery teaching (Cuban, 2007).

From the findings of this qualitative research, including observation of lessons and in-depth interviews, it appears that the teachers in school believe that pupils need some form of mediation of material and direction during the lesson (regardless of the type of

learning group and ability level) - so that the pupils will be able to understand and absorb the content of the studies. The teachers point out that, as a result of the implementation of the "TBWY" reform program, there was a change in their teaching perception, and even a change in the sense of their professional capability. From observation of the lessons and in-depth interviews carried out with the teachers, it appears that knowledge and content are the main objectives of teachers teaching by direct, clarifying and attentive delivery. Therefore, there is a preference among teachers, first of all, in the choice of subjects in the lesson, by level of importance, according to the teachers' point of view. In lessons A and E, for example, teachers presented information that the pupils could read, know and then memorize that is, knowledge was the primary goal of the lesson. Teachers using the direct/clarifying approach try to supply many subjects (out of a desire to provide a large amount of material towards the final examination). Memorizing and absorbing the material by the pupils is paramount. In the direct delivery teaching style, the pupils' function is to absorb the "material". Within the low level learning group, it is difficult for the pupils to summarize material. The teachers in these learning groups are aware of this difficulty. Accordingly, the absorption of the material by the pupils becomes an important goal which "justifies", according to the teachers' point of view, giving the pupils a prepared summary. From the interview with teachers A and E - "I try to convey the material with colours and explanations, in order to make it easier for them to write up the material: *"I try to mediate the material for them and present the subjects in clear and simple language."* What makes teaching by the attentive delivery unique, as opposed to teaching by direct or clarifying delivery, is the personal attitude of the teacher towards each pupil. In teaching by attentive delivery, the personal feelings of the pupil have an impact on the teacher's teaching style and the nature of delivery of the contents. In contrast to teaching by direct delivery, the teacher gives special attention to the individual pupil. Sometimes, the consideration becomes differential, intended to address the needs of various pupils (Darling-Hammond & Bransford, 2005), Here, also, the teacher, as in the case of teaching by direct delivery, is responsible for the teaching and learning process (Sawyer et al, 2005). The teacher is the initiator and leads the teaching process, its purpose being to convey the material being studied. Occasionally, the lesson includes learning activities which are adapted to the individual abilities of pupils within the group – even though the group is apparently a homogeneous group. From the interview with teacher B – *"It is important to me for every pupil to be connected to the lesson with the opportunity to feel a sense*

of capability that will strengthen their self-confidence." "The work-page which I distribute to the pupils during the lesson creates attentiveness. Thus, I am able to address each pupil, listening to his/her personal difficulties in that lesson. I go round the pupils and I can see their ability after I have explained." In activating teaching, on the other hand, one can discern that the instruction in the lessons activated all the pupils (Glubman & Caspi, 1999). The teacher used a variety of methods in the teaching process, such as disclosure and decoding. In lesson C, for example, the pupils were engaged in decoding text. The pupils were invited to try out various activities, which involved lively and planned activity, mostly decoding and disclosure of the knowledge being conveyed, through questions and other stimuli. Lessons with an activating teaching character devoted time to self-learning – the pupils learning in groups and talking to each other about the analysis of the text and then, presentation of an analysis of the text to the class. From the teacher of lesson C's interview - *"In my lesson, it was important to activate the pupils at an intelligent level, to create stimulation and arouse them to discourse and discussion. It was important for me to treat them as thinking people, to stimulate them and enable them to express their opinion, to train them in a group discussion and in how to persuade one another."* It appears that the teaching, in this case, as opposed to teaching by direct delivery was pupil-focused (Brooks & Brooks, 1993) and so, the teachers perceived their principal role as creating active and significant learning situations intended to structure knowledge as something with which he/she has a connection. In the encouraging structure approach, the pupils are activated in the lesson. The pupils react and bring their knowledge to the lesson (Brooks & Brooks, 1993). The teacher allows their diverse opinions and interpretations on the content of the lesson to be heard.

The teacher encourages creativity and independent thinking, for example, by dramatization, drawing and even writing a scenario, all of which express the subjective significance of the opinions of the pupils. The teacher, in the encouraging structure approach, encourages independent thinking and, at the same time, touches their personal world, through which the pupils are able to analyse, feel and interpret. The activities suggested by the teacher derive from the awareness of the fact that the pupils can suggest various ideas, each of which can be appropriate, in contrast to other teaching styles where the teacher's main intention is more to arouse motivation and interest and less to supply the material being studied. The teacher in lesson D stated in her interview *"During the lesson, it was important for the pupils to express their*

opinion, both emotional and educated. The pupil's world is unlike the world of adults. Their areas of interest are different from ours and, for me, it was important to present a subject which we all share, love." "I wanted them first to identify with the pain that there is in love. I assume that everyone experiences this in different ways, but the pain of parting is similar for everybody." "The lesson is varied and includes the active participation of the pupils dramatizing a play or even presenting ideas." The involvement of the pupils within the lesson and also the interaction between them and within themselves is very important to the dynamics of the lesson and to the connection between the pupils in their thoughts and feelings. The construction of ideas and thoughts helps me to create an interesting lesson. The ideas which are brought up by the pupils enrich the lesson and turn it into the public domain. These findings indicate that even when teachers actually teach, using the teaching approach which reflects the group's nature, both by direct/clarifying delivery by activating and encouraging teaching, the pupils' place in the teaching-learning process remains the same, that is the recipient of information, in the relationship between teachers and pupils (Yadid, 2006). From the findings, it appears that in low ability learning groups, the teachers are busy strengthening the pupils' feeling of capability and are aware of the difficulties of each pupil. Despite the fact that the groups are "apparently" homogeneous, there are still differences among the pupils, both at the level of attentiveness and at the emotional level. There is personal consideration for each pupil and the pace of the teacher allows all pupils within the group to internalize the material at the individual level. The findings reveal that teachers experience professional well-being. *"The reform program created professional well-being for me...teaching a homogeneous group enables me to teach in a style which is appropriate for the group." "...here I can adapt my teaching style to the learning group, not as in the past, when the pupils had to adapt themselves to the teacher." "...the TBWY program helped me learn new teaching styles and adapt the material to the pupils, in accordance with their level of ability."* The perception of teaching had been adapted, according to the teachers that we interviewed, according to the ability of the pupils and according to the character of the learning group. The perception of teaching changed from clarifying teaching and attentive teaching, in learning groups with low and medium learning ability levels, to operating and encouraging teaching in learning groups with high or very high ability. From observations in lessons and in-depth interviews with the teachers, it can be seen and understood that the teachers help pupils overcome difficulties and also stress emotional aspects (Isenberger &

Zembylas, 2006; Keefe, 2007). The teachers that were interviewed as part of the qualitative research indicated that they provided personal concern and respect toward the pupils. Furthermore, the teachers encouraged fair and friendly relations among the pupils and displayed caring. The teachers paid attention to the pupils. The learning was sometimes assessed in alternative ways and adjusted to the personalities of the pupils and the type of learning groups. This type of learning and assessment enables teachers to develop individual and authentic growth as well as professional well-being (Birnbaum, Yoad & Kimaron, 2004). The models in the research described the professional change that occurred among the teachers. The variety of teaching styles, integrated into the school's organizational culture, under the "TBWY" reform program enabled the teachers to change their teaching approach and to vary their teaching methods among and within the homogeneous learning groups. The implications for this change are vital for the success of a school and its students. The fact that teachers become flexible in their teaching styles and adapt to their students rather than the reverse, fulfils the requirement that, if a student cannot learn in the way a teacher teaches, then the teacher must teach in the way the student learns. In this way, the "TBWY" program offers equal and varied opportunity.

5.2 The analysis and findings of quantitative research

The question in Table 5.4 deals with the connection between the extent of the teacher's responsibility for the students' achievements, in cases of success and failure, prior to and following the activation of the "TBWY" reform program.

In order to examine the teachers' perception of their responsibility for the students' achievements and emotional results, I used Guskey's questionnaire (Guskey, 1988). The questionnaire originally included 30 statements. For each statement, there are two alternative answers; one answer describes "the extent of the teachers' responsibility" and the other answer describes "the students' contributing fault". The teachers were asked to give a grade (from 1 to 5) to each answer, and the final amount of the two answers together had to be five. Since not all of the statements were relevant to the current research, I chose 11 from the original 30 statements. It was found that the credibility of the questionnaire containing the 11 statements was 0.63 prior to the "TBWY" reform program and the credibility was 0.65 following the program.

Thirty teachers who teach in the school were asked to answer these statements prior to the activation of the "TBWY" reform program and again after its activation.

Table 5.4 presents the averages and standard deviations of the statements that express, as mentioned, the teachers' belief in the extent of their responsibility for the students' achievements and emotional results prior to and following the activation of the "TBWY" reform program. The table shows that the teachers agree less, after the program, with the statements "When parents comment on your work as a teacher, it is usually because their child is generally a good student" and "When most of the students in your classroom are successful in exams, it is usually because the exam was very easy". On the other hand, the teachers agree to a great extent with the statement "If you have presented a new idea to your students in the classroom and most of them remember it, it is because you presented and explained the difficult part in different ways". The various statements can be collected according to four distinct ways:

- The teachers' willingness to take responsibility for the students' achievements in cases of failure.
- The teachers' willingness to take responsibility for the students' emotional results in cases of failure.
- The teachers' willingness to take responsibility for the students' achievements in cases of success.
- The teachers' willingness to take responsibility for the students' emotional results in cases of success.

In order to examine if the statements connect with each other in this kind of configuration, a reinforcing factor analysis was carried out through the principal component method according to a Varimax rotation.

It can be seen that Table 5.5 indicates this distribution into two factors: the teachers' willingness to take responsibility for the students' achievements and emotional results in cases of failure (factor 1) and the teachers' willingness to take responsibility for the students' achievements and emotional results in cases of success (factor 2).

When these factors were examined following the activation of the "TBWY" reform program, the credibility (the credibility is involved in establishing that the results of the research are believable) of the first factor (responsibility of teacher in cases of failure) was found to be 0.63 and the credibility of the second factor (responsibility in cases of success) was 0.68. Furthermore, whether or not there were changes in the extent of the teachers' responsibility for cases of failure and success following the activation of the program was examined.

Table 5.4 Analysis of the teachers' responsibility for the students' scholastic achievements and emotional results prior to the program (N=30)

Item	Avgrag (Standard deviation)	Readiness to accept responsibility in cases of failure	Readiness to accept responsibility in cases of success
When your student is unable to remember something you said a moment ago, in most cases it is because you didn't emphasize the point strongly enough	2.03 (0.98)	0.80*	0.07
When the class has difficulty understanding something you have hypothesized, in most cases it is because you didn't clarify the hypothesis enough	2.48 (0.87)	0.73*	-0.39
When the students in your group fail exams, it is because you didn't insist that they prepare themselves for it	2.21 (1.34)	0.72*	-0.12
When the achievements of a substantial portion of your students are poor, in most cases it is because you didn't have time to give them the support they needed	2.19 (1.00)	0.53*	0.27
When the students in your group forget something, you explained to them earlier, in most cases it is because you didn't get them actively involved in learning	2.65 (1.01)	0.50*	0.41
When parents comment on your work as a teacher, it is usually because their child is generally a good student	1.48 (0.94)	0.44*	-0.03
When most of the students in your classroom are successful in	1.83	0.31*	0.02

exams, it is usually because the exam was very easy	(0.93)		
If you have presented a new idea to your students in the classroom and most of them remember it, it is because you presented and explained the difficult part in different ways	3.34 (0.76)	0.03	0.74*
When it appears that your students are learning something, with no difficulty, in most cases it is because you helped them organize the concepts and the approaches related to the subject	2.82 (0.84)	-0.11	0.68*
If your students learn something quickly, it is because you have encouraged their efforts to learn	2.32 (0.84)	0.02	0.63*
If a student in the group succeeds, it is because you encourage him	2.28 (0.79)	0.04	0.61*

Table 5.5 Teachers' responsibility for the students' scholastic achievements and emotional results before and after [shaded] the program, average, standard deviations N =30

Item	Before the program 2006 Average (Standard deviation) (N=30)	After the program 2009 Average (Standard deviation) (N=30)
The teachers' willingness to take responsibility for the students' achievements and emotional results in cases of failure	2.12 (0.59)	2.57 (0.44)
The teachers' willingness to take responsibility for the students' achievements and emotional results in cases of success	2.70 (0.55)	3.40 (0.68)

Table 5.5 presents the averages, standard deviations of the two factors prior to and following the activation of the "TBWY" reform program. Table 5.5 shows that in the two factors, there are pronounced differences between the averages prior to, and following the activation of the "TBWY" reform program.

The teachers' willingness to take responsibility in cases of failure and success is higher following the implementation of the program. Their willingness to take responsibility in cases of failure was lower than their willingness to take responsibility in cases of success, both prior to, and following the activation of the program.

Reinforcement of these findings can be found in the comments the teachers wrote when they were asked in the questionnaire if they felt that a change had occurred in the extent of their commitment following their participation in the "TBWY" reform program.

"I am more aware and my commitment is deeper."

"There has definitely been a change in my approach to the students."

"As an instructor, I feel more connected to the students, I feel more motherly toward them and more concern."

"There is more accessibility to the student. My skill in observance as an instructor is more focused with an emphasis on responsibility and commitment."

"My commitment to the students in the leadership group is undoubtedly greater than the commitment of a teacher in a homeroom of 40 students."

In order to examine the students' perception of the optimal educational climate in the school, I used the optimal social climate questionnaire, following tables (5.6 – 5.10), of the Department of Education's Psychological Consultation Service (*Shepy*) in 2006. This questionnaire relates to the various dimensions of the school climate. I chose items from the questionnaire that were relevant to the "TBWY" reform program; the students' various needs (a sense of belonging, self-respect and self-worth, capability, autonomy and self-actualization and authentic expression). Furthermore, the frequency of the students' exposure to verbal and physical violence in the school was examined, as well as their perception of the teachers' ability to cope with violence in the school.

The questionnaire was distributed to all the students in the school prior to the implementation of the "TBWY" reform program in 2006, and again in 2009 after the reform program had been in operation for three years.

The analysis of the findings indicates pronounced changes in many dimensions following the implementation of the reform program, especially in reference to the teachers in the school.

Table 5.6 Students' sense of belonging before (N=543) and after [shaded] the program (N=295), average, standard deviations

Item	Before the program 2006 Average (Standard deviation) (N=543)	After the program 2009 Average (Standard deviation) (N=295)
Summary index: sense of belonging	3.18 (0.72)	3.14 (0.81)
I feel that my teachers care about what is happening with me	3.26 (1.13)	3.60 (1.15)
The teachers make sure that the students help each other	2.69 (1.05)	2.72 (1.11)
	3.66	3.56

I feel I belong to my class	(1.21)	(1.27)
The teachers see to it that there are social connections between the students during recess and after school	2.14 (1.10)	2.31 (1.17)
Our teachers take a personal interest in the students	2.90 (1.11)	3.27 (1.19)
It is important to the teachers that the students care about each other	3.11 (1.06)	3.26 (1.20)

The following tables (5.6-5.10) present the research findings concerning the students' perceptions of the extent of the response to their various needs in the school, prior to and following, the activation of the reform program. The findings are based on the questions in the optimal educational climate questionnaire, in which the students were asked to indicate their agreement with statements that relate to these needs on a scale from 1 (I agree to a very small degree) to 5 (I agree to a very large degree).

Table 5.6 relates to the students' sense of belonging, expressed in the statements *"I feel I belong to my class"* and *"The teachers see to it that there are social connections between the students during recess and after school."*

It can be seen in Table 5.6 that the students' sense of belonging in all of the statements and in the summary index is higher following the activation of the reform program. However this increase is reflected in the statements that relate to the teachers – *"I feel that my teachers care about what is happening with me."* *"Our teachers take a personal interest in the students."* and *"It is important to the teachers that the students care about each other."* – as well as in the summary index in Table 6.5.

Table 5.6.1 Students' sense of belonging. Students' perception of the leadership concentration and the classroom's influence before the program

Item	Very little	Somewhat	Fairly	To a large extent	Very much
I feel that my teachers care about what is happening with me	7.3%	18.0%	29.8%	31.0%	13.9%
	7.1%	13.9%	28.8%	31.9%	18.3%
The teachers make sure that the students help each other	13.6%	29.2%	37.2%	14.6%	5.3%
	11.5%	7.8%	35.6%	19.3%	7.8%
I feel I belong to my class	7.4%	9.3%	22.8%	30.5%	30.0%
	15.6%	5.4%	19.3%	32.5%	27.1%
The teachers see to it that there are social relations between the students during recesses and after school	43.7%	25.6%	21.6%	6.3%	2.8%
	43.7%	23.4%	21.0%	7.1%	4.7%
Our teachers take a personal interest in the students	14.1%	23.0%	35.2%	19.2%	8.5%
	9.8%	15.6%	28.1%	30.5%	15.9%
It is important to the teachers that the students care about each other	10.5%	17.9%	38.3%	24.2%	9.1%
	10.2%	14.6%	31.9%	26.1%	17.3%

(N=543) and after [shaded] the program (N = 295) in percentages

"I feel that my teachers care about what is happening with me", before the program Table 5.6.1, (Very much, To a large extent and Fairly =74.7%) and after the program Table 5.6.1, (Very much, To a large extent and Fairly =79%). In Table 5.6 (before the program the average=3.26, after the program the average=3.6). *"The teachers make*

sure that the students help each other," before the program Table 5.6.1, (Very much, To a large extent and Fairly =57.1%) and after the program Table 5.6.1 (Very much, To a large extent and Fairly =62.7%). In Table 5.6 (before the program the average=2.69, after the program the average=2.72). "I feel I belong to my class," before the program Table 5.6.1, (Very much, To a large extent and Fairly =83.3%) and after the program Table 5.6.1 (Very much, To a large extent and Fairly =78.9%). In Table 5.6 (before the program the average=3.66, after the program the average=3.56). The students' sense of belonging is higher following the activation of the reform program. "The teachers see to it that there are social relations between the students during recesses and after school," before the program Table 5.6.1, (Very much, To a large extent and Fairly =30.7%) and after the program Table 5.6.1, (Very much, To a large extent and Fairly =33.4%). In Table 5.6, (before the program the average=2.14, after the program the average=2.31). "Our teachers take a personal interest in the students," before the pilot Table 5.6.1, (Very much, To a large extent and Fairly =62.9%) and after the pilot Table 5.6.1, (Very much, To a large extent and Fairly =74.5%). In Table 5.6 (before the program the average=2.9, after the program the average=3.27). "It is important to the teachers that the students care about each other." before the program Table 5.6.1, (Very much, To a large extent and Fairly =71.6%) and after the program Table 5.6.1, (Very much, To a large extent and Fairly =75.3%). In Table 5.6, (before the program the average=3.11, after the pilot the average=3.26).

Table 5.7 Students' sense of self-respect and self-worth before (N=543) and after (295) [shaded] the program, average, standard deviations

Item	Before the program 2006 Average (Standard deviation) (N=543)	After the program 2009 Average (Standard deviation) (N=295)
Summary index: sense of self-respect and self-worth	3.69 (0.61)	3.93 (0.67)
The students in my classroom treat me with respect.	3.99 (1.02)	4.16 (0.90)

None of our teachers humiliate the students***	2.57 (1.14)	3.89 (1.09)
The students in my classroom don't think my ideas are silly ***	3.39 (1.04)	4.24 (1.08)
My classmates almost never make fun of me ***	3.69 (1.05)	4.45 (0.93)
The teachers make me feel I am "worthy"	3.21 (1.10)	3.44 (1.15)
The students take what I say seriously	3.76 (1.10)	3.40 (1.03)
In our school, the teachers don't discriminate against the students ***	3.54 (1.18)	3.98 (1.13)
Most of the teachers show me respect	3.55 (1.09)	3.81 (1.03)
My classmates show me respect	3.99 (1.02)	3.83 (0.92)

*** This statement appeared on the questionnaire in reverse phrasing and it was re-coded so that it would match the rest of the statements.

Table 5.7.1 Students' sense of self-respect and self-worth before the program, Results of the Needs Questionnaire before the program (N=543) and after [shaded] the program (N = 295) in percentages

Item	Very little	Somewhat	Fairly	To a large extent	Very much
The students in my classroom treat me with respect	4.2%	3.3%	17.5%	39.3%	35.6%
	2.0%	2.4%	14.6%	39.0%	42.0%
None of our teachers humiliate the students***	19.9%	28.7%	32.4%	12.4%	6.7%
	11.5%	2%	51.3%	23.7%	11.5%
The students in my classroom don't think my ideas are silly ***	5.3%	39.3%	3%	32.2%	20.2%
	1.7%	18%	7.1%	50.5%	22.7%

My classmates almost never make fun of me ***	49.7%	29.3%	12.5%	4.5%	4.0%
	5.1%	42%	27.8%	13.2%	11.9%
The teachers make me feel I am "worthy"	8.9%	15.0%	37.9%	26.8%	11.5%
	3.7%	8.8%	24.4%	42.4%	20.7%
The students take what I say seriously	6.9%	9.3%	34.1%	37.6%	12.1%
	30.2%	32.5%	21.0%	10.2%	6.1%
In our school, the teachers don't discriminate against the students***	21.9%	30.6%	28.2%	12.1%	7.2%
	18%	10.8%	35.3%	27.8%	8.1%
Most of the teachers show me respect	5.8%	13.0%	25.7%	35.0%	20.5%
	5.4%	7.8%	19.3%	37.3%	30.2%
My classmates show me respect	5.5%	5.0%	27.7%	38.6%	23.2%
	4.7%	8.1%	20.7%	43.4%	23.1%

*** This statement appeared on the questionnaire in reverse phrasing and it was re-coded so that it would match the rest of the statements.

Table 5.7 examines the students' sense of self-respect and self-worth prior to and following the reform program, in the following statements: *"The students in my classroom show me respect"* and *"Most of the teachers show me respect."* Table 5.7 shows that the students' sense of self-respect and self-worth in all of the statements and in the summary index is higher following implementation of the "TBWY" reform program. The one exception is the statement *"The students take what I say seriously,"* where there was a decrease following implementation of the program.

"The students in my classroom treat me with respect," before the program Table 5.7.1, (Very much, To a large extent and Fairly =92.4%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =95.6%). In Table 5.7 (before the program the average=3.9, after the program the average=4.16). *"None of our teachers humiliates the students,"* before the program Table 5.7.1, (Very much, To a large extent and Fairly =51.5%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =86.5%). In Table 5.7 (before the program the average=2.57, after the program the average=3.89). *"The students in my classroom don't think my ideas*

are silly," before the program Table 5.7.1, (Very much, To a large extent and Fairly =55.4%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =80.3%), In Table 5.7 (before the program the average=3.39, after the program the average=4.24). The students' sense of belonging of the statement is higher following the activation of the reform program. *"My classmates almost never make fun of me,"* before the program Table 5.7.1 (Very much, To a large extent and Fairly =21%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =52.9%). In Table 5.6 (before the program the average=2.14, after the program the average=2.31). *"The teachers make me feel I am 'worthy',"* before the program Table 5.7.1, (Very much, To a large extent and Fairly =76.2%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =87.5%). In Table 5.7 (before the program the average=3.21, after the program the average=3.44). *"In our school, the teachers don't discriminate against the students,"* before the program Table 5.7.1, (Very much, To a large extent and Fairly =47.5%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =71.2%). In Table 5.7 (before the program the average=3.54, after the program the average=3.98). *"Most of the teachers show me respect,"* before the program Table 5.7.1, (Very much, To a large extent and Fairly =81.2%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =86.8%). In Table 5.7 (before the program the average=3.55, after the program the average=3.81). *"My classmates show me respect,"* before the program Table 5.7.1, (Very much, To a large extent and Fairly =89.5%) and after the program Table 5.7.1, (Very much, To a large extent and Fairly =87.2%). In Table 5.7 (before the program the average=3.99, after the program the average=3.83).

Table 5.8 Students' sense of capability before (N=543) and after (N=295) [shaded] the program, average, standard deviations

Item	Before the program 2006 Average (Standard deviation) (N=543)	After the program 2009 Average (Standard deviation) (N=295)
Summary index: sense of capability	3.68 (0.68)	3.77 (0.64)

I feel I can succeed in school	3.85 (1.06)	3.88 (1.07)
I feel I can perform difficult tasks	3.77 (0.99)	3.77 (1.03)
When I am given an assignment, I don't believe I can do it***	3.93 (1.10)	4.03 (0.99)
The teachers see to it that every student in the classroom feels he can succeed	3.18 (1.16)	3.37 (1.14)
Learning isn't harder for me than it is for any other student ***	3.67 (1.27)	3.97 (1.22)
I feel I can succeed in many things I do	3.75 (1.07)	3.83 (0.99)
I can do all the things I am required to do in school	3.32 (1.11)	3.58 (1.08)
I feel I am capable	3.73 (1.18)	3.86 (1.19)

*** This statement appeared on the questionnaire in reverse phrasing and it was re-coded so that it would match the rest of the statements.

The students' sense of capability is examined in Table 5.8. The findings show a higher sense of capability following implementation of the reform program. However, this increase in, *"The teachers see to it that every student in the classroom feels he can succeed,"* before the program Table 5.8.1, (Very much, To a large extent and Fairly =75.7%) and after the program Table 5.8.1, (Very much, To a large extent and Fairly =84.5%). In Table 5.8 (before the program the average=3.18, after the program the average=3.37), and in *"Learning is no harder for me than it is for any other student"* before the program Table 5.8.1, (Very much, To a large extent and Fairly =37.8%) and after the program Table 5.8.1, (Very much, To a large extent and Fairly =69.1%). In Table 5.8 (before the program the average=3.67, after the program the average=3.97), and *"I can't do all the things I am required to do in school,"* before the program Table 5.8.1, (Very much, To a large extent and Fairly =54%) and after the program Table

5.8.1, (Very much, To a large extent and Fairly =70.9%). In Table 5.8 (before the program the average=3.32, after the program the average=3.58).

Table 5.8.1 Students' sense of capability before the program (N=543) and after [shaded] the program (N = 295) in percentages

Item	Very little	Somewhat	Fairly	To a large extent	Very much
I feel I can succeed in school	5.2%	4.3%	20.7%	40.2%	29.6%
	4.1%	6.8%	18.6%	37.6%	32.9%
I feel I can perform difficult tasks	2.6%	6.4%	28.4%	36.5%	26.1%
	2.7%	9.2%	24.1%	36.9%	27.1%
When I am given an assignment, I don't believe I can do it***	36.0%	30.7%	22.6%	7.0%	3.7%
	44.7%	30.2%	15.9%	5.8%	3.4%
The teachers see to it that every student in the classroom feels he can succeed	10.9%	13.4%	36.0%	25.9%	13.8%
	5.2%	10.3%	46.4%	27%	11.1%
Learning isn't harder for me than it is for any other student. ***	36.9%	25.3%	22.8%	8.6%	6.4%
	2.4%	28.5%	25.8%	36.9%	6.4%
I feel I can succeed in many things I do	9.2%	7.2%	25.8%	30.2%	27.6%
	3.7%	7.9%	33.6%	34.7%	20.1%
I can do all the things I am required to do in school	17.0%	28.9%	36.4%	11.7%	5.9%
	13 %	16.1%	30.6%	30%	10.3%
I feel I am capable	6.4%	7.6%	26.0%	27.2%	32.8%
	3.8%	4.6%	25.8%	36.3%	29.6%

*** This statement appeared on the questionnaire in reverse phrasing and it was re-coded so that it would match the rest of the statements.

Table 5.9 Students' sense of autonomy before (N=543) and after (N=295) [shaded] the program, average, standard deviations

Item	Before the program 2006 Average (Standard deviation) (N=543)	After the program 2009 Average (Standard deviation) (N=295)
Summary index: sense of autonomy	2.78 (0.78)	2.92 (0.82)
The teachers encourage the students to suggest new ideas in connection with learning	2.74 (1.11)	2.87 (1.16)
In my school, I have an option of making my own decisions about certain subjects	2.67 (1.09)	2.97 (1.16)
Many of the things I do in school are not because they force me to do them ***	2.97 (1.19)	3.26 (1.25)
The teachers encourage the students to participate in making decisions about subjects related to the school	2.88 (1.09)	3.12 (1.16)
In our school, the students can have an influence on many things	3.22 (1.18)	3.23 (1.15)

*** This statement appeared on the questionnaire in reverse phrasing and it was re-coded so that it would match the rest of the statements.

Table 5.9 examines the students' sense of autonomy prior to, and following the implementation of the "TBWY" reform program. The findings show that the students' sense of autonomy is higher following the implementation of the program. An increase in the sense of autonomy in the following statements:

"The teachers encourage the students to suggest new ideas in connection with learning," before the program Table 5.9.1, (Very much, To a large extent and Fairly =56%) and after the program Table 5.9.1, (Very much, To a large extent and Fairly =66.7%). In Table 5.9 (before the program the average=2.74, after the program the average=2.87). *"Many of the things I do in school are not because they force me to do*

them," before the program Table 5.9.1, (Very much, To a large extent and Fairly =73.4%) and after the program Table 5.9.1, (Very much, To a large extent and Fairly =81%). In Table 5.9 (before the program the average=2.97, after the program the average=3.26).

"The teachers encourage the students to participate in making decisions about subjects related to the school," before the program Table 5.9.1, (Very much, To a large extent and Fairly =58.3%) and after the program Table 5.9.1, (Very much, To a large extent and Fairly =62.4%). In Table 5.9 (before the program the average=2.88, after the program the average=3.12). There was increase in the sense of autonomy in the summary index. The differences in the students' feelings prior to, and following the activation of the reform program are increases, principally in the statements that relate to the teachers in the school.

Table 5.9.1 Students' sense of autonomy before the program (N=543) and after [shaded] the program (N = 295) in percentages

Item	Very little	Somewhat	Fairly	To a large extent	Very much
The teachers encourage the students to suggest new ideas in connection with learning	15.5%	28.5%	33.3%	16.2%	6.5%
	10.6%	22.7%	37.9%	22.4%	6.4%
In my school, I have an option of making my own decisions about certain subjects	16.6%	26.8%	34.6%	16.8%	5.1%
	17.3%	24.4%	26.1%	21.0%	11.2%
Many of the things I do in school are not because they force me to do them ***	9.4%	17.2%	33.8%	23.8%	15.8%
	9.5%	9.5%	34.9%	22.7%	23.4%
The teachers encourage the students to participate in making decisions about subjects related to the school	14.7%	27.0%	34.8%	16.9%	6.6%
	10.9%	26.8%	31.2%	22.7%	8.5%

In our school, the students can have an influence on many things	13.5%	19.5%	32.7%	23.0%	11.3%
	14.9%	23.4%	31.2%	22.7%	7.8%

*** This statement appeared on the questionnaire in reverse phrasing and it was re-coded so that it would match the rest of the statements.

Table 5.10 Students' sense of self-actualization and authentic expression before (N=543) and after (N=295) [shaded] the program, average, standard deviations

Item	Before the program	After the program
	2006	2009
	Average (Standard deviation)	Average (Standard deviation)
	(N=543)	(N=295)
Summary index: sense of self-actualization and authentic expression	3.05 (0.77)	3.2 (0.81)
I can express my aptitudes in my school	3.34 (1.15)	3.33 (1.12)
The teachers encourage free and open expression in the classroom.	3.22 (1.05)	3.44 (1.03)
At my school, I can do things that are interesting to me	3.27 (1.18)	3.62 (1.23)
In my school, I can be creative	2.73 (1.25)	2.82 (1.2)
In my school, I feel comfortable expressing an original and unconventional point of view	3.10 (1.19)	3.17 (1.23)
Our school encourages students to express their personal ideas	2.85 (1.10)	2.92 (1.13)
In our school, the teachers encourage the students to express their true opinion	3.0 (1.14)	3.44 (1.03)

Table 5.10.1 Students' sense of self-actualization and authentic expression before the program (N=543) and after [shaded] the program (N = 295) in percentages

Item	Very little	Somewhat	Fairly	To a large extent	Very much
I can express my aptitudes in my school	7.9%	13.1%	34.2%	26.8%	17.9%
	7.5%	13.9%	31.9%	31.5%	15.3%
The teachers encourage free and open expression in the classroom	7.1%	14.4%	38.6%	29.2%	10.7%
	6.50%	8.1%	29.2%	28.8%	27.4%
At my school, I can do things that are interesting to me	13.3%	23.0%	37.6%	13.7%	12.3%
	9.8%	10.6%	34.2%	21.1%	24.3%
In my school, I can be creative	20.3%	23.0%	31.3%	13.9%	11.4%
	13.2%	12.9%	33.2%	25.1%	15.6%
In my school, I feel comfortable expressing an original and unconventional point of view	12.8%	14.7%	34.6%	25.3%	12.6%
	11.9%	24.1%	32.9%	22.7%	8.5%
Our school encourages students to express their personal ideas	13.5%	21.5%	39.2%	18.3%	7.6%
	7.5%	13.9%	31.9%	31.5%	15.3%
In our school, the teachers encourage the students to express their true opinion	12.1%	17.3%	39.4%	20.5%	10.7%
	28.8%	21.4%	29.2%	12.5%	8.1%

*** This statement appeared on the questionnaire in reverse phrasing and it was re-coded so that it would match the rest of the statements.

Table 5.10 examines students' sense of self-actualization and authentic expression in the school. The findings show that the differences in a sense of self-actualization prior

to, and following the implementation of the "TBWY" reform program are not changes in the summary index and in some of the statements. However, similar to the trend that was found in Table 5.9, there is an increase in the statements that relate to the teachers in the school.

"The teachers encourage free and open expression in the classroom," before the program Table 5.10.1, (Very much, To a large extent and Fairly =78.5%) and after the program Table 5.10.1, (Very much, To a large extent and Fairly =85.4%). In Table 5.10 (before the program the average=3.22, after the program the average=3.44). *"In our school, the teachers encourage the students to express their true opinion,"* before the program Table 5.10.1, (Very much, To a large extent and Fairly =65.1%) and after the program Table 5.10.1, (Very much, To a large extent and Fairly =78.7%). In Table 5.10, (before the program the average=2.85, after the program the average=2.92). *"At my school, I can do things that are interesting to me,"* before the program Table 5.10.1, (Very much, To a large extent and Fairly =63.6%) and after the program Table 5.10.1, (Very much, To a large extent and Fairly =79.6%). In Table 5.10 (before the program the average=3.27, after the program the average=3.62).

Table 5.11 shows the findings pertaining to verbal and physical violence in the school prior to, and following the activation of the reform program. The findings are based on the questions in the optimal educational climate questionnaire.

Table 5.11 Verbal violence before (N=543) and after (N=295) [shaded] the program, average, standard deviations

Item	Before the program 2006 Average (Standard deviation) (N=543)	After the program 2009 Average (Standard deviation) (N=295)
Verbal assault	1.44 (0.51)	1.43 (0.48)
Physical assault	1.19 (0.39)	1.15 (0.33)
Theft and blackmail	1.23 (0.43)	1.18 (0.39)

Carrying a weapon	1.17 (0.38)	1.11 (0.34)
Sexual assault and harassment	1.15 (0.37)	1.13 (0.34)
Teachers' violent behaviour toward students	1.19 (0.38)	1.17 (0.32)

Table 5.12 Students' perception of the teachers' ability to handle occurrences of violence before (N=543) and after (N=295) [shaded] the program, average, standard deviations

Item	Before the program	After the program
	2006	2009
	Average (Standard deviation)	Average (Standard deviation)
	(N=543)	(N=295)
Summary index: teachers' ability to handle occurrences of violence	3.07 (1.12)	3.34 (1.15)
The teachers manage to handle violent students who make trouble	2.79 (1.22)	2.98 (1.33)
The teachers are concerned that there will be no violent behaviour	3.47 (1.33)	3.76 (1.31)
The teachers do things in order to reduce occurrences of violent behaviour.	3.15 (1.28)	3.45 (1.31)
The teachers have reduced occurrences of violent behaviour.	2.87 (1.25)	3.17 (1.34)

Table 5.12.1 Students' perception of the teachers' ability to handle occurrences of violence before the program (N=543) and after [shaded] the program (N = 295) in percentages

Item	Not at all	Very little	Some-times	Quite a lot	Most of the time
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The teachers manage to handle violent students who make trouble	19.0%	20.1%	34.0%	17.3%	9.7%
	10.9%	17.6%	30.7%	16.2%	24.6%
The teachers are concerned that there will be no violent behaviour.	12.0%	12.4%	19.1%	29.5%	27.0%
	9.7%	7.9%	18.3%	24.8%	39.3%
The teachers do things in order to reduce occurrences of violent behaviour	13.7%	17.5%	26.0%	26.2%	16.7%
	10.7%	12.8%	25.9%	22.1%	28.6%
The teachers have reduced occurrences of violent behaviour	18.2%	19.1%	31.9%	19.1%	11.6%
	15.9%	13.1%	30.7%	18.6%	21.7%

Table 5.12 examines the students' perception prior to, and following the activation of the reform program, of teachers' ability to handle occurrences of violence. The findings from the optimal education climate questionnaire in which the students were to indicate their answers on a scale from 1 (to a very small extent) to 5 (to a very large extent) show differences (increases) in the students' perception of teachers' ability to handle occurrences of violence in the school prior to, and following the implementation of the reform program. The increases were in all of the statements as well as in the summary index. There was an increase in the students' perception following the implementation of the program. The statement, "*The teachers manage to handle violent students who make trouble,*" before the program Table 5.12.1, (Very much, To a large extent and Fairly =61%) and after the program Table 5.12.1, (Very much, To a large extent and Fairly =71.5%). In Table 5.12 (before the program the average=3.07, after the program the average=3.34). "*The teachers are concerned that there will be no violent behaviour,*" before the program Table 5.12.1, (Very much, To a large extent and Fairly =75.6%) and after the program Table 5.12.1, (Very much, To a large extent and Fairly =82.4%). In Table 5.12 (before the program the average=3.47, after the program the average=3.76). "*The teachers do things in order to reduce occurrences of violent behaviour,*" before the program Table 5.12.1, (Very much, To a large extent and Fairly =68.9%) and after the program Table 5.12.1, (Very much, To a large extent and Fairly =76.6%). In Table 5.12 (before the program the average=3.15, after the program the average=3.45). "*The teachers have reduced occurrences of violent behaviour,*" before the program Table 5.12.1, (Very much, To a

large extent and Fairly =62.6%) and after the program Table 5.12.1, (Very much, To a large extent and Fairly =71%). In Table 5.12 (before the program the average=2.87, after the program the average=3.17).

5.3 Percentage of students eligible for a matriculation certificate before and after activation of the reform program

The examination of the students' scholastic achievements was based on the students' grades in the compulsory subjects, Hebrew grammar/composition, Bible studies, civics, literature and history. The findings were taken from the students' final grades as they were received from the Examinations Section of the Department of Education.

For this purpose, the researcher compared the grades on the matriculation exams of 12th grade students two years prior to the implementation of the "TBWY" reform program with the grades on the matriculation exams the year following the implementation of the reform program. The analysis indicates clear differences in all of the subjects that were examined prior to, and following the implementation of the reform program. The program contributes not only from the standpoint of the students' perceptions and views, as found in Tables 5.4 through Tables 5.10, but also from the standpoint of actual scholastic achievements. In other words, it contributes not only from a subjective point of view but also from an objective point of view. It can be seen in Table 5.13 that an increase in grades in the subjects of English and mathematics was still unsubstantial. The English and mathematics classes retained the traditional format; there was no change and the direction was unclear, which indicates that there had been no change in the pedagogical perception and that the reform had not found expression in the structure of the learning groups, unlike other subjects. It is probable that in the coming years, when the program is more established within the schools, that an increase will be found in the students' grades in these subjects as well. Table 5.13 shows an increase in students' grades in Hebrew grammar/composition, Bible studies and civics, which they learned in homogeneous learning groups, with differential resources, in the framework of the "TBWY" reform program. On the other hand, 10th grade students had been tested in language prior to the implementation of the reform.

Table 5.13 Students' grades in compulsory subjects on the matriculation exams before (N=543) and after (N=295) [shaded] the program, average, standard deviations

Item	N	Before the program 2006 Average (Standard deviation)	N	After the program 2009 Average (Standard deviation)
Hebrew grammar/composition	415	77.75 (8.73)	176	79.09 (8.13)
Language	417	73.68 (14.76)	177	74.32 (15.17)
History	351	75.03 (15.19)	172	77.62 (13.41)
Civics	339	70.88 (15.57)	169	75.92 (14.11)
Literature	386	73.47 (13.72)	179	75.51 (14.45)
Bible studies	398	73.68 (15.76)	178	76.47 (14.21)
English (3 units)	54	71.99 (16.65)	12	70.14 (12.73)
English (4 units)	105	76.54 (9.51)	43	73.28 (8.91)
English (5 units)	282	84.50 (8.99)	132	83.75 (10.29)
Mathematics (3 units)	257	78.43 (14.35)	102	80.12 (17.61)
Mathematics (4 units)	112	82.17 (12.74)	56	80.04 (12.21)
Mathematics (5 units)	78	89.14 (8.78)	34	87.61 (7.93)

Diagram 3 shows increases in the percentage of students eligible for a matriculation certificate between the years prior to the activation of the "TBWY" reform program

and the year following its activation. There is around a 40.9% increase in the number of students eligible for a matriculation certificate, in the years following the activation of the program. There is then a regular increase until the 2015 academic year, which has a percentage eligibility of 95%.

Diagram 3 Eligibility for Matriculation between 2007 and 2015

2007	2008	2009	2010	2011	2012	2013	2014	2015
66%	72.8%	83.05%	80.3%	77%	84.4%	92.8%	87.4%	95%

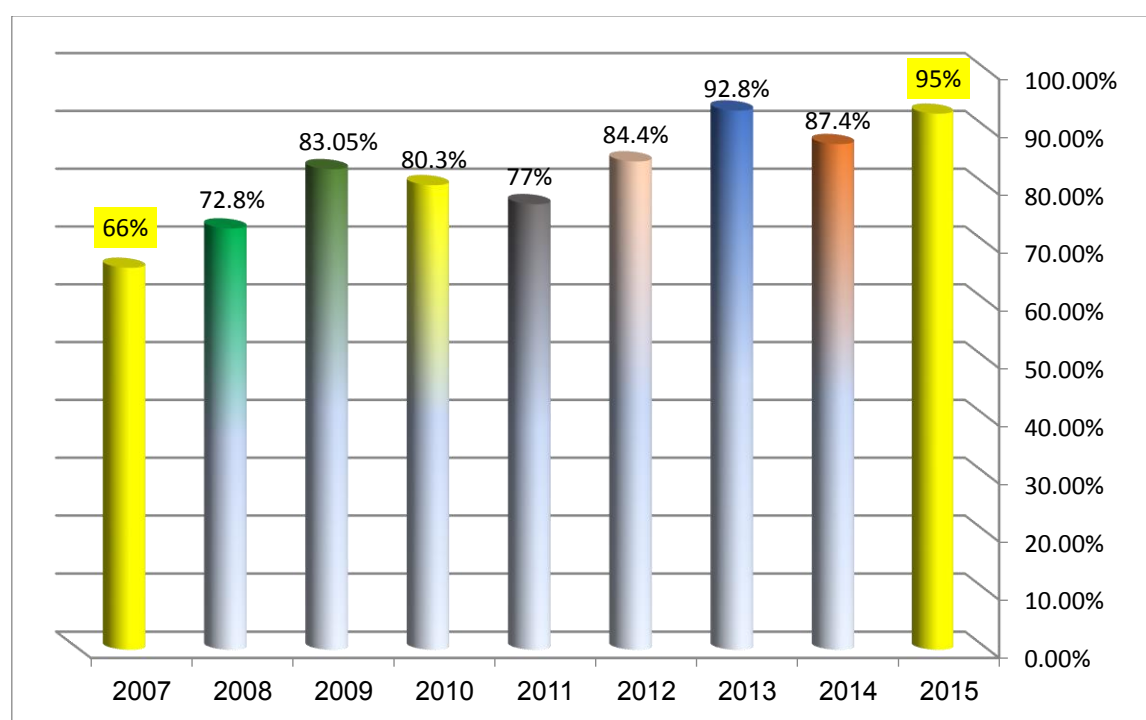


Diagram 4 shows a comparison of students' achievements in compulsory matriculation subjects.

Some achievements show an increase whilst others decreased prior to and after the implementation of the 'TBWY' program. There was in fact a decrease in the achievements in literature and language.

Diagram 4 shows that the changes in the grades in mathematics and English prior to, and following the activation of the program were not significant. The results of the MEITZAV exams (indices of the school's efficiency and growth) reflect similar results, which also bear witness to the large differences in achievements between groups of students in the education system, i.e. differences between students from high, middle and low socio-economic backgrounds.

Comparative international exams, in which students in the education system in Israel participate, also clearly indicate large differences between groups and sectors in society and between students from different socio-economic backgrounds.

Diagram 4 Proportion of students who received a final passing grade in compulsory subjects on the matriculation exams before and after the program (in %)

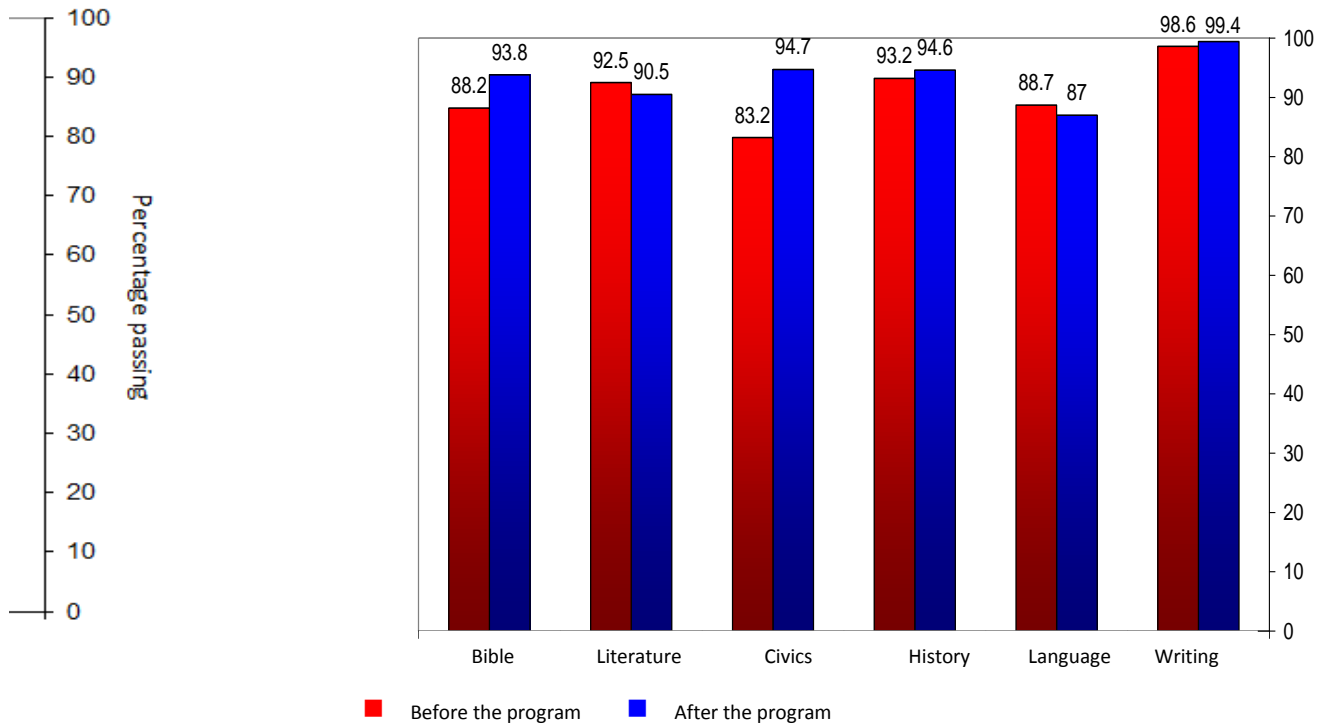


Diagram 5 Proportion of students who received a final passing grade in mathematics and English before and after the program (in %)

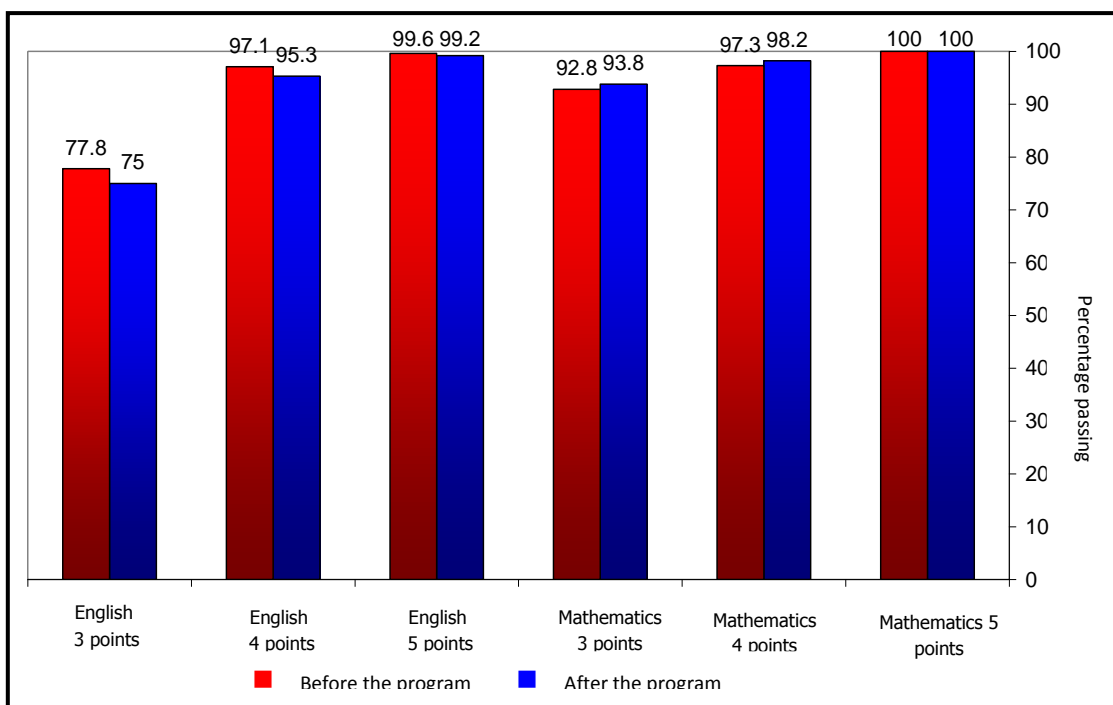


Diagram 5 shows an increase in the students' grades in study unit 3 in mathematics; however, the increase is not statistically significant. On the other hand, there was a definite decrease in the students' grades in study units 3 and 5 in English and in study units 4 and 5 in mathematics.

Diagram 6 Differences in scholastic achievements before and after the reform program

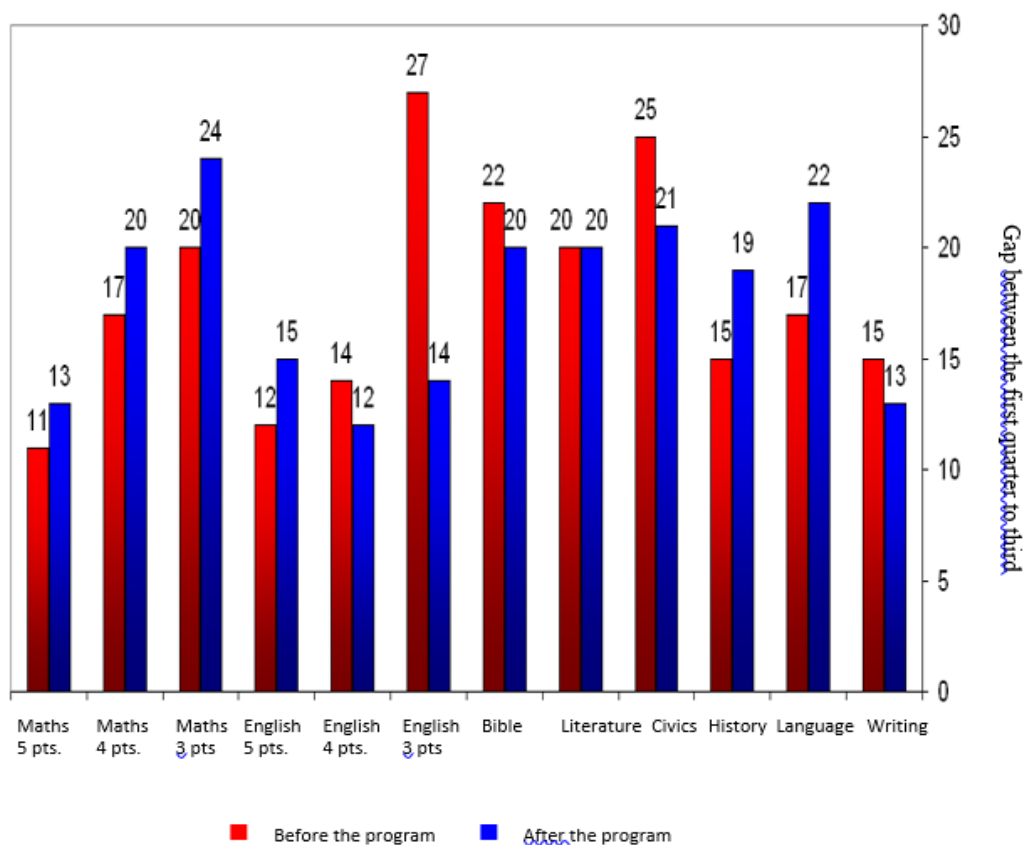


Diagram 6 presents the differences in average yearly grades prior to, and following the activation of the "TBWY" reform program.

The first stage of the reform included a small number of subjects: Hebrew grammar/composition, civics, literature and Bible studies. The diagram shows that the difference is small in Hebrew grammar/composition: 15 units were studied prior to the implementation of the reform program and 13 units following. The difference between the students' achievements in civics was reduced during this period from 25 to 21, and the polarization between their achievements in Bible studies was reduced from 22 to 20. There was no change in the students' achievements in literature. However, with regard to language, it appears that there are large differences between the quarters

during this period. The reason for this is that the 10th grade took the matriculation exam in language in 2004, prior to the implementation of the reform program.

There is a tendency towards an increase in the students' grades in unit 4 in English and in unit 3 in mathematics. However, there was no change before and after the reform program. On the other hand there was a decrease in units 3 and 5 in English and units 4 and 5 in mathematics, similar to that in language, in which the 10th grade was tested prior to the implementation of the reform program. It can be seen that there were no changes in English and mathematics, which are taught in homogeneous learning groups and groupings. These results in comparison to the pronounced changes in all of the other subjects make one wonder about the methods of instruction, which did not change from group teaching, as opposed to distinct changes in the subjects that were included in the reform program where the method of instruction was differentially adjusted.

5.4 Findings and concluding discussion

In the present study, clear differences can be discerned between the averages in general, prior to the implementation of the "TBWY" reform program and the averages following. The teachers' willingness to take responsibility for the students' achievements and their emotional results in cases of failure prior to the reform program was 2.12 as opposed to 2.57 following the reform program.

"The teachers' willingness to take responsibility for the students" achievements and emotional results in cases of success prior to the reform program was 2.7 as opposed to 3.4 following the program.

The findings of the present study indicate clear differences following the implementation of the reform program in the two factors, the teachers' willingness to take responsibility for the students' achievements and emotional results in cases of failure, and the teachers' willingness to take responsibility for the students' achievements and emotional results in cases of success.

The teachers wrote many comments in response to the questions in a questionnaire about their feelings regarding whether a change occurred in the extent of their commitment following their participation in the "TBWY" reform program.

These comments confirmed the findings of Ashton and Webb (1986) who found that responsibility for success expresses the sense of *"teaching's general capability as a*

profession", as well as Gibson and Dembo (1984), who found that teachers' willingness to stay with students in cases of failure, and not give up, was connected to the teacher's belief in the aptitudes of his instruction or to the student's ability to learn. It was found that teachers who have a low sense of capability give up easily when students do not achieve.

In their study, Friedman and Kass (2005) found that teachers in Israel perceive their sense of professional responsibility or efficacy as composed of three dimensions: their ability to promote students' achievements in the scholastic, emotional and moral domains; in the task and relationships domains and in the organization domain in everything connected with decision-making processes in the school.

Skinner *et al.* (1990) found a connection between a sense of efficacy and a sense of capability. Teachers who sense a high level of efficacy take more responsibility for students' successes and failures (Ross, 1994).

In the present study, it was found that the teachers' sense of responsibility for the students' achievements increased from 3.67 to 3.8 or a change of 0.13.

An additional connection has been found between students' sense of self-efficacy and their achievements in the area of language arts such as reading, the humanities, and the social sciences, while a sense of general efficacy is connected to mathematics (Ashton & Webb, 1986; Moore & Esselman, 1992; Ross & Cousins, 1993). In the aforementioned study, it was found that teachers perceived mathematical ability as an inborn aptitude, and they perceived language as an acquired ability. Therefore, teachers felt that they could teach language to the student but that they could affect the student less in mathematics. It appears that in mathematics and English learning groups, teachers still do not take advantage of the size of the group in order to implement suitable pedagogy (Blatchford, 2005). In the connections between teachers' and students' perception of efficacy, thinking aptitudes and students' achievements, it has been found that teachers' perception of their self-efficacy at the beginning of the year affects the students' achievements. Findings show that the teachers' self-perceptions in the pedagogic and scholastic achievements domains were good predictors of each other (Anderson, Greene & Loewen, 1988) and that teachers with a high sense of efficacy set high academic standards, demonstrated confidence, created a climate of acceptance, related to the students' unique needs and showed clearer academic directions (Achilles, 2005).

Ashton and Webb (1986) found that an increase in the sense of efficacy brought about an increase in the students' level of achievements in mathematics and language. Another study found a connection between a high level of efficacy and the level of the students' motivation to learn (Midgley, Feldlaufer & Eccles, 1989).

In the present study, the findings demonstrated how an increase in the extent of the teacher's responsibility directly increased the teacher's level of efficacy and indirectly affected the students' scholastic achievements.

One variable that was examined was the students' "sense of capability". It can be seen in Table 5.8 that the students' sense of capability was 3.67 prior to the implementation of the program and 3.8 following.

In their study, (Kaplan & Assor, 2001) found that high self-esteem created a high sense of self-efficacy relative to a given task. This finding reinforces the present research findings concerning the connection between a pronounced increase in the level of the students' sense of capability along with an increase in their scholastic achievements.

The study carried out by Anderson *et al.* (1988) examined the connections between the perception of the teacher's efficacy and the students' sense of capability, from their thinking aptitudes up to their achievements. The perception of the teacher's self-efficacy at the beginning of the year affects the students' achievements, especially when variables such as the teacher's gender, commitment to the school, the parents' socio-economic status and the teacher's teaching experience are controlled.

Bandura *et al.* (1977) found a direct connection between success in a task and an increase in a sense of capability. Success in one area projects onto other areas of work. Kinch (1973) studied the frequency of success or failure among students and found that the greater the number of failures the students experienced, the more there was a decline in their sense of capability. It has also been found that students' perception of capability decreases the older they get (Biddle & Berliner, 2002).

In the present study, it was found that the students' "sense of belonging" (Table 5.6) clearly increased from 2.99 prior to implementation of the "TBWY" reform program to 3.24.

From the present research findings it can be seen that the students' sense of belonging in all of the statements and in the summary index is higher following the

implementation of the reform program. This increase is principally in the statements that relate to the teachers' attitudes toward the students:

"I feel that my teachers care about what is happening with me."

"In our school, the teachers take a personal interest in the students."

"It is important to the teachers that the students care about each other."

In his study Edwards (1995) found a connection between teachers' attitudes toward students and the extent of the students' sense of belonging and their expectations about succeeding in school. In addition, a sense of belonging was achieved better in smaller groups (Cawelti, 1995; Cotton, 1996; Raywid, 1996), findings, which reinforce the present research findings pertaining to the size of the group.

Reinforcement for the current research findings and the characteristics of the reform program were found in Drew and Watkins (1998) concerning the proportion of students eligible for matriculation exams and increase in "self-respect and self-worth". A reciprocal relation was found between self-esteem and scholastic achievements; a change in one of these things affects the other and vice versa. In the present study, a pronounced change was found in self-esteem. Prior to the implementation of the reform program the self-esteem was 3.69 and following its activation, the self-esteem was 3.93.

In reference to self-esteem and coping in cases of students' failure, students with high self-esteem are supported by various social resources in order to cope more effectively, as opposed to students with low self-esteem, who are unable to believe in their ability to succeed (Nunn & Parish, 1992; Abouserie, 1994).

Concerning "a sense of autonomy", Kaplan and Assor (2001) found that the need for autonomy increases for actualizing the student's potential and that it includes three kinds of aspirations:

- performing an action according to the student's personal temperament and inclinations in order to realize his inborn potentials
- solidifying a set of goals and ideals that suit the student's character
- allowing the student the possibility of choosing goals, ideals, attitudes and commitments.

It was found that the three types of aspirations and contributed to a sense of freedom and self-determination without being dependent on others.

In the present research, it was found that the students' sense of autonomy was 2.95 prior to the activation of the reform program and 3.12 following its activation (Table 5.9). The summary index of 2 indicates a pronounced change. The following statements:

"The teachers encourage the students to suggest new ideas in connection with learning."

"Many of the things I do in school are not because they force me to do them."

"The teachers encourage the students to participate in making decisions about subjects related to the school."

In Assor and Kaplan (2001) and Assor, Kaplan and Roth (2002) clear differences can be discerned between the teachers' and the students' perception in relation to preliminary learning processes in the classroom. Teachers may think they give the students enough autonomy and possibility of choice in learning, but the students perceive the level of choice that the teacher gives as low. It has been found that students' reports about the teachers' support of the three basic needs – belonging and security, capability and autonomy – predict achievements

Similar to the tendency that was found in Table 5.4 were the differences in the students' feelings prior to, and following the reform program, principally in the statements relating to the teachers in the school.

There are few studies from which the extent of satisfying the need for autonomy in schools can be learned (Assor, 2001). According to the studies that have been done by (Ryan, Chirkov, Little, Sheldon, Timoshina & Deci, 1999), a sense of autonomy comes from a sense of imparting and a sense of well-being. When someone helps his/her friend, the person who gives the help realizes his/her need for autonomy by doing this. Continuous help produces a sense of ability. Values are important for the student's sense of well-being and they have an influence on intensifying his/her sense of ability.

In their study, (Deci, Sheinman, Schwartz & Ryan, 1981) found that the teacher's perception of giving autonomy influences the student. This is expressed in controlling the students' sense of ability. Students with high motivation and high self-esteem

usually had teachers who gave them autonomy in their thinking. Students of teachers who were control-oriented were found to have low motivation and low self-esteem. It was found that teachers who supported autonomy, by promoting relevance, by giving an opportunity to express criticism and opportunities to choose, directly and positively affected the students' feelings and contributed to learning, unlike teachers who repressed autonomy, by repressing opportunities to criticise and by compelling expected behaviour. These behaviours created negative feelings about learning in all age groups.

In studies carried out by Assor, Kaplan, Kanat-Maimon (2001) in Israel, it was found that in elementary schools in Israel choice (autonomy) is poorly expressed. There is no research data that relates to the high school age, but it is evident that the situation in the high schools is even worse.

The flaws in the high schools are particularly salient in the element dealing with nurturing, reinforcing goals and authentic ideals (Ryan *et al*, 1999).

Self-actualization and authentic expression: The extent of the teachers' influence on the measure of a change in the students' sense of self-actualization and authentic expression, which prior to the actualization of the reform program was 3.26 and 3.34 following its actualization (Table 5.10). The changes were expressed in the following statements:

In spite of coping with various types of populations, even when students have been placed in homogeneous and small learning groups, success still depended on the teachers' performance (OECD, 2004; Barber & Mourshed, 2007).

The quality of the teachers is one of the most important factors for the system's success; it is difficult to expect that the quality of the system will be better than the quality of the teachers (Barber & Mourshed, 2007). The size of the group is significant in the learning process. Its size and composition will facilitate proper pedagogical applications (Achilles, 2005) in order to arrive at higher achievements.

Table 5.13 presents the averages, standard deviations of the students' achievements prior to, and following the activation of the reform program. There is inequality and there are socio-economic differences between various population groups, which create differences in education and educational achievements between students from low and high socio-economic backgrounds (Svirsky & Atkin, 2004). A difference can be discerned in the scholastic achievements of students who come from a high socio-

economic background and students who come from a low socio-economic background in the data that was collected on the subject of the scholastic achievements of the students in the Israeli education system (Svirsky & Atkin, 2004). There was an increase in the students' achievements in the subjects of Hebrew grammar/composition, civics and Bible studies in the "TBWY" reform program. However, the increase in the students' grades in 4 units of English and 3 units of language and mathematics was not changed, and there was a decrease in the students' grades in 3 and 5 units of study in English and in 4 and 5 units of study in mathematics. There was no increase in students' grades in English and mathematics, which are considered to be core subjects, even when the students were placed in homogeneous learning groups and in small groups (OECD, 2004; Barber & Mourshed, 2007).

Giving equal opportunities to children from various backgrounds, reducing the gaps and promoting weak populations are some of the declared goals of the education system in Israel (Weissblei, 2006). In the present research, the differences in scholastic achievements and in the students' achievements were examined. The polarity (the difference in the scholastic achievements) between the upper quarter and the lower quarter in grades was examined.

The composition of the homogeneous group and the nature of the differential instruction have an effect on the students' achievements. In their study, Klein and Eshel (1980) stipulate that the positive advantage depends on suiting the teaching methods. The extent of the scholastic and social involvement of students in small groups has led to an improvement in students' achievements and their approach to learning has become positive and effective (Finn *et al.*, 2003).

An analysis of the TIMSS data (Mevarech & Lieberman, 2004) showed the existence of a negative connection between the average achievements and the level of the polarity. The level of the polarity is defined as a difference between excellent students' grades and failing students' grades. According to the Department of Education's data, a low grades difference can be discerned in subjects that were part of the reform process, such as Hebrew grammar/composition, Bible studies and civics. There was no change in literature. The direct result of reducing the polarity is expressed in an increase in the scholastic achievements in these subjects.

There was a change of -2.63 in Hebrew grammar/composition, -1.79 in history, - 4.27 in civics and -3.03 in Bible studies.

It can be seen that in countries in which the achievements average was high, the polarity was low or more accurately, in countries where the achievements average was low, the polarity was high. This result can be projected onto the results of the "TBWY" reform program. The differences in grades were low and there was no deviation in the differential weighting in the learning groups that were examined (the differential weighting is done every year by the Department of Education for all subjects in the matriculation examinations, ensuring that the influence of the yearly grades the school gives the students will be measured and that this will be done within a reasonable range in the external matriculation examinations of the Department of Education). There was no deviation between the grades given by the school and the national average.

As a result of the "TBWY" reform program, there was a substantial increase in scholastic achievements. The reform program facilitated the creation of a secure learning environment for the students and it gave them a feeling of security. The learning environment provided a basis for elevating the students' scholastic achievements. The feeling of protection enabled reinforcement of a sense of belonging to the school (Benbenishty *et al*, 2000) and an increase in scholastic achievements.

In studies that have focused on the connection between the social climate and learning products, the social climate variable was a predictor of learning processes (Anderson, 1971). A considerable ability to predict scholastic achievements is created through the way the student perceives the psycho-social characteristics of the learning environment in the classroom (Sita, 1988).

Lack of support from teachers or overly high expectations in achievement are catalysts for bullying and violence together with a decline of a sense of general security among students (Gofin *et al*, 2000).

In the present research (the findings in Table 5.12), in reference to the extent of the teachers' ability to deal with violence in the school, were found prior to, and following the implementation of the "TBWY" reform program. The differences are pronounced in all of the statements as well as in the summary index. Following the implementation of the reform program, there was an increase in the students' perception relative to the following statements:

"The teachers manage to handle violent students who make trouble."

(2.83 prior to the activation of the reform program and 3.13 following its activation)

"The teachers are concerned that there will be no violent behaviour".

(3.46 prior to the activation of the reform program and 3.81 following its activation)

"The teachers have reduced occurrences of violent behaviour."

(2.84 prior to the activation of the reform program and 3.19 following its activation)

A connection has also been found between bullying and deficiencies in well-being, a sense of belonging and a love of school (Seeley *et al*, 2009).

Roche and Marsh (2002) found that teachers who transmit messages with negative expectations and who did not demonstrate concern for the students created a harmful effect. The students adopted these expectations and created a negative self-image, their self-confidence was reduced, their ability to learn was harmed and eventually, they failed in school.

In the present study, a change occurred in the statement *"The teachers ensure that every student in the class feels that he/she can succeed"* from 3.18 prior to the implementation of the reform program to 3.37 following its implementation.

In Gofin *et al.*'s (2000) study, it was found that lack of support from teachers or overly high expectations from the achievement aspect were catalysts for bullying and violence. Lack of support created a serious repression of a sense of general confidence among the students relative to their success.

In Bar-El (1996) students who sensed a chilly and non-supportive atmosphere withdrew from active involvement in the classroom and some of them dropped out of school. In extreme cases, aggression and even violence developed. On the other hand, among students who sensed a positive educational environment, their adaptation to the school was optimal and significant for learning.

In the present study, the frequency of the students' exposure to verbal violence prior to, and following the "TBWY" reform program was expressed in Table 5.11. The table shows that following the implementation of the reform program there was a decrease in the frequency of the students' exposure to verbal and physical violence in the school. The statement *"A group of students in the school threatened that 'they are going to get you'."* It should be noted that the level of violence in the school was very low to begin with.

In studies that have focused on the connection between the social climate and learning products (Anderson, 1971), it was found that the social climate variables were

significant predictors of learning. In various countries in the world, a connection has been found between the scholastic achievements of aggressive children and their involvement in bullying, a direct connection between a sense of general security among students who are in a threatening environment and their functioning, and a connection between negative attitudes toward school and the sparse involvement of students in school activities (Klein-Allerman *et al.*, 2001).

The results of a study of students who had experienced continuous failure ever since primary school and who were absorbed into rigid frameworks predicted the violence of 18 year old adolescents (Herrenkohl, Maguin, Hill, Hawkins, Abbott & Catalano, 2000).

A connection has also been found between bullying and deficiencies in well-being, a sense of belonging and a love of school (Seeley *et al.*, 2009).

The "TBWY" reform program brought about changes in the school climate and in the scholastic achievements in the school. It can be seen in the present study that there was an increase in the students' grades in most of the subjects in the matriculation exams, particularly in Hebrew grammar/composition, history, civics and Bible studies. In the remaining subjects, learning was carried out in the usual format and there was no change in those subjects. There was also an increase in the percent of students eligible for a matriculation certificate, from 66% two years before the implementation of the reform program to 82.63% following its implementation.

From data that was collected on scholastic achievements of students in the education system in Israel, it was found that there are differences in the scholastic achievements of students who come from a high socio-economic background and students who come from a low socio-economic background (Svirsky & Atkin, 2004). The data analysis of the matriculation exams shows vast differences between the scholastic achievements in the various knowledge domains. As in all countries, it appears that the achievements of students from weak social classes are much lower than those of students from more well-established social classes. This is expressed in the proportion of students who took the exams, the proportion of students eligible for matriculation, and the proportion of students who met the threshold requirements of the universities (Zussman & Tsur, 2008).

In the present research, the differences in achievements were reduced in the subjects studied within the framework of the "TBWY" reform program. The first stages of the

reform program included a small number of subjects – Hebrew grammar/composition, civics, literature and Bible studies – and the differences in achievements were reduced. In Hebrew grammar/composition, the difference was reduced from 15 units prior to the implementation of the reform program to 13 units following its implementation. In civics, the differences in the students' achievements were reduced from 25 to 21 during the period of the reform program, and the differences in the students' achievements in Bible studies were reduced from 22 to 20.

There was no change in literature and in language and it appears that the differences between the quarters grew even larger during this period. The reason for this is that the 10th grade took the matriculation exam in language in 2004, prior to the implementation of the reform program.

The present study answers the main question of the research, which was based on the nature of changes in the students' feelings. The changes in their feelings occurred as a result of pronounced changes in the extent of the teachers' responsibility for cases of failure and success among the students. The products of the change among the teachers and the students found expression in improvement in the school's optimal climate, a reduction in the differences in the scholastic achievements of different types of populations, and an increase in the scholastic achievements and in the percentage of students eligible for a matriculation certificate.

6. Methodological limitations

Several limitations in the choice of the quantitative research method were discovered, for example:

1. The research examined students' and teachers' attitudes in response to structured questionnaires that were formulated by the researcher or that were adapted from questionnaires in other studies. For example, the students were asked to indicate their answers to structured questions prior to, and following, the implementation of the reform program. In this way, the researcher was able to sort the characteristics of feelings according to predefined categories and thus, to examine the implementation of the theoretical approaches that were proposed as the basis of the program. However, we were unable to ascertain the reasons that the students ascribe for a change, except for comments that the teachers and students were asked to write freely. It can be assumed that relying on open research tools based

on the qualitative-naturalistic paradigm (Sabar Ben-Yehoshua, 2001) would have enabled a deeper understanding of the process of the change in the extent of the teachers' and students' feelings through the research subjects' own language and points of view.

2. The present research emphasizes the importance of the research subjects' personal feelings during the process of change in the school, but its ability to trace the experiences to which the research subjects were exposed, which form their personality and the way they behave, is limited. From this aspect, it is important to continue research on the effect of the reform while relying on qualitative research methods that facilitate a deep understanding of the research subjects' feelings as a means of understanding their behaviour and way of thinking.
3. An additional problem relates to the fact that the data upon which the research is based was collected in two situations – once, prior to the implementation of the reform program and once, two years following the implementation of the program – although the process of change was over a period of 4 years. Future research should continue to access the changes and to re-examine them after another period of time.

Finally, mention should be made of the limitations of the research findings and the need to relate to them when attempting to formulate conclusions. This research examined the reform program two years after its implementation. Since the process of change is dynamic and it necessarily involves developments in the structure of the program, the state of the school and assimilation of the program among the teachers and the students, the research findings should be related to, and its conclusions should be understood in light of, these limitations. This suggests that further research over a prolonged time period is recommended.

In addition, due to the originality of the research, in that it is a prototype and was originally only carried out in one school and since there have been only a relatively small number of studies carried out on this subject, the findings that were found among the students and teachers should be followed up and, simultaneously, research should be developed in new directions to deal with the long-term results of the "TBWY" reform program. It is suggested that the program be carried out in larger populations of students in a variety of schools and using a larger variety of teaching methods.

6.1 Conclusions and implications for practice

The conclusions that emerged from the present study have concrete implications for the education system's policy concerning primary and post-primary schools worldwide.

Since the "TBWY" reform program found expression in pronounced changes in the extent of the teachers' (Appendix 11) and students' (Appendix 10) feelings, which together brought about changes in the optimal climate in the school, a decrease in the differences in scholastic achievements (Appendix 1) and an increase in the number of students eligible for a matriculation certificate, the implications for education are clear. If programs such as these are not implemented then the future for students at risk will continue to be bleak, with all the consequent implications for society in Israel and worldwide. However, if we can hone the educational system to meet the requirements of the students rather than asking the students to meet the requirements of the educational system, then we can make a positive change and reverse the trend of increasing failure by students of differing abilities and social standing.

6.2 The applied aspect

From the applied aspect, several conclusions emerged that can assist policy makers in the education system at the national, as well as the worldwide, level.

- i. The research examines the differences in yearly scholastic achievements prior to the implementation of the "TBWY" reform program when the school operated in the regular traditional format and one year following the implementation of the reform program. The findings show differences in scholastic achievements between groups of students. The pronounced differences in achievements occurred in homogeneous learning groups. Moreover, the extent of the teachers' influence on students' success appeared in the extent to which the teachers took responsibility for the students' success and/or failure in the exams. The findings show that the teachers took less responsibility for the students' failure in the exams prior to the activation of the reform program and that they blamed the students' failure on the characteristics of the students' learning. The degree of the teachers' responsibility changed following the implementation of the reform program which, according to the

findings, led to an increase in the level of the teachers' as well as the students' efficacy.

- ii. The research examined the students' and the teachers' attitudes and feelings prior to the implementation of the reform program (before 2006), when the school operated in the regular traditional format. The findings pertaining to characteristics of the students and teachers' feelings, reinforced the need to activate control mechanisms that would ensure changes in the students, and teachers' feelings, which in turn can bring about changes in the optimal climate and an improvement in scholastic achievements. From the findings prior to the implementation of the reform program, it appears that the doctrine of "equal opportunity", was not implemented in practice as a basic educational value, in spite of the fact that the egalitarian approach emphasized the value of social equality and viewed the school's principal job as developing a better society through making an effort to reduce personal and social differences (Inbar, 2000). The research findings show that because of distribution of 'hours' (resources) and identical methods of teaching all of the students, equality suited to all students' needs and abilities did not exist.

The research findings following the implementation of the reform program constituted the basis of the principles of differential distribution of 'hours' (resources), which brought about equal opportunities in homogeneous learning groups. The findings show a pronounced change in self-actualization among the students. In homogeneous learning groups, the teacher suited the learning material and the pace of the learning to the character of the group, improved the visibility of the students in the group and increased the students' self-confidence and sense of capability. Students are different from each other and they have to be allowed to actualize their ability (Margalit & Deninu, 2002).

- iii. The research examined the change that occurred in the scholastic achievements, the optimal climate and the number of students eligible for a matriculation certificate through the implementation of the reform program and its characteristics, i.e. the implementation of three main philosophical and psychological theories: (a) the humanistic approach in education, (b) the self-determination theory, (c) Martin Buber's philosophical approach.

The findings from the current research show a pronounced change in all of the variables, relative to students and teachers, which were defined in the research. At the

end of the process, the findings show that the implementation of the philosophical and psychological approaches brought about a clear improvement in the optimal climate, a clear decrease in the achievement gaps between the students, and a substantial increase in the number of students eligible for a matriculation certificate.

6.3 Publications in the media

Responses followed the impression of success of the reform program that was publicized by parents, teachers and students. Investigative reports began to appear in local and national newspapers, "Yedioth Achronot" and "Ma'ariv" (Appendix 15) and in the electronic media, Channel 1 and Channel 10 (see attached disc). The reports strengthened the reform program's advantages and praised its results and the team's work. As a result, senior parties in the Department of Education and in the local authority began to treat the reform program seriously.

6.4 Visits by external parties

As a result of the aid from the local authority and official recognition of the reform program, senior parties in the Department of Education began to send requests to learn about the "TBWY" reform program.

The first visit was by the mayor and a team from the local authority. The visit occurred in 2007 at the beginning of the school year followed by a visit from the district manager and all of the principals of the city's schools (Appendix 14). The Minister of Education, Yuli Tamir, and her assistants (Appendix 14) came to visit, in order to learn about the advantages of the reform program. The visit from the Minister of Education was followed by visits from teams and principals of various schools around the country (Appendix 14).

In April 2009, the Director of the Ministry of Education came to visit in order to learn about the "TBWY" reform program (Appendix 14). The result of the visit was that the Director of the Ministry of Education invited me to make a presentation to him and to his team. This meeting led to a series of other meetings, part of which included an idea to integrate the "TBWY" reform program into the Ministry of Education's reform for post-primary schools.

Discussions are currently being held with the teachers' organizations with the hope of receiving their agreement as to the nature of the pedagogical reform in the high schools.

6.5 "TBWY" Reform Presentation

Since 2007, there have been numerous presentations of the "TBWY" reform of our school. Many management teams from other high schools have come to our school in order to learn about the program and its organizational structure. These management teams spend time with teachers and pupils, observing lessons in which classes are being taught with different teaching methods, observing guiding lessons and conversing with management teams, teachers and pupils. Later in the process, the program and its pedagogy are provided to the different schools.

In addition to school visitations, I was asked to become a partner in the process of construction of the reform in the Ministry of Education, working with Dr. Shoshani. I have presented the reform to the office's senior staff, including the budget management. I have also presented this reform to the education leadership convention, held in Jerusalem, in front of 300 managers and in the educational leadership convention in Sachnin College in the presence of school counsellors and principals from the Arab sector.

The "TBWY" program is based on principles based on autonomy of choice, mobility of students and suitability according to level and rate of progress, applied to all the multi-verbal subjects. In addition, the "TBWY" program is based on pedagogic principles which are reflected in differential teaching methods adapted to the levels of the learners. It is hoped that it will be a program to lead the educational world to equality for all students regardless of ability or socio-economic level.

6.6 The contribution of the research to academia and its practical applications in the educational arena

The "TBWY" reform rests on the philosophy of the educational viewpoint of "equal opportunities in education". The reform supports professional pedagogical development of teachers, group instruction, and organizational changes in the pedagogical, ethical and social structure of education in the lives of schools (Paris, 2012).

The contribution of the research reflects an understanding of the implementation of complex educational processes, including the "translation" process of philosophical and psychological theories and their implementation within schools on the pedagogical, ethical, emotional and social plane, in a practical manner.

The research on the "TBWY" reform program provides a real opportunity for educators, in Israel and around the world, to examine and understand the practical application of these philosophical and psychological theories, within the school, in instruction groups and other learning groups, as part of a holistic educational program, including autonomy in learning for teachers and students: searching and questioning, identifying and solving problems, planning activities in uncertainty, innovation and creativity, developing and analysing learning methods and innovative teaching styles, targeting homogeneous learning groups, learning from sources of information and knowledge, using evaluation and control, collaborating at all levels, teamwork, professional output, measurement and assessment, accountability and professional responsibility of teachers (King *et al.*, 2011).

The effect of the research on education systems, in Israel and around the world, is in the understanding of the relationship between the nature and structure of the learning groups, the allocation of differential time resources, the nature and structure of the instruction groups (instead of the parent classrooms) for research and the products of the research in the "TBWY" reform program, including educational achievements (Fullan, 2011), the number of those eligible for a matriculation certificate, the reduction in the gaps in educational achievements among diverse populations (Haeseler, 2010), and an increase in the responsibility of teachers for their students' success.

The research contributes to the understanding of the relationship between the degree of responsibility of teachers for the students' success and the structure and features of the learning groups, as reflected in the "TBWY" program, as a response to the differences between the students at the cognitive, emotional, and social level according to individual students' personal strengths.

This research aids in the understanding of the realization of the teachers' professional expertise and the degree of caring in the development of teaching methods and styles in homogeneous learning groups, while creating pedagogical flexibility and the degree of willingness of teachers to accept responsibility for the achievements and emotional outcomes of the students.

From the data gathered on the educational accomplishments of the students of the educational system in Israel, a significant gap was apparent in the educational achievements among students with a high and a low socioeconomic background. However, the standard of achievements in all subjects in the "TBWY" reform program, were increases in the humanities – Hebrew writing (reading comprehension), civics and Bible studies - with a reduction in the gaps in educational achievements among the students. The contribution of the research is in an understanding of the innovative educational framework using a different pedagogical organizational structure from traditional schools.

The research presented the affective aspect in the perception of learning and examined the students' feelings in the course of the learning process, for example, the nature of the mediation and the ease of their understanding. By means of the research, one can see the effect in an increase in the feeling of capability among the teachers, a change which occurred among the teachers in their pedagogical flexibility and the assumption of responsibility for the students' success (Romi & Layser, 2006), an increase in educational and learning inputs from under-achieving standards, an improvement in accomplishments and a reduction in the educational gaps and learning ability of students according to the character of the homogenous learning groups (Park *et al*, 2012).

The academic knowledge accumulated from the current study is available for distribution to all education systems, being publicized in articles and open conferences, and through its transference by students who have been through the reform to other students to better understand the knowledge gained from the current research and enable its contribution to the field of education.

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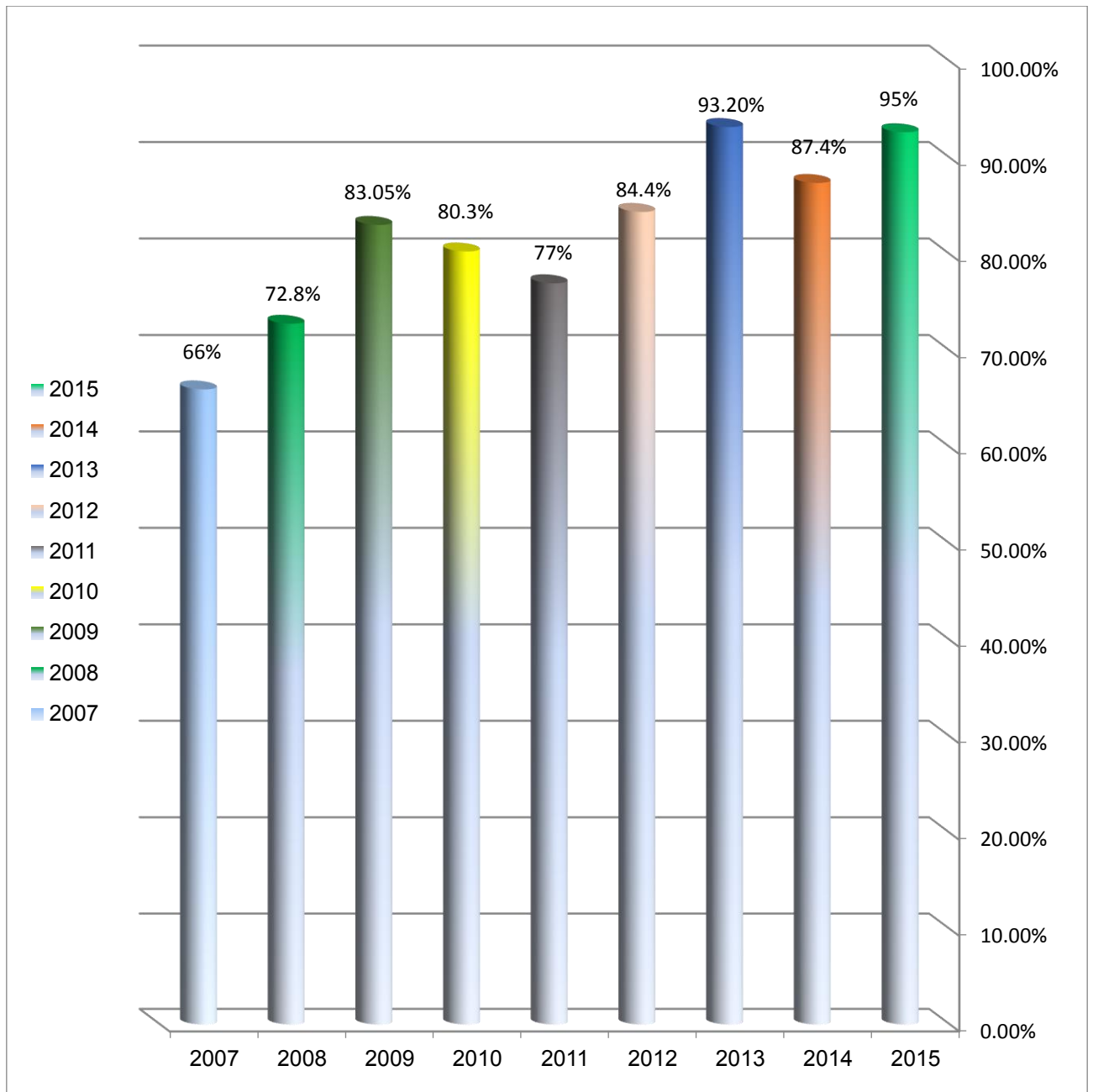
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Appendices

Appendix 1

Students eligible for matriculation according to academic years

Students eligible for matriculation (%)



Appendix 2

Comparison of matriculation certificate quality before and after the program.

Academic year	Percent of students eligible for matriculation according to academic years	Quality of the matriculation certificate 2006/07-2007/08	Percent of dropouts	Percent of excellent students from those eligible for matriculation	Number of students lacking more than one subject for matriculation
2006/07	72.34	20-25 units – 45.29 26-28 units – 30.59 29-30 units – 16.47 31+ units – 7.65	5.28	4.71	54
2007/08	82.63	20-25 units – 36.31 26-28 units – 37.58 29-30 units – 15.92 31+ units – 10.19	4.25	7.01	30

Appendix 3

External Evaluation of the "TBWY" Reform Program

Department of Education and Welfare

A descriptive report of impressions from the "TBWY" reform program in XXX High School following an internal evaluation of the "TBWY" program in the school

Written by: X – Evaluation Section, Department of Education

Internal draft, 19.3.2003

Introduction

This report was written at the request of the mayor, Mrs. X, and the head of the Department of Education, X, due to the need to make a decision regarding continuing the budgeting for the "TBWY" program, which is currently operating in school X. Due to the urgency of this decision, ten days were allotted to the Evaluation Section to assess the program, which did not enable conducting a meaningful and professional process of evaluation that could shed light on the program, its effectiveness and its strong and weak points. However, we will make an effort to describe and to give our impression of the program, principally from the perspective of the process of the program's evaluation, which was carried out at the school by an internal evaluation team over the course of a year and a half, to characterize this process and to give recommendations concerning desired directions for further evaluation of the program.

Information and Data Collection

In order to learn about the program and the process of its evaluation, a short process of collecting information and data was carried out:

- A brief introductory conversation was held with the school's principal and the coordinator of the assessment team, Mrs. X.
- There was an open interview with the coordinator of the assessment team, Mrs. X, and with a member of the assessment team, X.
- A presentation of the "TBWY" reform program and additional general information was studied.

- The evaluation tools that were constructed by the internal evaluation team (and that were partially transferred) were analyzed.
- The reports written by the internal evaluation team (partially transferred) were studied.
- A tour of the school was documented for the district manager.

Findings

The findings pertaining to the following topics will be presented below: the principles of the "TBWY" program; focal points in the school's process of evaluating the "TBWY" reform program and salient findings; and strong and weak points.

The Principles of the "TBWY" Program

The "TBWY" reform program is composed of two significant parts: (A) An instructor for a small group of students (about 15 students) instead of the traditional homeroom. This part of the program went into operation in the 2006/07 school year. (B) Studying subjects for the matriculation exams in homogeneous learning groups in smaller classrooms. This part of the program went into operation during the 2004/05 school year, but gradually. Each year, more subjects for the matriculation exams were added to the homogeneous groups' study program.

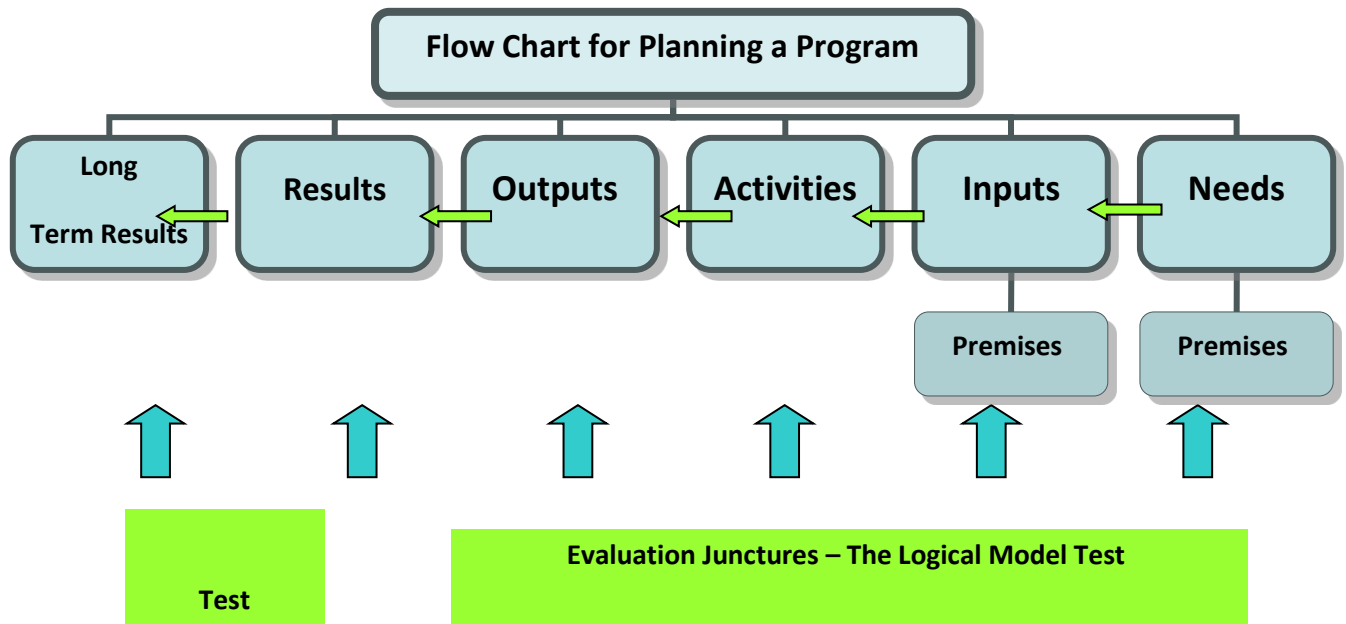
The basic premises of these principles derive from the pedagogical, social and emotional domains.

Focal points in the school's process of evaluating the "TBWY" reform program and salient findings. An internal evaluation team has been operating in the "New High School" for about four years. The team was trained and received leadership on the subject of "school assessment" over the course of three years, until the 2006/07 school year. In the framework of its work, the team has evaluated a variety of subjects and during the 2006/07 school year, it began to focus on evaluating the "TBWY" program.

In order to learn about the aspects of the program that the team examined, the findings and how they were used by the school management, a diagram of the school evaluation process was done. The following logical model was used in order to make this diagram and it shows the possible junctures for evaluating a program. As can be seen in the diagram, the evaluation of a program can focus on a number of junctures:

the premises, needs and values of the goals, inputs, activities, outputs and short and long-term results.

Diagram 1: The Logical Model for Evaluating a Program



When evaluating multiple programs under conditions of limited time and manpower, a number of the program's junctures are chosen on which it is important that the evaluation will focus, and the depth of the evaluation program is defined in each of the junctures. These constraints characterized the "XXX" school evaluation team's work, which is voluntary and which has limited time and manpower. The team worked without constructing and defining an evaluation program ahead of time but rather, according to the needs described by the school's management and staff. In fact, these needs defined the evaluation junctures on which the evaluation focused. Based on the information that the school's evaluation team received (through questionnaires, data analysis and reports), Table 1 was constructed, in which the following information is organized: what was examined in the program and why, the evaluation juncture in the logical model, tools, main findings and how the school used the findings.

School year	What was examined and why?	Evaluation juncture in the logical model	Data collection tools	Main findings	School's use of the findings
2006/07	The quality of a training course that the instructors took at the Adler Institute in order to promote working in instruction groups	Inputs for the instructors Imparting skills to instructors	Feedback questionnaire for the teachers who did the training course	The quality of the training course is not satisfactory. Recommendation: redefine the contents of the training courses and provide tools for work in practice	A decision to have someone else teach the teachers' training course
2007/08	The quality of the training course for the instructors conducted by Mrs. Orit Yosephi in order to promote working in instruction groups	Inputs for the instructors Imparting skills to instructors	Feedback questionnaire for the teachers who did the training course	Good quality of the training course , which fulfilled the teachers' needs	
2006/07	Students' opinions about the quality of their connection with the instructor in order to learn about the work process in the instruction groups	Inputs for the students The connection with the instructor (listening, emotional response, impartment, scholastic monitoring and support)	Three questionnaires with identical statements for different target populations: 1. Opinion questionnaire for 10 th grade students (first year in the program); 2. Opinion questionnaire for 11 th grade students (did not participate in the program; the questionnaire asked student	An indication was found of the value of the instructors in the opinion of the 10th grade students participating in the program in the following areas: <ul style="list-style-type: none"> • Scholastic monitoring and support • The extent of the teacher's impartment to the students 	Reinforcement was received for investing in the instruction groups

			<p>about his connection with his teacher);</p> <p>3. Opinion questionnaire for the teachers (asked about their connection with the students).</p>	<p>(quality and quantity of time, confidence in handling difficulties,etc).</p> <p>The value of the educators in the opinion of the 11th grade students did not participate in the program was expressed to a lesser degree.</p>	
2006/07	The desirable group composition in the students' and teacher's opinion in order to promote working in instruction groups	<p>Inputs for the students</p> <p>The group composition</p>	<p>Two identical questionnaires for students and teachers</p> <p>Focus group composed of students</p>	The need to create a group composition according to social considerations in the joint learning of study courses was salient.	Assisted the school's staff in constructing the groups' composition
2007-08	Students' perception of the teacher's function in order to promote working in instruction groups	<p>Inputs for the students</p> <p>The teacher's function</p>	Information is missing	Information is missing	
2007-08	Measuring the perceived social climate: examining the value of the group as contributing a scholastic and social aspect in order to learn the value of the program	<p>Students' outputs</p> <p>The value of the group for the student</p>	A questionnaire for the students intended to examine the perceived social climate (source: the Henrietta Szold Institute) was distributed to the 10th grade students at the beginning of the school year. At the end of the school year, the questionnaire was distributed again. For comparison purposes, the questionnaire was also distributed	The data has not been analyzed yet.	

			to the 12th grade students (who did not participate in the program).		
2007-08	Follow-up: the percentage of students eligible for matriculation in order to learn the value of the program	Students' outputs	Follow-up of the percentage of students eligible for matriculation – carried out by the school's management	A 5% increase in eligibility for matriculation: 68% in 2005-06 compared to 73% in 2006-07.	

Table 1 Information diagram of the school's process of evaluating the "TBWY" reform program

As can be seen in Table 1, the process focused mainly on evaluating the inputs invested in the need to promote the teachers' work with the students both on the group and the personal level. This focal point was evaluated from the following perspectives:

- The quality of the training course that the teachers took during the 2006-2007 school year in order to promote leadership skills required to function as an instructor. As a result of the instruction trainees' lack of satisfaction, it was decided to change the course's instructor and during the 2007-08 school year, the course was re-examined and it was found to be of better quality and more satisfactory.
- The students' and instructors' perception of the value of the instruction was examined. An indication was found of the value of the instructors in the opinion of the 10th grade students participating in the program in the following areas: scholastic monitoring and support and the extent of the instructor's impartment to the students (quality and quantity of time, confidence in handling difficulties, etc.).
- The students' opinions about the desirable composition of the instruction groups were examined in order to plan their placement in the groups. It was found that the students' preferences were based on social considerations of joint learning in the study courses. This information, along with the information received from the instructors, assisted in planning the groups' composition for 2007/08 school year.

Besides examining the aforementioned inputs, one of the program's outputs was also examined – an increase in the percentage of matriculations. According to the school management's report, there was a 5% increase in eligibility for matriculation in the 2006/07 school year (73%) compared to the previous 2005/06 school year (68%). It should be mentioned that this report pertained to the 2005/06 matriculation data of a class that only partially benefitted from the program, since the elements of the program have developed gradually since the 2004/05 school year. The students learned some of the matriculation subjects in homogeneous groups and they did not participate in the personal and group instruction program.

During the 2007/08 school year, it is planned that the following aspects of a change in the perception of the social climate by the 10th grade which is participating in the program will be examined: cooperation, leadership concentration, the class's influence and cohesion. The perceived social climate will be re-examined at the end of the school year, after a year of participating in the program, and the level of perception will be compared to the level of the 12th grade's perception,

who did not participate in the program. The data has not been analyzed yet and the process has not been completed and therefore we have not obtained the findings as yet.

Strong points and benefits versus difficulties and dilemmas

The interviews, the documents analysis and the documentation of conversations with the school's staff, the instructors and the 10th grade students who participated in a discussion with the regional manager provide additional perspectives on the program. Following are strong points and benefits vs. difficulties and dilemmas.

Strong points and benefits

- According to the members of the school's staff, in general, the program places the student in the center and responds to his scholastic, social and emotional needs. Here are some examples from the instructors' report that reflect this: the instructors create a scholastic work plan with each student and they monitor its implementation on a daily basis. The instructors are attentive to many emotional levels, they give support and they are empathetic. They are involved with and committed to the children; as one of the teachers mentioned, "I can't say I have 40 children in my classroom anymore... now I have only 15 students and I'm committed to being available on a daily basis...". The advisors said that thanks to the more intense acquaintanceship with the students, the program enables them to identify emotional distress more easily.
- According to the instructors, thanks to the program, the students take responsibility at an earlier stage. One of the instructors said, "The 10th graders call me to tell me when they will be late." Moreover, the pace at which each student's level of responsibility develops is different.
- According to the teachers, learning matriculation subjects in homogeneous groups enables them to advance each student from his current status to the expected standard. The teachers use a variety of strategies that are adapted to the different levels of the groups.
- The students express great appreciation of the instructors' work and mention the instructors' positive attitude toward them, which according to them is manifested in an acquaintance beyond the educator's usual acquaintance with them, characterized by caring (as one of the students says "they [the instructors] care about me...they call me at home when I don't come to school and not just because it's their job..."), listening (according to another student: "The teacher listens to me more and I can talk to her about my problems") and a feeling of family (one student said that the instructor is like having a mother in school).

- The 10th graders mention the value of the group for them. Despite the difficulty some of the students had in getting used to belonging to a small group instead of a homeroom and being exposed in the group, they felt that the instruction group encounter gives them a stage to talk openly about their problems and to discuss them with the group. According to the students, as time went on, their self-confidence increased and they found it easier to talk in the group.
- The students positively mention the instruction group sessions that have replaced the traditional education lessons. In these sessions, there are activities and discussions as opposed to the traditional education lessons in which announcements and matters pertaining to education which were meaningless to the students are transferred frontally.
- The students positively mention the class consolidation that was created as a result of the program. They feel that the composition of the current instruction and learning groups enables them to get acquainted with a lot more students in their class. Along with the benefits, the school's management, instructors and advisors also mentioned difficulties and dilemmas:
- Required time resource – the instructor: In this program, more time is required of the instructor than is required of the traditional educator. This resource is required for preparing the group instruction sessions and for close monitoring of the students in various contexts. This resource is only partially remunerated monetarily.
- Time resource required – the school's counseling arrangement is broader than that in a traditional school because of the need to support about twice as many instruction groups and instructors than in a traditional school. Moreover, a support and therapy arrangement is required in order to assist the program in the processes of assimilating the change in the traditional perception of the educator's function.
- Teaching homogeneous groups requires that the teaching staffs have to plan teaching-learning-evaluation processes that will suit the group's level. This planning also requires teachers to invest time and to learn new strategies.
- Limits to the instructor's authority are not always clear and this raises issues regarding occasions when it is necessary to involve professional parties.
- Defining the group's size and its desirable composition is still undecided and it is going through a trial and error process.
- The instructors are experiencing difficulties and they lack professional tools for having an open dialogue with the group in which students share their problems and experiences. The school is trying to equip the instructors with these tools in the framework of training courses and support through counselling.

Summary and Recommendations

The “TBWY” reform program is striving to attain its goals in the areas of values, leadership and achievements through allocating the inputs in the following domains: instruction groups and one-on-one instruction, studying in homogeneous learning groups, a special education support arrangement, a technological and logistic arrangement and a social support arrangement.

We can learn, principally about the inputs in one of the most significant parts of the program – the group instruction and the one-on-one instruction processes, from the data that was collected by the school's evaluation team.

The data also indicates the program's strong and weak points. The salient strong points are: the team's impressive investment in individual and group instruction, the staff's belief in its contribution to the students on many levels, the students' considerable appreciation of the change in the traditional educator's function, the counseling team's involvement and its support of the instructors, and the school's management's and staff's aspiration to learn lessons and to improve the innovative instruction mechanism in the school.

Along with the strong points, it appears that the change in the perception of the traditional educator's function and his becoming an instructor of a small group with a different perception of his function has led to difficulties in two main areas: the greater time resources necessary for an optimal instruction process which is only partially remunerated monetarily, and the need for professional tools which were not at the traditional educator's disposal. It should be mentioned that in order to cope with a lack of tools and knowledge, the school provides the teaching staff with training courses and counseling support.

Based on the gamut of outputs that the program aspires to achieve in the values, social and scholastic domains, a follow-up has been done of the changes in the percent of students eligible for matriculation. Perhaps the increase in this percent (5%) between the 200/06 and the 2006/07 school years merely indicates an improvement trend, considering that the class of 2006/07 for which the matriculation data was reported participated only partially in the program since the program's elements were developed gradually since the 2004/05 school year. In addition, the evaluation team is attempting to collect data this year regarding the change in the students' perception of the social climate following the activation of the program.

In conclusion, generally speaking, there are without a doubt positive and encouraging indications in the data that the goals of the program can be reached. At the same time, and particularly in light of the fact that the program is innovative and that it is being implemented through a process of learning while implementing the program, it is important to continue to carry out the evaluation process.

It is recommended that the school's evaluation team should continue to lead the process of evaluating the program. This recommendation is based on three important conditions which currently exist in the school: (a) the evaluation team appears to be operating independently, (b) the key members of the team received comprehensive training and (c) evaluation is perceived in the school as valuable and as a source for learning. In parallel, it is important that the following recommendations be taken into consideration during the evaluation process:

- All interested parties such as the school's management, the supervisor and the city council should take part in defining the evaluation questions and consolidating an evaluation program and in systematic prioritization processes.
- The evaluation team should be responsible for accessing the scholastic outputs and additional decisions beyond accessing eligibility for matriculation (for example, the quality of the matriculation).
- The internal evaluation team should be accompanied by the extensive leadership and counselling of an expert in evaluation and new members of the team should be trained.
- Mrs. X, who has acquired tools and impressive skills in school evaluation, should continue to lead the school's internal evaluation team.
- The data processing should be upgraded.
- The method through which the data pertaining to the evaluation processes, the findings and how the school uses them is documented and presented should be improved.

It is further recommended that the targets and the measures of the program's success be sharpened. This will help the team focus their process of evaluation.

Appendix 4

The 2006 exploratory study: Analysis of feedback results of the students' opinions and satisfaction regarding the new class division.

January 2007

The evaluation is made according to a scale of 10 points. "I don't agree" = less than 5 points, "I agree" = 5 points or more. For all the statements, excluding number 13, a higher figure means a higher estimation.

Statements	An average mark 6 th grade	An average mark 5 th grade
1. I believe that my instructor knows me.	7.6	7.2
2. My instructor talks with me about subjects we are studying.	7.5	8.5
3. My instructor talks with me about significant subjects.	7.2	7.5
4. My instructor talks with me about social subjects.	6.7	7.2
5. I feel I can talk to my instructor about personal matters.	6.7	6.7
6. If I have a learning problem, I'll ask my instructor for help.	7.3	8.9
7. If I have a problem with a	7.5	8.7

teacher of a subject, I'll ask my instructor for help.		
8. If I have problems with other students, I'll ask my instructor for help.	5.2	6.2
9. If I have problems with my parents, I'll ask my instructor for help.	4.1	4.1
10. If I have problems with my friends, I'll ask my instructor for help.	4.2	4.4
11. My instructor is always available to me.	7.2	7.8
12. My instructor has time for me during recesses.	6.6	7.7
13. My instructor has time for me only during the weekly education hour.	4.6	4.1
14. My instructor has time to talk to me only on the phone after school hours.	7.6	8.4
15. My instructor is familiar with my personal matters.	6.6	6.9

16. My instructor takes a personal interest in me.	7.1	7.6
17. My instructor has patience for me.	7.7	8.8
18. My instructor helps me solve problems.	7.1	8.3
19. I like learning in this type of class better than the class we learned in last year.	6.7	7.6
20. My instructor contributes to my success in learning.	6	6.6
21. I look forward to meetings with my instructor.	6	6.6
22. My instructor helps me cope with problems at home.	6.3	6.9
23. When I have serious problems with learning, I ask my instructor for help.	6	7.5
24. I feel that my instructor really cares about me.	7.8	8.2
25. My parents are in touch	3.9	4.7

with my instructor.		
26. My instructor is familiar with my learning progress.	6.3	8.3
27. My instructor is familiar with my social situation.	6.2	6.3
28. My instructor is familiar with my personal situation.	5.6	6
29. Would you recommend joining a new education program?	-	7.2

Analysis of the results of the questionnaire

Goals of the new education program	Questions	Average score of teachers	Average score of students	Average score of students
The new education program increases the time allocated by the teacher to each student in the group.	14, 15, 16	8.3	7.1	7.6
The new program enables a focused and emotional response by the teacher to the students' problems.	5, 8, 9, 10, 21, 22, 24, 25, 28, 29	7.3	5.7	6.2
The new program increases the ability to respond to the students' problems.	14,17,23, 17, 14	7.3	6.6	7.9

The new program contributes to continuous communication between the teacher and the students' parents.	26	6.3	3.9	4.7
The new program ensures the support and monitoring of each student to improve their learning progress.	2, 3, 4, 6, 7, 18, 20, 27	7.5	6.9	8
Level of overall satisfaction from the class	19	–	6.7	7.6
Satisfaction with your teacher in ...	1	–	7.6	–
Does the facilitator “recognize” me in ...	–	–	–	7.2

Appendix 5

Results of feedback - The 2006 exploratory research: Analysis of feedback results of the students' opinions and satisfaction regarding the new class division.

Analysis of the findings

The new education program presents its four goals:

1. Overall benefit to the school, to the team climate in the school – creating the collective responsibility of the entire teaching staff and the distribution of the education functions among all the teachers and the entire teaching staff as a body with collective responsibility for the students' learning success and the climate in the school (questions 1, 2, 6).
2. For the facilitators: the creation of the opportunity to strengthen communication with the students, to dedicate time to teacher-student interpersonal communication and to ensure that the students realize their learning potential (3, 4, 8).
3. For the students: receiving special attention from the teacher, the practical allocation of quality time and emotional support (4, 5).
4. For the parents: timely identification of problems and their solution (7).

Concerning the first goal, the analysis shows that the goal of the teachers' collective responsibility and the distribution of education functions according to the new program was received with lower confidence than expected – an average mark of 6.59 (which can be estimated as “almost good”) but the lowest mark compared to the other areas. Answers like “I agree in general” or “I don’t agree” show that these goals have not received unanimous support from all of the teachers. The assumed reason is that 35% of the teachers participating in the new education program believe that they work harder than teachers in traditional classes. The explanation is that this is the first cycle in the implementation of the program and not all of the staff members are taking part in it. This reason, as well as the results of a questionnaire answered by the students that are to be released soon, should be considered when evaluating other goals.

An average mark of 7.72 (“good”) and the support of 82% of the teachers show that the new program enables the teachers to reach the goal of dedicating more quality time to the students.

Regarding the third goal, an average mark of 7.82 (“good”) and the support of 82% of facilitators show their belief that under the new program, the students benefit more in all aspects.

The influence of the new program on communication with the parents is estimated to be only 7.5, while 42% of the teachers do not believe that the new program creates conditions for continuous connection with the parents (probably due to technical reasons).

The goals of the new program
(according to a 10-point scale)

Statements	I agree completely	I agree in general	I do not agree in general	I do not agree	Not relevant	Average score
1. Distribution of educational functions among all the teachers in the school	6	7	2	4		7
2. Requirement of the collective responsibility of all the teachers	3	8	5	3		6.45
3. An increase in the teacher's ability to contribute	3	12	4			7.37
4. More time for interpersonal communication with the students	9	8	1	1		8.30
5. Enables a focused and emotional response to the students' needs	3	11	4		1	7.35
6. Requirement of the teachers' collective	2	9	6	2		6.32

obligation to educate						
7. Continuous communication with the parents	2	9	7	1		6.31
8. Conditions for the teacher to support and monitor the student's learning progress in order to improve it	4	10	4		1	7.50

Appendix 6

Estimation of an understanding of the social climate in the group

Based on the classroom climate and individual learning questionnaire
created by Walberg and Anderson (1968)

October 2007

Summary of the questionnaire results:

The Perceived Social Climate Index

The 12th grade, which did not participate in the program

2007/08 School Year

Processed by the school's evaluation and measuring team

Introduction Description

The questionnaire was distributed to all 12th graders during the 2007/08 school year with the aid of a new computerized intake system.

Each class answered the questionnaire as a group in their classroom. The students looked at the question displayed on a screen by a projector and each student pressed the remote control to choose his answer.

The questionnaire included 30 closed-end questions, from which:

12 questions were intended to examine cooperation

11 questions were intended to examine leadership

7 questions were intended to examine cohesion and attraction

The answers were on a scale of 1 to 5:

5=always, 4=frequently, 3=sometimes, 2=rarely, 1=never.

The questionnaire's purpose:

To describe the level of the perceived social climate in the classroom from three aspects:

- A. Cooperation in a competitive environment
- B. Leadership concentration and the class's influence
- C. Cohesion and interpersonal attraction versus hostility and rejection.

Key definitions for the analysis of the results: group climate, interpersonal attraction, cohesion, hostility, cooperation, leadership, competition, students' positions in the group.

Grading: 5 – always; 4 – often; 3 – sometimes; 2 – rarely; 1 – never

Statement	Always	Often	Sometimes	Rarely	Never
1. In my class, the students are considerate of each other.					
2. The students in my class quarrel with each other a lot.					
3. My best friends are in my class.					
4. Some students in my class brag when they get good grades.					
5. The students in my class are friendly toward each other.					
6. I don't like most of the students in my class.					
7. Some of my classmates have no friends in our class.					

8. In my class, we help each other without the teacher's intervention.					
9. Every student in our class can speak freely without being ridiculed.					
10. It is important to the students that the class learns well and progresses with the material we are learning.					
11. I can rely on my classmates for help when I need it.					
12. Some students in our class always tell others what to do.					
13. In my class, the students say what they think and feel.					
14. When the students decide something, everyone in the group is ready to work and to contribute.					
15. If I could, I would transfer to different group.					
16. The students in our group frequently participate in social activities.					
17. Everyone wants to be friends with certain students in our					

class.					
18. Some students in my class always try to make themselves look more important.					
19. The students in my class know a lot about each other.					
20. The students in my class don't care if I come to school or not.					
21. The students in our class understand and forgive others who misbehave.					
22. Everybody in my class knows which students will disrupt the lessons.					
23. Some students in our class behave in a certain way so that others will like them.					
24. I wouldn't like it if most my classmates would get good grades.					
25. Most of the students in my class participate in social activities.					
26. Most of the students help keep the classroom clean.					
27. Most of the students in our					

class listen to others who tell them what to do.					
28. Some students in our class ridicule others.					
29. Everyone in our class knows which students hardly ever participate in the lessons.					
30. The students in our class do things in a way that won't annoy the other students.					

The Main Conclusions – according to the variables:

A. Cooperation versus a competitive atmosphere. It was found that the 12th graders do not perceive the classroom as an environment that gives scholastic support, although the students feel comfortable in the classroom and there are generally positive reciprocal relations between them. When an item on the questionnaire related to a school/institutional context, the students expressed less satisfaction. The conclusion is that there is no competitive atmosphere in the classroom but there is also no feeling of cooperation. Apparently, the group is secondary to the social and scholastic processes.

B. Leadership concentration and its influence on the class. It can be said that in the 12th grade classrooms, leadership concentration has not been created that influences the class, and certainly not one that contributes to the group. The class definitely identifies certain elements that bother them when they are trying to learn. There is more sensitivity to students' behaviours that are intended to please the teacher than to their negative behaviours (questions 3 and 18 versus question 2).

C. Cohesion and interpersonal attraction vs. hostility and rejection. We can conclude from this measure that the 12th grade transmits indifference and a lack of concern about the subject of cohesion. No evidence of hostility was found but on the other hand, no evidence was found of a fondness for the classroom framework. The classrooms were unable to provide a supportive social environment, and certainly not a supportive group learning environment.

Overall Conclusion:

The perceived social climate in the classrooms is mediocre, there is no sense of cohesion and partnership and no leadership has been created that influences the members of the class, but most of the students are not in favor of changing the status quo. They have friends in their class and they don't want to transfer to a different one. In addition, it appears that the 12th graders are not keen to participate in the school's social activities and they don't see the classroom as a source of support in the scholastic domain. Although there is a certain amount of difference between the classes (12th grade 3 is more cohesive and satisfied while 12th grade 5 is much less cohesive and satisfied), it appears that in the final conclusion, they are homogeneous: the social climate in the classrooms is good and there is no sense of tension or violence, but the social climate has not created a learning environment and it has not strengthened the sense of belonging to the school.

Analysis of the results:

The variables:

A. Cooperation vs. a competitive environment

The questions and the average score:

1. In my classroom, the students are considerate of each other – 3.11
5. The students in my class are friendly toward each other – 3.53
8. In my class, we help each other without the teacher's intervention – 2.85
9. Every student in our class can speak freely without being ridiculed – 2.34
10. It is important to the students that the class learns well and progresses with the material we are learning. – 2.56
11. I can rely on my classmates for help me when I need it – 2.86
13. In my class, the students say what they think and feel – 2.94
14. When the students in my class decide something, everyone is ready to work and to contribute – 2.65

16. The students in our class frequently participate in social activities – 2.03

21. The students in our class understand and forgive others who misbehave – 3.22

25. Most of the students in my class participate in social activities – 2.11

26. Most of the students in my class help keep the classroom clean – 1.48

In the answers to these 12 questions that examined the sense of cooperation in the classroom, the average score was 2.64 which means that all of the 12th grade classes ranked their feelings somewhere between "rarely" and "sometimes".

The higher score ("sometimes") was given to measures that examined thoughtfulness (question 1 = 3.11), friendliness (question 5 = 3.53), forgiveness (question 21 = 3.22) and a sense of freedom in the classroom (question 13 = 2.94), which are areas that define social relations between the students regardless of the learning subject or the school framework.

An average score was given to the measures that examined mutual help in the classroom context and a sense of feeling comfortable in the classroom (confidence in speaking, mocking others, help, contribution), help in the scholastic context ("without the teacher's intervention" – question 8 = 2.85), mocking a friend (question 10 = 2.56), "I can rely on my classmates" (question 11 = 2.86), "everyone is ready to work and to contribute" (question 14 = 2.65).

A lower score than average was given to the measures which were directly linked to the group's contribution to a scholastic/institutional subject. The question pertaining to the group's contribution to cleaning the classroom received the lowest score (question 26 = 1.48). The question pertaining to participation in social activities in the school, which was asked in two versions (question 16 = 2.03; question 25 = 2.11), received a score interpreted as "not often", and the answer to the explicit question regarding the connection between the group and motivation to learn was negative (question 9 = 2.34).

Summary

It was found that the 12th graders do not perceive the classroom as an environment that gives scholastic support, although the students feel comfortable in the classroom and there are generally positive reciprocal relations between them. When an item on the questionnaire related to a school/institutional context, the students expressed less satisfaction. The conclusion is that there is

no competitive atmosphere in the classroom but there is also no feeling of cooperation. Apparently, the group is secondary to the social and scholastic processes.

B. Leadership centrality and its influence on the class

The questions and the average score:

2. The students in my class quarrel with each other a lot – 2.37
4. Some students in my class brag when they get good grades – 3.05
12. Some students in our class always tell others what to do – 2.09
17. Everyone wants to be friends with certain students in our class – 2.45
18. Some students in my class always try to make themselves look more important – 3.45
22. Everybody in my class knows which students will disrupt the lessons – 4.34
23. Some students in our class behave in a certain way so that others will like them – 3.5
27. Most of the students in my class listen to others who tell them what to do – 2.03
28. Some students in our class ridicule others – 3.83
29. Everyone in our class knows which students hardly ever participate in the lessons – 4.09
30. The students in my class do things in a way that won't annoy the other students – 2.56

These 11 questions examined leadership in the 12th grade classroom and its influence on the class. The average score was 3.07 and based on the students' answers, it is clear that they know who the problematic students are (they know which students will disrupt the lessons = 4.34).

They do not agree with the assumption that there is leadership in the class that rules the class in a negative way (question 12 = 2.09; question 17 = 2.45). The students also do not agree that students in their class quarrel with each other a lot (question 2 = 2.37).

Summary

It can be said that in the 12th grade classrooms, leadership concentration has not been created that influences the class, and certainly not one that contributes to the group.

C. Cohesion and interpersonal attraction versus hostility and rejection

The questions and the average score:

- 3. My best friends are in my class – 3.26
- 6. I don't like most of the students in my class – 2.75
- 7. Some of my classmates have no friends in our class – 2.18
- 15. If I could, I would transfer to a different group – 2.33
- 19. The students in my class know a lot about each other – 2.32
- 20. The students in my class don't care if I come to school or not – 3.28
- 24. I wouldn't like it if most of my classmates would get good grades – 1.94

The average score that the 12th grade gave to this social measure is 2.58, or between "often" and "sometimes". This means that the students do not have a clear sense of social belonging to the class.

Although the students sometimes state that their best friends are in their class (question 3 = 3.26), they in effect state that they don't like most of the students in their class (question 6 = 2.75), that they don't know a lot about their classmates (question 19 = 2.32), and that they feel that the other students in their class don't care if they come to school or not (question 20 = 3.28). On the other hand, they don't believe that there are students who don't have friends in the class (question 7 = 2.18), they support their classmates and would like to see them get good grades (question 24 = 1.94) and they don't want to transfer to a different class(!) (question 15 = 2.33).

Summary:

We can conclude from this measure that the 12th grade transmits indifference and a lack of concern about the subject of cohesion. No evidence of hostility was found but on the other hand, no evidence was found of a fondness for the classroom framework. The classrooms were unable to provide a supportive social environment, and certainly not a supportive group learning environment.

Appendix 7

The Department of Education's Optimal Educational Climate Questionnaire

State of Israel – Department of Education Psychological and Counseling Service Branch

An Optimal Educational Climate

Dear student,

This is a questionnaire regarding your school. The purpose of the questionnaire is to find out how secure you feel in your school and what makes you feel this way. The information that will be received through the questionnaire will help the school take care of problems that will be discovered and to plan activities for improving the atmosphere in the school and in the classroom. The questionnaire has four parts. Please answer all of them.

The questionnaire is anonymous (you don't have to write your name).

Thank you for your cooperation!

School symbol (six digits) _____

Your grade level (circle one): 4th 5th 6th 7th 8th 9th 10th 11th 12th

Your class number (circle one): 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Sex (circle one): Male Female

The first part of the questionnaire contains 37 statements. Please read each statement carefully and mark an X in the box that suits the extent to which you agree with the statement.

No.	Statement	I don't agree at all	I somewhat agree	I agree to a certain extent	I agree to a large extent	I completely agree
1	I have a lot of friends in my class.					
2	My classmates treat me with respect.					
3	I feel I can succeed in school.					
4	I can show my skills and talents at school.					
5	I feel that my teachers care about me.					
6	Some of our teachers embarrass the students.					
7	I feel I can do difficult assignments.					
8	The teachers encourage free and open expression in the classroom.					
9	I can rely on my classmates for help when I need it.					
10	My classmates think my					

	ideas are stupid.					
11	The teachers encourage the students to suggest new ideas about learning.					
12	When I am given an assignment, I don't believe I can do it.					
13	The teachers see to it that the students help each other.					
14	I feel I belong to my class.					
15	My classmates often make fun of me.					
16	In my school, I can make my own decisions about certain subjects.					
17	The teachers make me feel I am "worthy".					
18	The teachers make sure that every student in the class feels he can succeed.					
19	My classmates take what I say seriously.					
20	I do many things at school because I am					

	forced to do them.					
21	The teachers in our school discriminate against students.					
22	In my school, I can't do things that are interesting to me.					
23	The teachers see to it that there are social relations between the students during recesses and after school.					
24	In my school, I can be creative.					
25	The teachers encourage the students to participate in making decisions about subjects related to school.					
26	Learning is harder for me than it is for other students in my classroom.					
27	In our school, I feel comfortable expressing an original and unconventional opinion.					
28	In our school, the teachers take a personal					

	interest in the students.					
29	Most of the teachers treat me with respect.					
30	I feel like I can succeed in many things that I do.					
31	My classmates appreciate me.					
32	It is important to the teachers that the students care about each other.					
33	In our school, students can have an influence on many things.					
34	I can't do all the things I am required to do at school.					
35	Our school encourages the students to express their personal ideas.					
36	I feel I am talented.					
37	In our school, the teachers encourage the students to express their honest opinion.					

The following questions deal with different types of violence. The questions relate to cases of violence you have personally experienced. Mark things you have experienced during the past month at school with an X.

No.		Never	Once or twice	Three times or more
38	A student grabbed/pushed you on purpose.			
39	You were kicked or punched by a student who wanted to hurt you.			
40	You saw a student with a gun at school.			
41	A student used a rock or another object to hurt you.			
42	You went to the nurse or a doctor because a student hurt you or hit you during a quarrel.			
43	Students stole personal items or equipment from you.			
44	You saw a student with a knife.			
45	A student threatened to hurt you or to beat you up.			
46	A student cursed you.			
47	A student mocked or offended/humiliated you.			
48	A student threatened you with a knife and you saw the knife.			
49	A group of students at school threatened you and made fun of you.			
50	A student blackmailed you with threats (for money, food or other valuables)			

51	Someone from the school's staff mocked, insulted or humiliated you			
52	Someone from the school's staff pushed or hit you.			
53	A student touched or tried to touch you, pinch you or fondle you sexually without your consent.			
54	Someone from the school's staff "made a pass at you" (sexually).			
55	You carry a weapon (a knife, a pocketknife, a gun, etc.).			
56	A student gossiped about you and spread insulting rumors of a sexual nature about you.			
57	A student touched or tried to touch you sexually without your consent.			
58	A student kissed or tried to kiss you without your consent.			
59	A student took off or tried to take off part of your clothes.			
60	A student made sexual remarks to you that offended you.			

61. If you have been hurt (you were insulted, pushed or etc.), indicate the place where it happened with an X.

	Yes	No
By the kiosk or in the school's cafeteria during recess		
Outside of the school's gates		
In the teachers' lounge		

At the school's gate		
In the washroom		
In the athletics field or in the schoolyard		
In the sports or another auditorium in the school		
In the hallway or corridor		
In the classroom		
In the school bus		

Somewhere else? _____

62. If someone hurt you, indicate during which part of the school day it happened:

	Yes	No	
During the lessons			
Before school started			
After school started			
During recess			

At a different time during the day? _____

63. If another student hurt you (insulted/pushed/hit you, etc.), indicate who it was with an X

	Yes	No
A student from a higher grade		
A student from my grade		
A student from a different class in my grade		
A student who is not from this school		
A student from a lower grade		

64. If a group of students hurt you (insulted, hit you, etc.), mark the group with an X.

	Yes	No
A group from a higher grade		
A group from my grade		
A group of students from different grades		
A group of students from a different class in my grade		
A group that doesn't belong to the school		
A group from a lower grade		

65. Circle your answer to whether there any places in the school where you don't feel safe (if yes, please give details):

Yes Details _____

No

66. What do you do if you are hit, harassed or threatened by the use of force?

	Yes	no
I ask for help from other students.		
I talk to someone on the school's staff (a teacher, principal, advisor, etc.) about it.		
I don't do anything and I wait for it to stop.		
I ask for help from a family member (parent, brothers, cousins, etc.).		

Do you do something else? Please give details _____

The following questions deal with the atmosphere in the school. Please mark an X in the box that describes how much you agree with the following statements:

No.		Completely	To a large extent	Sometimes	To a certain extent	Not at all
67	In my school, there is a problem with students who curse the teachers.					
68	In my school, students break things (vandalism).					
69	In my school, students drink alcoholic beverages and get drunk.					
70	In my school, students use drugs.					
71	I generally feel safe and secure at school.					
72	The teachers know how to handle the violent students and trouble-makers.					
73	The teachers take steps to prevent violent behaviour.					
74	The teachers take steps to reduce violent behaviours.					
75	The teachers succeed in reducing violent behaviours.					
76	Students in my grade smoke cigarettes.					
77	Students in my grade smoke hookahs.					

Appendix 8

External Evaluation Feedback 2005-2006

Department of Education

Psychological and Counseling Service Branch

Analysis of Results – 2006

Institution XXXXX Results at the Institution Level

Results of the Needs Questionnaire – Part A

	Average	Standard deviation	Number of students
Belonging	3.18	0.72	N=543
Self respect and self-worth	3.65	0.63	N=543
Capability	3.68	0.68	N=543
Autonomy	2.78	0.78	N=537
Self-fulfillment and authentic expression	3.05	0.77	N=543

Results of the Needs Questionnaire – Belonging

	Average	Standard deviation
I have a lot of friends in my class	3.94	1.07
I feel that my teachers care about me.	3.26	1.13
I can rely on my classmates for help when I need it.	3.81	1.11
The teachers see to it that the students help each other.	2.69	1.05
I feel I belong to my class.	3.66	1.21

Results of the Needs Questionnaire – Belonging

	Very little	Somewhat	Fairly	To a large extent	Very much
I have a lot of friends in my class.	4.1%	5.2%	20.4%	33.7%	36.7%
I feel that my teachers care about me.	7.3%	18.0%	29.8%	31.0%	13.9%
I can rely on my classmates for help when I need it.	5.6%	6.0%	21.6%	35.8%	31.1%
The teachers see to it that students help each other.	13.6%	29.2%	37.2%	14.6%	5.3%
I feel I belong to my class.	7.4%	9.3%	22.8%	30.5%	30.0%
The teachers see to it that there are social relations between the students during recesses and after school.	43.7%	25.6%	21.6%	6.3%	2.8%
In our school, the teachers take a personal	14.1%	23.0%	35.2%	19.2%	8.5%

interest in the students.

It is important to the teachers that the students care about each other.	10.5%	17.9%	38.3%	24.2%	9.1%
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Results of the Needs Questionnaire – Self-Respect and Self-Worth

	Average	Standard deviation
My classmates treat me with respect.	3.99	1.02
Some of our teachers embarrass the students.	2.57	1.14
My classmates think my ideas are stupid.	2.00	1.04
My classmates frequently make fun of me.	1.84	1.07
The teachers make me feel I am "worthy".	3.17	1.10
My classmates take what I say seriously.	3.39	1.04
In our school, teachers discriminate against students.	2.52	1.17
Most of the teachers treat me with respect.	3.55	1.09
My classmates appreciate me.	3.69	1.05

Results of the Needs Questionnaire – Self-Respect and Self-Worth

	Very little	Somewhat	Fairly	To a large extent	Very much
The students in my class treat me with respect.	4.2%	3.3%	17.5%	39.3%	35.6%
Some of our teachers embarrass the students.	19.9%	28.7%	32.4%	12.4%	6.7%
My classmates think my ideas are stupid.	39.3%	32.2%	20.2%	5.3%	3.0%
My classmates frequently make fun of me.	49.7%	29.3%	12.5%	4.5%	4.0%
The teachers make me	8.9%	15.0%	37.9%	26.8%	11.5%

feel I am "worthy".

My classmates take what I say seriously.	6.9%	9.3%	34.1%	37.6%	12.1%
In our school, teachers discriminate against students.	21.9%	30.6%	28.2%	12.1%	7.2%
Most of the teachers treat me with respect.	5.9%	9.0%	29.7%	35.0%	20.5%
My classmates appreciate me.	5.5%	5.0%	27.7%	38.6%	23.2%

Results of the Needs Questionnaire – Capability

	Average	Standard deviation
I feel I can succeed in school.	3.85	1.06
I feel I can do difficult assignments.	3.77	.99
When I am given an assignment, I don't believe I can do it.	2.12	1.09
The teachers make sure that every student in the classroom feels he can succeed.	3.18	1.16
Learning is harder for me than it is for other students in the class.	2.22	1.21
I feel I can succeed in many things that I do.	3.75	1.07
I can't do all the things I am required to do in school.	2.61	1.08
I feel I am talented.	3.73	1.18

Results of the Needs Questionnaire – Capability

	Very little	Somewhat	Fairly	To a large extent	Very much
I feel I can succeed in school.	5.2%	4.3%	20.7%	40.2%	29.6%
I feel I can do difficult	2.6%	6.4%	28.4%	36.5%	26.1%

assignments.

When I am given an assignment, I don't believe I can do it.	36.0%	30.7%	22.6%	7.0%	3.7%
The teachers make sure that every student in the classroom feels he can succeed.	10.9%	13.4%	36.0%	25.9%	13.8%
Learning is harder for me than it is for other students in the class.	36.9%	25.3%	22.8%	8.6%	6.4%
I feel I can succeed in many things that I do.	4.2%	7.2%	25.8%	35.2%	27.6%
I can't do all the things I am required to do in school.	17.0%	28.9%	36.4%	11.7%	5.9%
I feel I am talented.	6.4%	7.6%	26.0%	27.2%	32.8%

Results of the Needs Questionnaire – Autonomy

	Average	Standard deviation
The teachers encourage the students to suggest new ideas related to learning.	2.69	1.11
In my school, I can make my own decisions about certain subjects.	2.67	1.09
I do a lot of things in school because I am forced to do them.	3.20	1.18
The teachers encourage the students to participate in making decisions about subjects related to school.	2.74	1.11
In our school, the students can have an influence on many things.	2.99	1.19

Results of the Needs Questionnaire – Autonomy

	Very little	Somewhat	Fairly	To a large extent	Very much
The teachers encourage the students to suggest new ideas related to learning.	15.6%	28.5%	33.3%	16.2%	6.5%
In my school, I can make	16.6%	26.8%	34.6%	16.8%	5.1%

my own decisions about certain subjects.

I do a lot of things at school because I am forced to do them. 9.4% 17.2% 33.8% 23.8% 15.8%

The teachers encourage the students to participate in making decisions about subjects related to school. 14.7% 27.0% 34.8% 16.9% 6.6%

In our school, the students can have an influence on many things. 13.5% 19.5% 32.7% 23.0% 11.3%

Results of the Needs Questionnaire – Self-fulfillment and authentic expression

	Average	Standard deviation
I can show my talents and skills at school.	3.34	1.15
The teachers encourage free and open expression in the classroom.	3.22	1.05
In my school, I can't do things that are interesting to me.	2.89	1.18
In my school, I can be creative.	2.73	1.25
In my school, I feel comfortable expressing an original and unconventional opinion.	3.10	1.19
Our school encourages students to express their personal ideas.	2.85	1.10
At our school, the teachers encourage the students to express their honest opinion.	3.00	1.14

Results of the Needs Questionnaire – Self-fulfillment and authentic expression

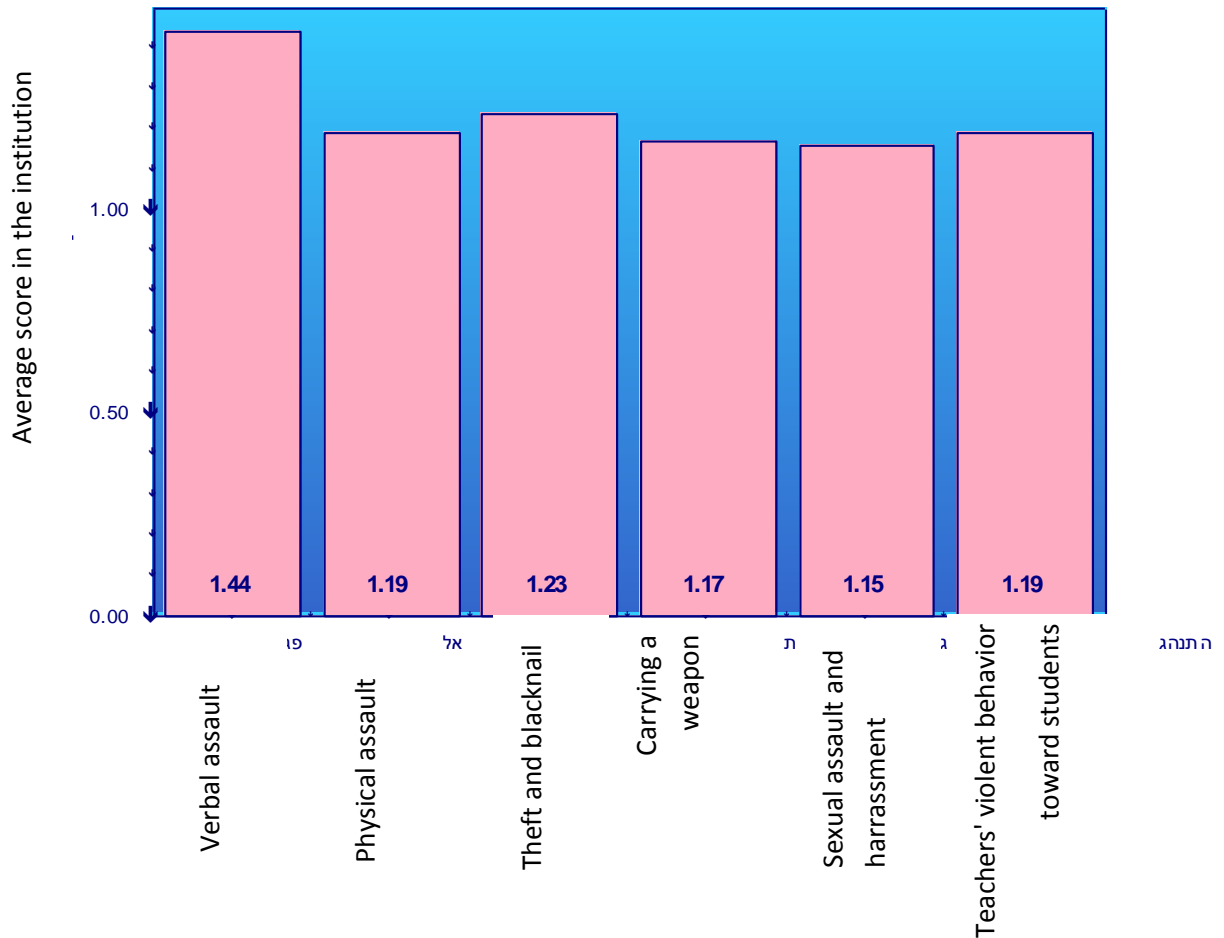
	Very little	Somewhat	Fairly	To a large extent	Very much
In my school, I can show my talents and skills.	7.9%	13.1%	34.2%	26.8%	17.9%
The teachers encourage free and open expression in the classroom.	7.1%	14.4%	38.6%	29.2%	10.7%

At my school, I can't do things that are interesting to me.	13.3%	23.0%	37.6%	13.7%	12.3%
In my school, I can be creative.	20.3%	23.0%	31.3%	13.9%	11.4%
In my school, I feel comfortable expressing an original and unconventional opinion.	12.8%	14.7%	34.6%	25.3%	12.6%
Our school encourages students to express their personal ideas.	13.5%	21.5%	39.2%	18.3%	7.6%
In our school, the teachers encourage the students to express their honest opinion.	12.1%	17.3%	39.4%	20.5%	10.7%

Results of the Types of Violence Questionnaire – Part B

	Average	Standard deviation	Number of students
Verbal assault	1.44	.51	N=535
Physical assault	1.19	.39	N=531
Theft and blackmail	1.23	.43	N=532
Carrying a weapon	1.17	.38	N=532
Sexual assault and harassment	1.15	.37	N=533
Teachers' violent behaviour toward students	1.19	.38	N=530

Comparison of average scores
in Types of Violence in the Institution indexes



Results of the Types of Violence Questionnaire – Verbal Assault

	Average	Standard deviation
A student threatened to hurt/hit you.	1.28	.59
A student cursed you.	1.77	.82
A student mocked, insulted or humiliated you.	1.55	.72
A group of students in the school threatened you and made fun of you.	1.23	.54
Someone from the school's staff mocked, insulted or humiliated you.	1.35	.60

Results of the Types of Violence Questionnaire – Verbal Assault

	Never	Once or twice	Three times or more
A student threatened to hurt/ hit you.	78.8%	13.9%	7.3%
A student cursed you.	47.6%	27.6%	24.8%
A student mocked, insulted or humiliated you.	58.5%	28.3%	13.2%
A group of students in the school threatened you and made fun of you.	82.7%	11.4%	5.9%
Someone from the school's staff mocked, insulted or humiliated you.	71.5%	21.9%	6.6%

Results of the Types of Violence Questionnaire – Physical Assault

	Average	Standard deviation
A student grabbed/pushed you on purpose.	1.42	.67
You were kicked or punched by a student who wanted to hurt you.	1.21	.53
You saw a student with a gun at school.	1.11	.42
A student used a rock or another object to hurt you.	1.16	.46
You went to the nurse or a doctor because a student hurt you during a fight or a quarrel	1.11	.40
Someone from the school's staff pushed or hit you.	1.09	.37

Results of the Types of Violence Questionnaire – Physical Assault

	Never	Once or twice	Three times or more
A student grabbed/pushed you on purpose.	68.8%	20.9%	10.3%
You were kicked or punched by a student who wanted to hurt you.	84.8%	9.6%	5.7%
You saw a student with a gun at school.	92.6%	3.7%	3.7%
A student used a rock or another object to hurt you.	87.9%	8.4%	3.7%
You went to the nurse or a doctor because a student hurt you during a fight or a quarrel.	91.8%	5.1%	3.1%
Someone from the school's staff pushed or hit you.	93.1%	4.4%	2.5%

Results of the Types of Violence Questionnaire – Theft and blackmail

	Average	Standard deviation
Students stole personal items or equipment from you.	1.39	.65
A student blackmailed you with threats (for money, food or other valuables).	1.09	.36

Results of the Types of Violence Questionnaire – Theft and blackmail

	Never	Once or twice	Three times or more
Students stole personal items or equipment from you.	70.6%	20.2%	9.1%
A student blackmailed you with threats (for money, food or other valuables).	93.4%	4.2%	2.5%

Results of the Types of Violence Questionnaire – Carrying a weapon

	Average	Standard deviation
You saw a student with a gun at school.	1.11	.42
You saw a student with a knife at school.	1.36	.65
A student threatened you with a knife and you saw the knife.	1.08	.37
You carried a weapon at school (a knife, pocketknife, gun, etc.).	1.11	.41

Results of the Types of Violence Questionnaire – Carrying a weapon

	Never	Once or twice	Three times or more
You saw a student with a gun at school.	92.6%	3.7%	3.7%
You saw a student with a knife at school.	74.2%	15.9%	9.9%
A student threatened you with a knife and you saw the knife.	94.6%	2.4%	3.0%
You carried a weapon at school (a knife, pocketknife, gun, etc.).	93.2%	3.0%	3.8%

Results of the Types of Violence Questionnaire – Sexual assault and harassment

	Average	Standard deviation
A student touched or tried to touch you or to fondle you in a sexual manner without your consent.	1.18	.49
Someone from the school's staff "made a pass at you" in a sexual way.	1.11	.41
A student gossiped about you and spread insulting rumors of a sexual nature about you.	1.19	.51
A student touched or tried to touch you in a sexual way without your consent.	1.14	.44
A student kissed or tried to kiss you without your consent.	1.11	.38
A student took off or tried to take off part of your clothes.	1.13	.43
A student made sexual comments to you that offended you.	1.21	.53

Results of the Types of Violence Questionnaire – Sexual assault and harassment

	Never	Once or twice	Three times or more
A student touched or tried to touch you or to fondle you sexually without your consent.	87.2%	8.0%	4.8%
Someone from the school's staff "made a pass at you" in a sexual way.	91.9%	4.9%	3.2%
A student gossiped about you and spread insulting rumors of a sexual nature about you.	86.3%	8.3%	5.3%
A student touched or tried to touch you in a sexual way without your consent.	90.4%	5.7%	4.0%
A student kissed or tried to kiss you without your consent.	91.6%	6.1%	2.4%
A student took off or tried to take off part of your clothes.	90.2%	6.5%	3.3%
A student made sexual comments to you and offended you.	85.1%	9.0%	5.8%

Results of the Types of Violence Questionnaire – Teachers' violent behaviour toward students

	Average	Standard deviation
Someone from the school's staff mocked, insulted or humiliated you.	1.35	.60
Someone from the school's staff pushed or hit you.	1.09	.37
Someone from the school's staff "made a pass at you" in a sexual way.	1.11	.41

Results of the Types of Violence Questionnaire – Teachers' violent behaviour toward students

	Never	Once or twice	Three times or more
Someone from the school's staff mocked, insulted or humiliated you.	71.5%	21.9%	6.6%
Someone from the school's staff pushed or hit you.	93.1%	4.4%	2.5%
Someone from the school's staff "made a pass at you" in a sexual way.	91.9%	4.9%	3.2%

Unsafe places

Are there places in school where you don't feel safe?	.	230	42.4%
	No	268	49.4%
	Yes	45	8.3%

Diagram: The phenomenon and the student's response to violence - Time

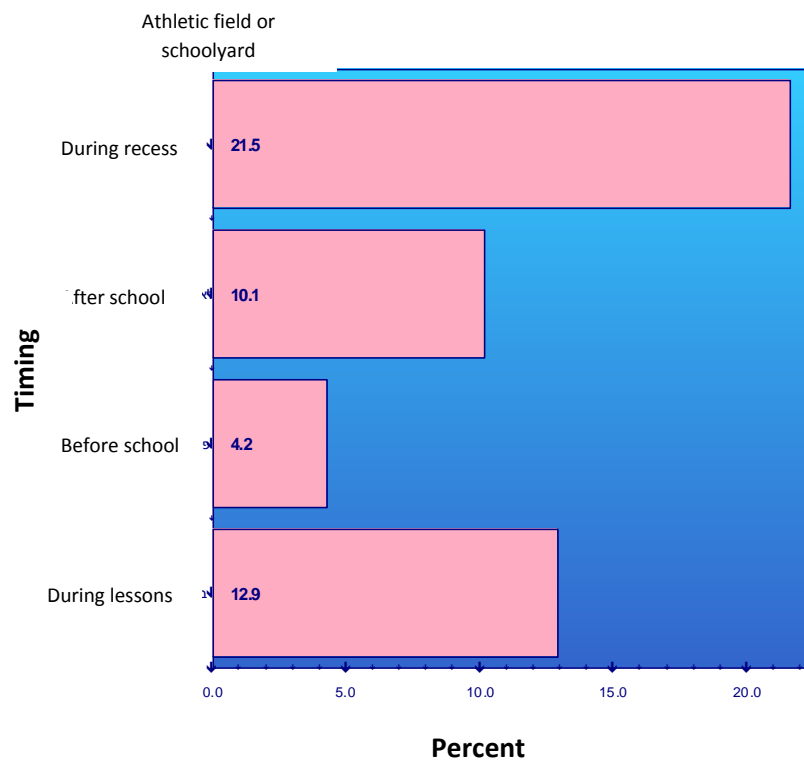
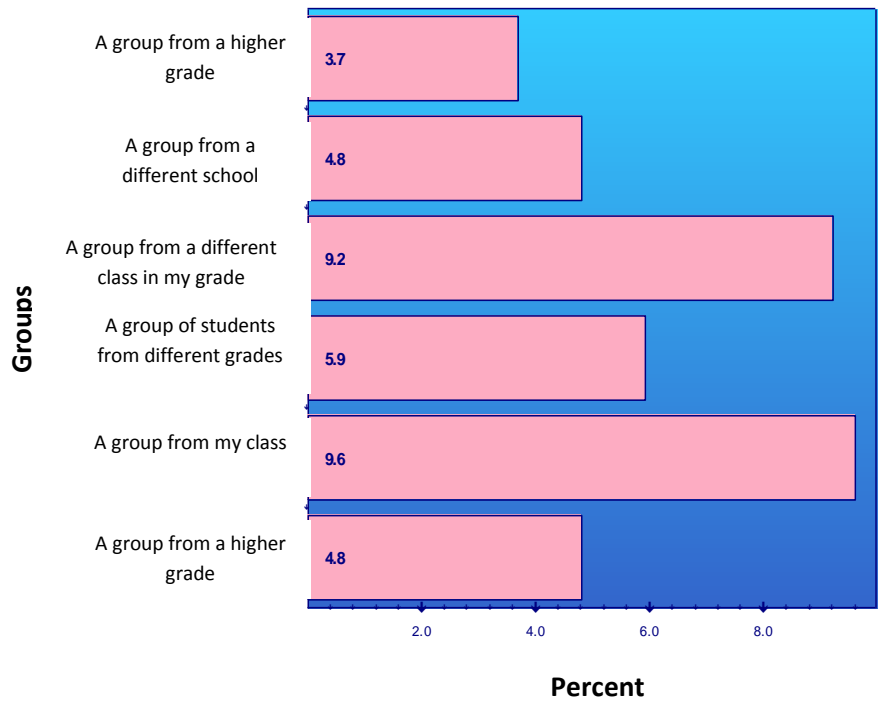


Diagram: The phenomenon and the student's response to violence –

The offending population



Results of the School Atmosphere Questionnaire – Part D

	Average	Standard deviation	Number of students
Asocial behaviours	2.29	.93	N=533
Teachers' ability to handle occurrences of violence	3.07	1.12	N=530

Overall sense of security

In general, I feel safe and secure in school		N	%
	Never	N=54	10.2%
	Usually not	N=32	6.0%
	Some of the time	N=72	13.6%
	Most of the time	N=194	36.7%
	Almost always	N=177	33.5%

Results of the School Atmosphere Questionnaire – Asocial behaviours

	Average	Standard deviation
At my school, there is a problem with students who curse teachers.	2.28	1.10
Students break things (vandalism).	2.70	1.21
Students drink alcoholic beverages and get drunk.	2.35	1.41
Students use drugs.	1.85	1.16

Results of the School Atmosphere Questionnaire – Asocial behaviours

	Not at all	Very little	Some-times	Quite a lot	A lot
At my school, there is a problem with students who curse teachers.	27.3%	35.4%	24.4%	7.8%	5.1%
Students break things (vandalism).	18.3%	29.2%	25.8%	17.5%	9.1%
Students drink alcoholic beverages.	41.1%	17.9%	18.1%	10.9%	11.9%
Students use drugs.	54.3%	22.6%	12.9%	4.7%	5.5%

Results of the School Atmosphere Questionnaire – Teachers' ability to handle occurrences of violence

	Average	Standard deviation
The teachers know how to handle violent students and trouble-makers.	2.79	1.22
It's important to the teachers that there will be no violent behaviours.	3.47	1.33
The teachers take steps to reduce violent behaviours.	3.15	1.28
The teachers succeed in reducing violent behaviours.	2.87	1.25

Results of the School Atmosphere Questionnaire – Teachers' ability to handle occurrences of violence

	Not at all	Very little	Some-times	Quite a lot	Most of the time
The teachers know how to handle violent students and trouble-makers.	19.0%	20.1%	34.0%	17.3%	9.7%
It's important to the teachers that there will be no violent behaviours.	12.0%	12.4%	19.1%	29.5%	27.0%
The teachers take steps to reduce violent behaviours.	13.7%	17.5%	26.0%	26.2%	16.7%
The teachers succeed in reducing violent behaviours.	18.2%	19.1%	31.9%	19.1%	11.6%

Institution XXXXX Results at the Grade Level

Results of the Needs Questionnaire – Part A(a)

	Average	Standard deviation	Number of students
Belonging	3.22	.70	N=239
Self-respect and self-worth	3.65	.62	N=239
Capability	3.69	.67	N=239
Autonomy	2.94	.73	N=236
Self-fulfillment and authentic expression	3.20	.71	N=239

a=10th grade

Results of the Needs Questionnaire – Part A(a)

	Average	Standard deviation	Number of students
Belonging	3.19	.69	N=183
Self-respect and self-worth	3.72	.61	N=183
Capability	3.63	.66	N=183
Autonomy	2.66	.77	N=182
Self-fulfillment and authentic expression	2.96	.75	N=183

a=11th grade

Results of the Needs Questionnaire – Part A(a)

	Average	Standard deviation	Number of students
Belonging	3.06	.78	N=116
Self-respect and self-worth	3.57	.69	N=116
Capability	3.73	.72	N=116

Autonomy	2.60	.84	N=114
Self-fulfillment and authentic expression	2.91	.87	N=116

a=12th grade

Results of the Types of Violence Questionnaire – Part B(a)

	Average	Standard deviation	Number of students
Verbal assault	1.44	.49	N=235
Physical assault	1.17	.34	N=234
Theft and blackmail	1.23	.40	N=234
Carrying a weapon	1.14	.31	N=234
Sexual assault and harassment	1.15	.34	N=235
Teachers' violent behaviour toward students	1.16	.34	N=232

a=10th grade

Results of the Types of Violence Questionnaire – Part B(a)

	Average	Standard deviation	Number of students
Verbal assault	1.46	.55	N=181
Physical assault	1.20	.44	N=179
Theft and blackmail	1.27	.47	N=179
Carrying a weapon	1.20	.42	N=179
Sexual assault and harassment	1.17	.41	N=180
Teachers' violent behaviour toward students	1.23	.43	N=180

a=11th grade

Results of the Types of Violence Questionnaire – Part B(a)

	Average	Standard deviation	Number of students
Verbal assault	1.41	.50	N=114
Physical assault	1.21	.40	N=113
Theft and blackmail	1.20	.43	N=114
Carrying a weapon	1.19	.44	N=114
Sexual assault and harassment	1.13	.37	N=113
Teachers' violent behaviour against students	1.19	.38	N=113

a=12th grade

Table: The phenomenon and the student's response to violence – Place (a)

	No	Yes
Outside of the school's gate	84.5%	15.5%
At the school gate	92.5%	7.5%
In the athletics field or schoolyard	89.5%	10.5%
In a hallway or corridor	83.7%	16.3%
In the school bus	95.8%	4.2%
At the kiosk or in the school's cafeteria during recess	93.7%	6.3%
In the teachers' lounge	97.5%	2.5%
In the washroom	95.0%	5.0%
In the sports or other auditorium	95.0%	5.0%
In the classroom	81.6%	18.4%

a=10th grade

Table: The phenomenon and the student's response to violence – Place (a)

	No	Yes
Outside of the school's gate	90.7%	9.3%
At the school gate	92.3%	7.7%
In the athletics field or schoolyard	88.5%	11.5%
In a hallway or corridor	92.3%	7.7%
In the school bus	95.1%	4.9%
At the kiosk or in the school's cafeteria during recess	85.2%	14.8%
In the teachers' lounge	96.2%	3.8%
In the washroom	94.0%	6.0%
In the sports or other auditorium	95.1%	4.9%
In the classroom	88.0%	12.0%

a=11th grade

Table: The phenomenon and the student's response to violence – Place (a)

	No	Yes
Outside of the school's gate	87.9%	12.1%
At the school gate	93.1%	6.9%
In the athletics field or schoolyard	87.9%	12.1%
In a hallway or corridor	82.8%	17.2%
In the school bus	94.8%	5.2%
At the kiosk or in the school's cafeteria during recess	86.2%	13.8%
In the teachers' lounge	92.2%	7.8%
In the washroom	91.4%	8.6%
In the sports or other auditorium	94.0%	6.0%
In the classroom	78.4%	21.6%

a=12th grade

Unsafe Places (a)

Are there places at school where you don't feel safe?	.	92	38.5%
	No	123	51.5%
	Yes	24	10.0%

a=10th grade

Unsafe Places (a)

Are there places at school where you don't feel safe?	.	88	48.1%
	No	83	45.4%
	Yes	12	6.6%

a=11th grade

Unsafe Places (a)

Are there places at school where you don't feel safe?	.	46	39.7%
	No	61	52.6%
	Yes	9	7.8%

a=12th grade

Table: The phenomenon and the student's response to violence – Time(a)

	No	Yes
Before school starts	95.8%	4.2%
During recess	77.4%	22.6%
During lessons	86.2%	13.8%
After school	90.0%	10.0%

a=10th grade

Table: The phenomenon and the student's response to violence – Time(a)

	No	Yes
Before school starts	96.2%	3.8%
During recess	78.7%	21.3%
During lessons	89.6%	10.4%
After school	88.0%	12.0%

a=11th grade

Table: The phenomenon and the student's response to violence – Time (a)

	No	Yes
Before school starts	94.8%	5.2%
During recess	79.3%	20.7%
During lessons	84.5%	15.5%
After school	92.2%	7.8%

a=12th grade

Table: The phenomenon and the student's response to violence – The offending population (a)

	No	Yes
A student from my class	82.4%	17.6%
A student from another class in my grade	78.2%	21.8%
A student from a lower grade	98.7%	1.3%
A student from a higher grade	91.2%	8.8%
A student from another school	92.5%	7.5%

a=10th grade

Table: The phenomenon and the student's response to violence – The offending population (a)

	No	Yes
A student from my class	83.1%	16.9%
A student from another class in my grade	83.1%	16.9%
A student from a lower grade	97.3%	2.7%
A student from a higher grade	92.9%	7.1%
A student from another school	94.5%	5.5%

a=11th grade

Table: The phenomenon and the student's response to violence – The offending population (a)

	No	Yes
A student from my class	82.8%	17.2%
A student from another class in my grade	86.2%	13.8%
A student from a lower grade	92.2%	7.8%
A student from a higher grade	93.1%	6.9%
A student from another school	94.0%	6.0%

a=12th grade

Table: The phenomenon and the student's response to violence – The offending population (a)

	No	Yes
A group of students from my class	89.5%	10.5%
From another class in my grade	88.7%	11.3%
From a lower grade	97.5%	2.5%
From a higher grade	95.4%	4.6%
From different grades	95.4%	4.6%
From another school	94.6%	5.4%

a=10th grade

Table: The phenomenon and the student's response to violence – The offending population (a)

	No	Yes
A group of students from my class	91.3%	8.7%
From another class in my grade	90.7%	9.3%
From a lower grade	95.6%	4.4%
From a higher grade	96.2%	3.8%
From different grades	91.8%	8.2%
From another school	94.5%	5.5%

a=11th grade

Table: The phenomenon and the student's response to violence – The offending population (a)

	No	Yes
A group of students from my class	90.5%	9.5%
From another class in my grade	94.8%	5.2%
From a lower grade	94.8%	5.2%
From a higher grade	93.1%	6.9%
From different grades	94.8%	5.2%
From another school	97.4%	2.6%

a=12th grade

Table: The phenomenon and the student's response to violence – The student's response (a)

	No	Yes
Talks to someone from the school's staff (teacher, principal, counselor, etc.) about it.	85.8%	14.2%
Asks a family member for help (parent, brothers, cousins, etc.)	91.6%	8.4%
Asks other students for help.	83.7%	16.3%
Does nothing and waits for it to stop.	91.6%	8.4%

a=10th grade

Table: The phenomenon and the student's response to violence – The student's response (a)

	No	Yes
Talks to someone from the school's staff for help (teacher, principal, counselor, etc.) about it.	84.2%	15.8%
Asks a family member for help (parent, brothers, cousins, etc.).	91.3%	8.7%
Asks other students for help.	89.1%	10.9%
Does nothing and waits for it to stop.	90.7%	9.3%

a=11th grade

Table: The phenomenon and the student's response to violence – The student's response (a)

	No	Yes
Talks to someone from the school's staff (teacher, principal, counselor, etc.) about it.	84.5%	15.5%
Asks a family member for help (parent, brothers, cousins, etc.).	93.1%	6.9%
Asks other students for help.	81.0%	19.0%
Does nothing and waits for it to stop.	88.8%	11.2%

a=12th grade

Questionnaire Results – School Atmosphere – Part D(a)

	Average	Standard deviation	Number of students
Asocial behaviours	2.35	.90	N=235
Teachers' ability to handle occurrences of violence	3.09	1.07	N=235

a=10th grade

Questionnaire Results – School Atmosphere – Part D(a)

	Average	Standard deviation	Number of students
Asocial behaviours	2.20	.93	N=181
Teachers' ability to handle occurrences of violence	3.18	1.16	N=178

a=11th grade

Questionnaire Results – School Atmosphere – Part D(a)

	Average	Standard deviation	Number of students
Asocial behaviours	2.34	.98	N=112
Teachers' ability to handle occurrences of violence	2.86	1.13	N=112

a=12th grade

Overall Sense of Security (a)

In general, I feel safe and secure at school.	Never	N=22	9.4%
	Not always	N=17	7.3%
	Some of the time	N=30	12.8%
	Most of the time	N=88	37.6%
	Almost always	N=77	32.9%

a=10th grade

Overall Sense of Security (a)

In general, I feel safe and secure at school.	Never	N=16	9.0%
	Not always	N=7	3.9%
	Some of the time	N=24	13.5%
	Most of the time	N=65	36.5%
	Almost always	N=66	37.1%

a=11th grade

Overall Sense of Security (a)

In general, I feel safe and secure at school.	Never	N=15	13.4%
	Not always	N=8	7.1%
	Some of the time	N=18	16.1%
	Most of the time	N=39	34.8%
	Almost always	N=32	28.6%

a=12th grade

Appendix 9

External Evaluation Feedback

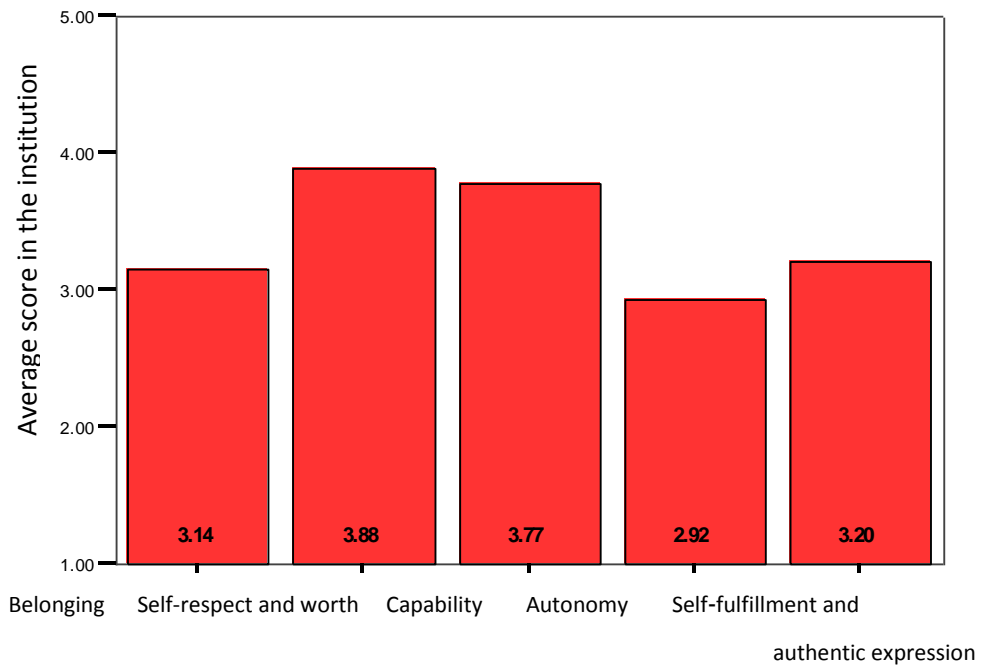
Department of Education Psychological and Counselling Service Branch Analysis of Results – 2009

Results at the Institution Level

Results of the Needs Questionnaire – Part A

	Average	Standard deviation	Number of students
Belonging	3.14	.81	N=295
Self-respect and self-worth	3.88	.64	N=295
Capability	3.77	.64	N=295
Autonomy	2.92	.82	N=295
Self-fulfillment and authentic expression	3.20	.81	N=295

A comparison of the average scores in the Needs in the Institution indexes



Results of the Needs Questionnaire – Distribution of Belonging and Respect Indexes

	Average	Standard deviation	Number of students
Students' sense of belonging	3.48	1.09	N=295
A sense of belonging that the teachers bestow	2.94	.88	N=295
A sense of mutual respect among the students	4.02	.69	N=295
A sense of respect bestowed by the teachers	3.70	.85	N=295

Results of the Needs Questionnaire according to gender

	Gender	Average	Standard deviation	Number of students
Belonging	Male	3.20	.81	N=158
	Female	3.07	.82	N=137
Self-respect and self-worth	Male	3.84	.64	N=158
	Female	3.92	.63	N=137
Capability	Male	3.81	.61	N=158
	Female	3.73	.68	N=137
Autonomy	Male	2.86	.80	N=158
	Female	2.99	.84	N=137
Self-fulfillment and authentic expression	Male	3.18	.84	N=158
	Female	3.23	.79	N=137

Results of the Needs Questionnaire – Students' sense of belonging

	Average	Standard deviation
I have a lot of friends in my class.	3.54	1.22
I can rely on my classmates for help if I need it.	3.33	1.26
I feel I belong to my class.	3.56	1.27

Students' sense of belonging

	Don't agree at all	Somewhat agree	Agree to a certain extent	Agree to a large extent	Completely agree
I have a lot of friends in my class.	7.5%	11.9%	27.8%	25.4%	27.5%
I can rely on my classmates for help if I need it.	10.5%	15.3%	26.1%	26.8%	21.4%
I feel I belong to my class.	11.5%	7.8%	19.3%	35.6%	25.8%

A sense of belonging bestowed by the teacher

	Average	Standard deviation
I feel that my teachers care about me.	3.6	1.15
The teachers see to it that the students help each other.	2.72	1.11
The teachers see to it that students have social relations during recesses and after school.	2.06	1.17
In our school, the teachers take a personal interest in the students.	3.27	1.19
It is important for the teachers that the students care about each other.	3.26	1.20

A sense of belonging bestowed by the teachers

	Don't agree at all	Somewhat agree	Agree to a certain extent	Agree to a large extent	Completely agree
I feel that my teachers care about me.	7.1%	13.9%	28.8%	31.9%	18.3%
The teachers see to it that students help each other.	15.6%	27.1%	32.5%	19.3%	5.4%
The teachers see to it that students have social relations during recesses and after school.	43.7%	23.4%	21.0%	7.1%	4.7%
In our school, the teachers take a personal interest in the students.	9.8%	15.6%	28.1%	30.5%	15.9%
It is important for the teachers that the students care about each other.	10.2%	14.6%	31.9%	26.1%	17.3%

Students' sense of self-respect and self-worth

	Average	Standard deviation
My classmates treat me with respect.	4.17	.91
My classmates think my ideas are stupid.	1.69	.99
My classmates frequently make fun of me.	1.47	.87
My classmates take what I say seriously.	3.42	1.03
My classmates appreciate me.	3.67	1.02

Students' sense of self-respect and self-worth

	Don't agree at all	Somewhat agree	Agree to a certain extent	Agree to a large extent	Completely agree
My classmates treat me with respect.	2.0%	2.4%	14.6%	39.0%	42.0%
My classmates think my ideas are stupid.	58.0%	23.7%	11.5%	4.7%	2.0%
My classmates frequently make fun of me.	70.5%	18.0%	7.1%	2.7%	1.7%
My classmates take what I say seriously.	5.1%	13.2%	27.8%	42.0%	11.9%
My classmates appreciate me.	3.7%	8.8%	24.4%	42.4%	20.7%

A sense of self-respect and self-worth bestowed by teachers

	Average	Standard deviation
Some of the teachers in our school embarrass the students.	2.29	1.18
My teachers make me feel I am "worthy".	3.44	1.15
In our school, the teachers discriminate against students.	2.16	1.21
Most of my teachers treat me with respect.	3.81	1.03

A sense of self-respect and self-worth bestowed by the teachers

	Don't agree at all	Somewhat agree	Agree to a certain extent	Agree to a large extent	Completely agree
Some of the teachers in our school embarrass the students.	30.2%	32.5%	21.0%	10.2%	6.1%
My teachers make me feel I am "worthy".	8.1%	10.8%	27.8%	35.3%	18.0%
In our school, the teachers discriminate against students.	37.3%	30.2%	19.3%	5.4%	7.8%
Most of my teachers treat me with respect.	4.7%	5.1%	20.7%	43.4%	26.1%

Results of the Needs Questionnaire – Capability

	Average	Standard deviation
I feel I can succeed in school.	3.88	1.07
I feel I can do difficult assignments.	3.77	1.03
When I get assignments, I don't believe I can do them.	1.93	1.07
Learning is harder for me than it is for other students in my class.	2.09	1.28
I feel I can succeed in most of the things I do.	3.83	.99
I can't do everything I am required to do at school.	2.50	1.12
I feel I am talented.	3.86	1.19
The teachers make sure that every student in the classroom feels he can succeed.	3.37	1.14

Results of the Needs Questionnaire – Capability

	Don't agree at all	Somewhat agree	Agree to a certain extent	Agree to a large extent	Completely agree
I feel I can succeed in school.	4.1%	6.8%	18.6%	37.6%	32.9%
I feel I can do difficult assignments.	2.7%	9.2%	24.1%	36.9%	27.1%
When I get assignments, I don't believe I can do them.	44.7%	30.2%	15.9%	5.8%	3.4%
Learning is harder for me than it is for other students in my class.	46.4%	22.0%	14.2%	10.2%	7.1%
I feel I can succeed in many of the things I do.	2.4%	6.4%	25.8%	36.9%	28.5%
I can't do everything I am required to do in school.	23.7%	24.7%	33.6%	13.9%	4.1%
I feel I am talented.	6.4%	7.1%	18.3%	30.5%	37.6%
The teachers make sure that every student in the classroom feels he can succeed.	7.8%	14.6%	25.8%	36.3%	15.6%

Results of the Needs Questionnaire – Autonomy

	Average	Standard deviation
In my school, I can make my own decisions about certain subjects.	2.97	1.16
I do many things in school because I am forced to do them.	2.84	1.25
At our school, students can have an influence on many things.	2.95	1.14
The teachers encourage the students to suggest new ideas related to learning.	2.87	1.16
The teachers encourage the students to participate in making decisions about subjects related to school.	2.85	1.16

Results of the Needs Questionnaire – Autonomy

	Don't agree at all	Somewhat agree	Agree to a certain extent	Agree to a large extent	Completely agree
In my school, I can make my own decisions about certain subjects.	16.6%	22.7%	31.9%	22.4%	6.4%
I do in many things in school because I am forced to do them.	17.3%	24.4%	26.1%	21.0%	11.2%
At our school, students can have an influence on many things.	11.5%	23.4%	32.9%	22.7%	9.5%
The teachers encourage the students to suggest new ideas related to learning.	12.9%	26.8%	29.2%	22.7%	8.5%
The teachers encourage the students to participate in making decisions about school-related subjects.	14.9%	23.4%	31.2%	22.7%	7.8%

Results of the Needs Questionnaire – Self-fulfillment and authentic expression

	Average	Standard deviation
In my school, I can show my talents and skills.	3.33	1.12
In my school, I can't do things that are interesting to me.	2.50	1.25
In my school, I can be creative.	2.82	1.20
In my school, I feel comfortable expressing an original and unconventional opinion.	3.17	1.23
Our school encourages students to express their personal ideas.	2.92	1.13
In our school, the teachers encourage free and open expression.	3.44	1.03
In our school, the teachers encourage the students to express their honest opinion.	3.25	1.23

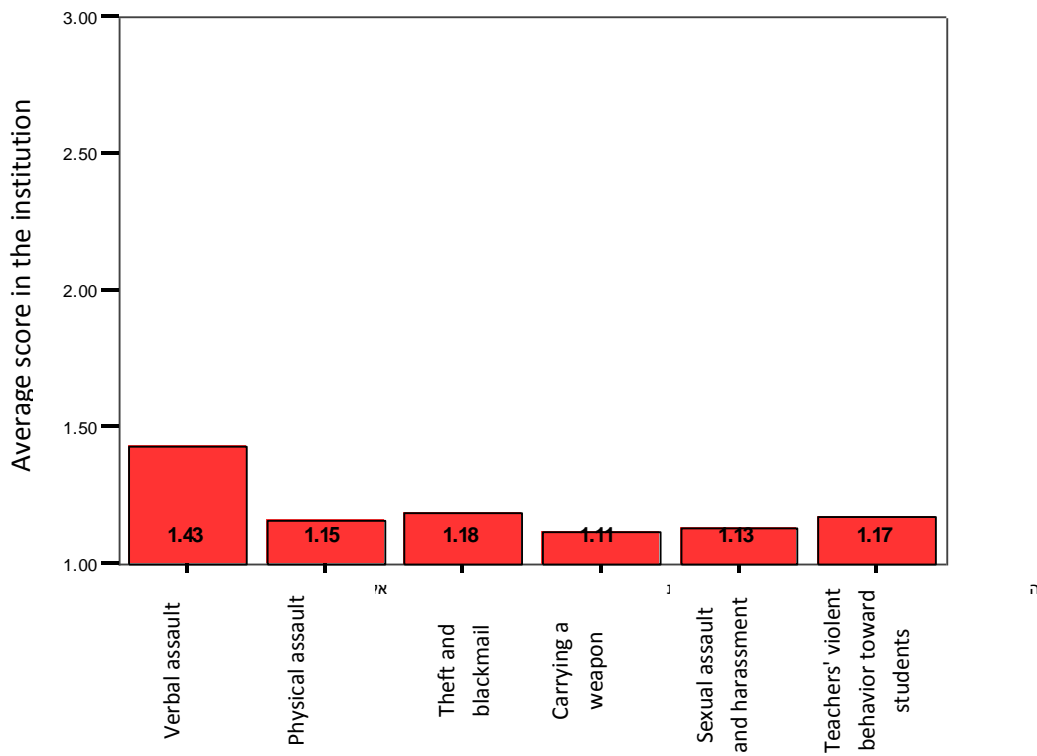
Results of the Needs Questionnaire – Self-fulfillment and authentic expression

	Don't agree at all	Somewhat agree	Agree to a certain extent	Agree to a large extent	Completely agree
In my school, I can show my talents and skills.	7.5%	13.9%	31.9%	31.5%	15.3%
In my school, I can't do things that are interesting to me.	28.8%	21.4%	29.2%	12.5%	8.1%
In my school, I can be creative.	17.3%	21.0%	34.2%	17.6%	9.8%
In my school, I feel comfortable expressing an original and unconventional opinion.	13.2%	12.9%	33.2%	25.1%	15.6%
Our school encourages students to express their personal ideas.	11.9%	24.1%	32.9%	22.7%	8.5%
In our school, the teachers encourage free and open expression.	7.5%	13.9%	31.9%	31.5%	15.3%
In our school, the teachers encourage the students to express their honest opinion.	28.8%	21.4%	29.2%	12.5%	8.1%

Results of the Types of Violence Questionnaire – Part 2

	Average	Standard deviation	Number of students
Verbal assault	1.43	.48	N=295
Physical assault	1.15	.33	N=295
Theft and blackmail	1.18	.39	N=295
Carrying a weapon	1.11	.34	N=295
Sexual assault and harassment	1.13	.34	N=295
Teachers' violent behaviour toward students	1.17	.32	N=295

**A comparison of the average scores of the
Types of Violence in the Institution indexes**



Index

Results of Types of Violence Questionnaire according to gender

	Gender	Average	Standard Deviation	Number of students
Verbal assault	Male	1.52	.53	N=158
	Female	1.33	.40	N=137
Physical assault	Male	1.21	.37	N=158
	Female	1.09	.25	N=137
Theft and blackmail	Male	1.20	.41	N=158
	Female	1.16	.35	N=137
Carrying a weapon	Male	1.18	.42	N=158
	Female	1.04	.21	N=137
Sexual assault and harassment	Male	1.18	.40	N=158
	Female	1.08	.24	N=137
Teachers' violent behaviour toward students	Male	1.21	.36	N=158
	Female	1.14	.25	N=137

Results of Types of Violence Questionnaire – Verbal assault

	Average	Standard deviation
A student threatened to hurt or hit you.	1.25	.55
A student cursed you.	1.78	.81
A student mocked, insulted or humiliated you.	1.59	.73
A group of students in the school threatened you and made fun of you.	1.18	.49
Someone from the school's staff mocked, insulted or humiliated you.	1.34	.58

Results of Types of Violence Questionnaire – Verbal assault

	Never	Once or twice	Three times or more
A student threatened to hurt or hit you.	80.3%	13.9%	5.8%
A student cursed you.	46.1%	29.5%	24.4%
A student mocked, insulted or humiliated you.	55.3%	30.5%	14.2%
A group of students in the school threatened you and made fun of you.	87.1%	8.1%	4.7%
Someone from the school's staff mocked, insulted or humiliated you.	71.9%	22.7%	5.4%

Results of Types of Violence Questionnaire – Physical assault

	Average	Standard deviation
A student t grabbed/pushed you on purpose.	1.35	.64
You were kicked or punched by another student who wanted to hurt you.	1.18	.48
You saw a student with a gun at school.	1.11	.42
A student used a rock or another object to hurt you.	1.15	.44
You went to the nurse or a doctor because a student hurt you during a fight or a quarrel.	1.07	.33
Someone from the school's staff pushed or hit you.	1.07	.33

Results of Types of Violence Questionnaire – Physical assault

	Never	Once or twice	Three times or more
A student grabbed/pushed you on purpose.	74.6%	16.3%	9.2%
You were kicked or punched by another student who wanted to hurt you.	86.4%	9.5%	4.1%
You saw a student with a gun at school.	93.2%	2.7%	4.1%
A student used a rock or another object to hurt you.	88.5%	8.1%	3.4%
You went to the nurse or a doctor because a student hurt you during a fight or a quarrel.	94.9%	3.1%	2.0%
Someone from the school's staff pushed or hit you.	94.6%	3.4%	2.0%

Results of Types of Violence Questionnaire – Theft and blackmail

	Average	Standard deviation
Students stole personal items or equipment from you.	1.28	.56
A student blackmailed you with threats (for money, food or other valuables).	1.08	.36

Results of Types of Violence Questionnaire – Theft and blackmail

	Never	Once or twice	Three times or more
Students stole personal items or equipment from you.	77.6%	16.9%	5.4%
A student blackmailed you with threats (for money, food or other valuables).	94.2%	3.1%	2.7%

Results of Types of Violence Questionnaire – Carrying a weapon

	Average	Standard deviation
You saw a student with a gun at school.	1.11	.42
You saw a student with a knife at school.	1.16	.46
A student threatened you with a knife and you saw the knife.	1.07	.36
You carried a knife, pocketknife or a gun in school.	1.12	.45

Results of Types of Violence Questionnaire – Carrying a weapon

	Never	Once or twice	Three times or more
You saw a student with a gun at school.	93.2%	2.7%	4.1%
You saw a student with a knife at school.	88.1%	7.8%	4.1%
A student threatened you with a knife and you saw the knife.	95.9%	1.0%	3.1%
You carried a knife, pocketknife or a gun in school.	92.9%	2.4%	4.7%

Results of Types of Violence Questionnaire – Sexual assault and harassment

	Average	Standard deviation
A student touched or tried to touch or to fondle you in a sexual way without your consent.	1.13	.43
Someone from the school's staff "made a pass at you" in a sexual way.	1.11	.38
A student gossiped about you and spread insulting rumors of a sexual nature about you.	1.20	.50
A student touched or tried to touch you in a sexual way without your consent.	1.14	.44
A student kissed or tried to kiss you without your consent.	1.11	.41
A student took off or tried to take off part of your clothes.	1.09	.37
A student made sexual remarked to you that offended you.	1.14	.44

Results of Types of Violence Questionnaire – Sexual assault and harassment

	Never	Once or twice	Three times or more
A student touched or tried to touch or to fondle you in a sexual way without your consent.	91.2%	5.1%	3.7%
Someone from the school's staff "made a pass at you" in a sexual way.	91.2%	6.4%	2.4%
A student gossiped about you and spread insulting rumors of a sexual nature about you.	85.1%	10.2%	4.7%
A student touched or tried to touch you in a sexual way without your consent.	89.8%	6.4%	3.7%
A student kissed or tried to kiss you without your consent.	93.2%	3.1%	3.7%
A student took off or tried to take off part of your clothes.	93.2%	4.1%	2.7%
A student made sexual remarked to you that offended you.	91.2%	5.1%	3.7%

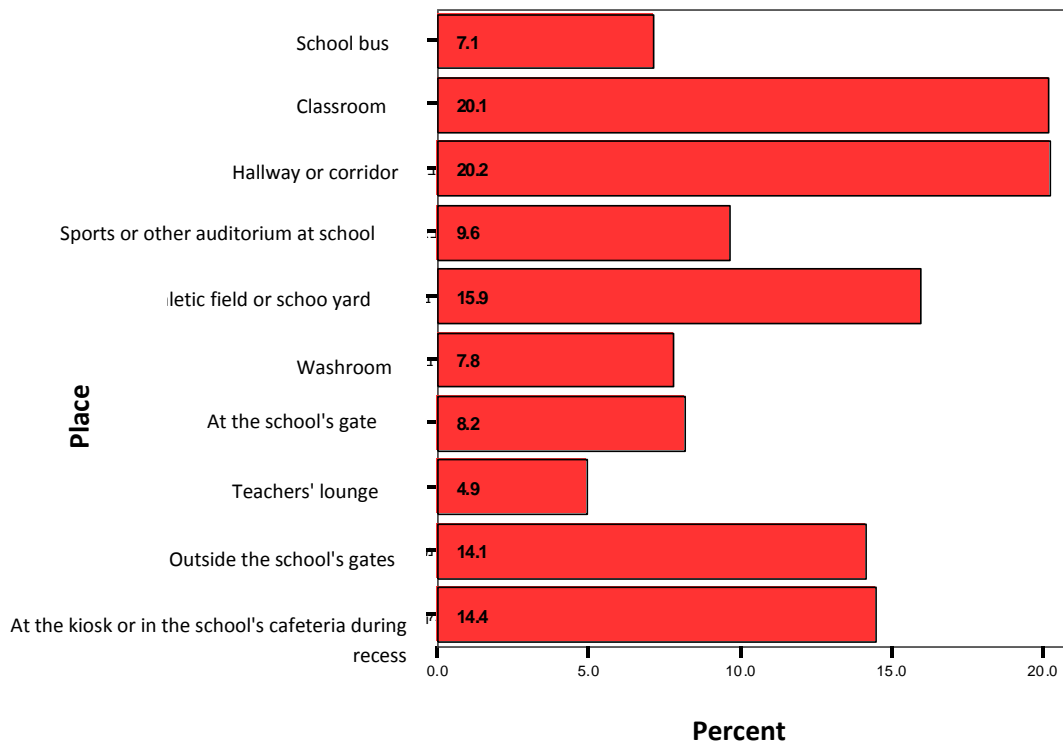
Results of Types of Violence Questionnaire – Teachers' violent behaviour toward students

	Average	Standard deviation
Someone from the school's staff mocked, insulted or humiliated you.	1.34	.58
Someone from the school's staff pushed or hit you.	1.07	.33
Someone from the school's staff "made a pass at you" in a sexual way.	1.11	.38

Results of Types of Violence Questionnaire – Teachers' violent behaviour toward students

	Never	Once or twice	Three times or more
Someone from the school's staff mocked, insulted or humiliated you.	71.9%	22.7%	5.4%
Someone from the school's staff pushed or hit you.	94.6%	3.4%	2.0%
Someone from the school staff "made a pass at you: in a sexual way.	91.2%	6.4%	2.4%

Diagram: The phenomenon and the student's response to violence – Place



Unsafe places

Are there places at school where you don't feel safe?	No response	2	.7%0
	Yes	32	10.8%
	No	261	88.5%

Diagram: The phenomenon and the student's response to violence - Time

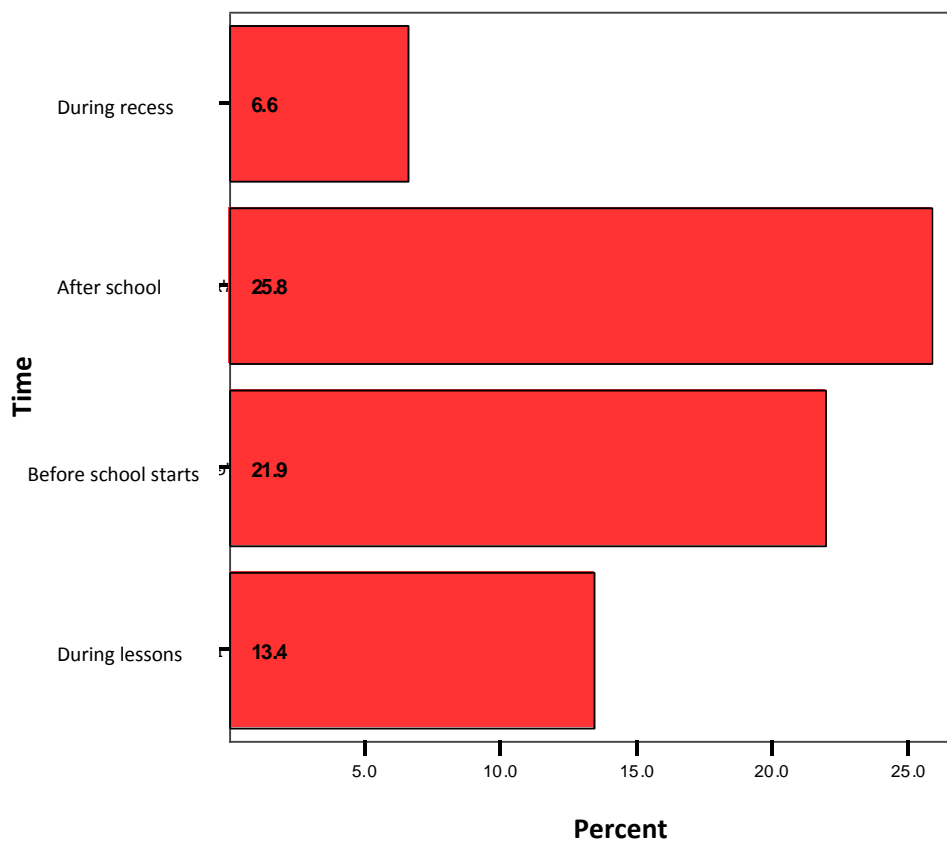


Diagram: The phenomenon and the student's response to violence – Offending population

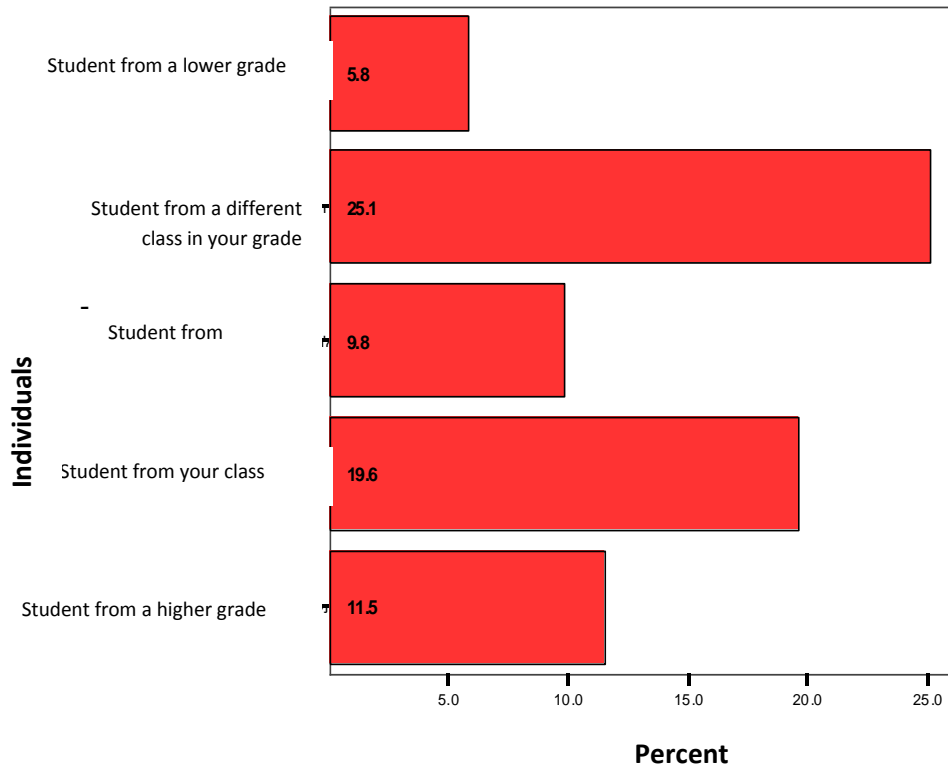


Diagram: The phenomenon and the student's response to violence – Offending population

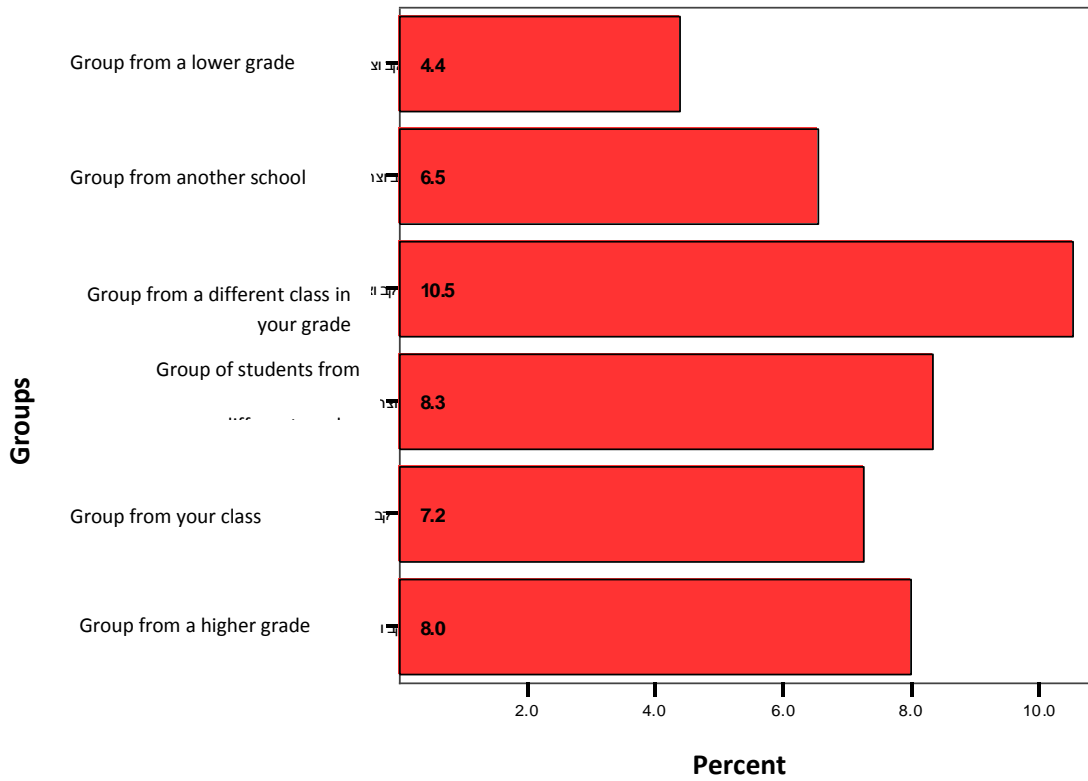
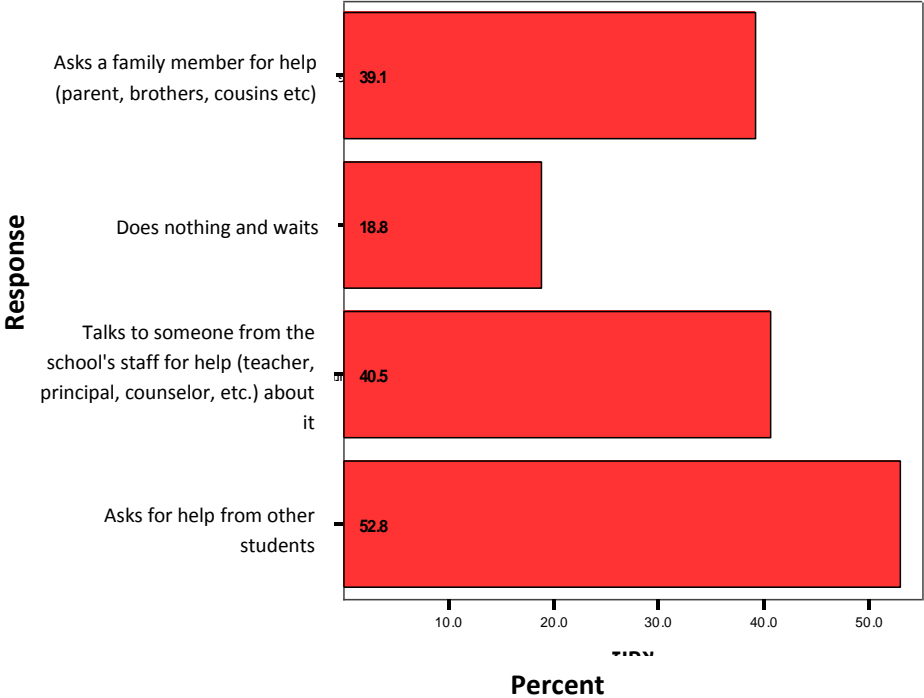


Diagram: The phenomenon and the student's response to violence – Student's response



Questionnaire Results – School Atmosphere – Part D

	Average	Standard deviation	Number of students
Asocial behaviours	2.89	.96	N=290
Teachers' ability to handle occurrences of violence	3.34	1.15	N=290

Overall Sense of Security

In general, I feel safe and secure at school.	Never		N=31	10.7%
	Not always		N=17	5.9%
	Some of the time		N=35	12.1%
	Most of the time		N=87	30.0%
	Almost always		N=120	41.1%

Results of the School Atmosphere Questionnaire – Asocial Behaviours

	Average	Standard deviation
In my school, there is a problem with students who curse teachers.	2.53	1.31
Students break things (vandalism).	2.70	1.35
Students drink alcoholic beverages.	2.31	1.47
Students use drugs.	2.04	1.31
Students in my grade smoke cigarettes.	4.08	1.29
Students in my grade smoke a hookah.	3.67	1.49

Results of the School Atmosphere Questionnaire – Asocial Behaviours

	Not at all	Not much	Occasionally	Quite a lot	A lot
At my school, there is a problem with students who curse teachers.	27.6%	25.5%	24.8%	10.3%	11.7%
Students break things.	24.1%	22.8%	27.2%	10.3%	15.5%
Students drink alcoholic beverages.	46.6%	14.1%	14.1%	12.4%	12.8%
Students who drugs.	50.0%	21.0%	13.1%	6.9%	9.0%
Students in my grade smoke cigarettes.	8.6%	5.2%	11.7%	18.3%	56.2%
Students in my grade smoke a hookah.	15.2%	9.0%	14.8%	15.9%	45.2%

Results of the School Atmosphere Questionnaire – Teachers' ability to handle occurrences of violence

	Average	Standard deviation
The teachers know how to handle violent students and trouble-makers.	2.98	1.33
The teachers take steps to prevent violent behaviour.	3.76	1.31
The teachers take steps to reduce violent behaviours.	3.45	1.31
The teachers succeed in reducing violent behaviours.	3.17	1.34

Results of the School Atmosphere Questionnaire – Teachers' ability to handle occurrences of violence

	Not at all	Not much	Occasionally	Quite a lot	A lot
The teachers know how to handle violent students and trouble-makers.	17.9%	17.6%	30.7%	16.2%	17.6%
The teachers take steps to prevent violent behaviour.	9.7%	7.9%	18.3%	24.8%	39.3%
The teachers take steps to reduce violent behaviours.	10.7%	12.8%	25.9%	22.1%	28.6%
The teachers succeed in reducing violent behaviours.	15.9%	13.1%	30.7%	18.6%	21.7%

Institution 570192 – Grade Level Results

March 2009

Results of the Needs Questionnaire – Part A

	Average	Standard deviation	Number of students
Belonging	3.35	.76	N=146
Self-respect and self-worth	3.94	.68	N=146
Capability	3.81	.61	N=146
Autonomy	3.12	.83	N=146
Self-fulfillment and authentic expression	3.34	.81	N=146

10th Grade

Results of the Needs Questionnaire – Part A

	Average	Standard deviation	Number of students
Belonging	2.99	.80	N=131
Self-respect and self-worth	3.79	.60	N=131
Capability	3.71	.69	N=131
Autonomy	2.77	.76	N=131
Self-fulfillment and authentic expression	3.10	.81	N=131

11th Grade

Results of the Needs Questionnaire – Part A

	Average	Standard deviation	Number of students
Belonging	2.61	.91	N=18
Self-respect and self-worth	4.04	.47	N=18
Capability	3.92	.56	N=18
Autonomy	2.43	.78	N=18
Self-fulfillment and authentic expression	2.87	.75	N=18

12th Grade

Results of the Types of Violence Questionnaire – Part B

	Average	Standard deviation	Number of students
Verbal assault	1.37	.48	N=146
Physical assault	1.16	.31	N=146
Theft and blackmail	1.19	.41	N=146
Carrying a weapon	1.12	.36	N=146
Sexual assault and harassment	1.12	.32	N=146
Teachers' violent behaviour toward students	1.15	.31	N=146

10th Grade

Results of the Types of Violence Questionnaire – Part B

	Average	Standard deviation	Number of students
Verbal assault	1.50	.48	N=131
Physical assault	1.17	.37	N=131
Theft and blackmail	1.17	.38	N=131
Carrying a weapon	1.13	.35	N=131
Sexual assault and harassment	1.14	.37	N=131
Teachers' violent behaviour toward students	1.21	.33	N=131

11th Grade

Results of the Types of Violence Questionnaire – Part B

	Average	Standard deviation	Number of students
Verbal assault	1.37	.40	N=18
Physical assault	1.02	.08	N=18
Theft and blackmail	1.17	.30	N=18
Carrying a weapon	1.00	.00	N=18
Sexual assault and harassment	1.10	.31	N=18
Teachers' violent behaviour toward students	1.13	.20	N=18

12th Grade

Table: The phenomenon and the student's response to violence – Place

	Yes	No
Outside the gates of the school	84.7%	15.3%
At the school gate	92.4%	7.6%
In the athletics field or schoolyard	84.7%	15.3%
In a hallway or a corridor	84.6%	15.4%
In the school bus	93.0%	7.0%
At the kiosk or in the school's cafeteria during recess	85.4%	14.6%
In the teachers' lounge	95.1%	4.9%
In the washroom	93.1%	6.9%
In the sports or other auditorium in the school	89.5%	10.5%
In the classroom	86.8%	13.2%

10th Grade

Table: The phenomenon and the student's response to violence – Place

	Yes	No
Outside the gates of the school	85.4%	14.6%
At the school gates	90.1%	9.9%
In the athletics field or schoolyard	82.8%	17.2%
In a hallway or a corridor	73.8%	26.2%
In the school bus	92.6%	7.4%
At the kiosk or in the school's cafeteria during recess	85.4%	14.6%
In the teachers' lounge	94.3%	5.7%
In the washroom	91.0%	9.0%
In the sports or other auditorium in the school	91.8%	8.2%
In the classroom	70.5%	29.5%

11th Grade

Table: The phenomenon and the student's response to violence – Place

	Yes	No
Outside the school's gates	100.0%	
At the school's gates	100.0%	
In the athletics field or schoolyard	88.2%	11.8%
In a hallway or a corridor	82.4%	17.6%
In the school bus	94.1%	5.9%
At the kiosk or in the school's cafeteria during recess	88.2%	11.8%
In the teachers' lounge	100.0%	
In the bathroom	94.1%	5.9%
In the sports or other auditorium	87.5%	12.5%
In the classroom	88.2%	11.8%

12th Grade

Unsafe Places

Are there places at school where you don't feel safe?	.	2	1.4%
	Yes	20	13.7%
	No	124	84.9%

1 0th Grade

Unsafe Places

Are there places at school where you don't feel safe?			
	Yes	11	8.4%
	No	120	91.6%

11th Grade

Unsafe Places

Are there places at school where you don't feel safe?			
	Yes	1	5.6%
	No	17	94.4%

12th Grade

Table: The phenomenon and the student's response to violence – Time

	No	Yes
Before school starts	85.8%	14.2%
During recess	95.0%	5.0%
During classes	86.4%	13.6%
After school	76.8%	23.2%

10th Grade

Table: The phenomenon and the student's response to violence – Time

	No	Yes
Before school starts	71.7%	28.3%
During recess	90.7%	9.3%
During classes	84.9%	15.1%
After school	70.0%	30.0%

11th Grade

Table: The phenomenon and the student's response to violence – Time

	No	Yes
Before school starts	58.8%	41.2%
During recess	100.0%	
During classes	100.0%	
After school	82.4%	17.6%

12th Grade

Table: The phenomenon and the student's response to violence – The offending population

	No	Yes
A student from your class	85.0%	15.0%
A student from a different class in your grade	80.9%	19.1%
A student from a lower grade	95.0%	5.0%
A student from a higher grade	86.6%	13.4%
A student from another school	90.8%	9.2%

10th Grade

Table: The phenomenon and the student's response to violence – The offending population

	No	Yes
A student from your class	73.1%	26.9%
A student from a different class in your grade	68.6%	31.4%
A student from a lower grade	93.2%	6.8%
A student from a higher grade	90.8%	9.2%
A student from another school	89.0%	11.0%

11th Grade

Table: The phenomenon and the student's response to violence – The offending population

	No	Yes
A student from your class	94.1%	5.9%
A student from a different class in your grade	70.6%	29.4%
A student from a lower grade	94.1%	5.9%
A student from a higher grade	88.2%	11.8%
A student from another school	94.1%	5.9%

12th Grade

Table: The phenomenon and the student's response to violence – The student's response

	No	Yes
Talks to someone from the school's staff (teacher, principal, counselor) about it	55.7%	44.3%
Asks for help from a family member (parent, brothers, cousins)	60.4%	39.6%
Asks for help from other students	46.4%	53.6%
Does nothing and waits for it to stop	79.9%	20.1%

10th Grade

Table: The phenomenon and the student's response to violence – The student's response

	No	Yes
Talks to someone from the school's staff (teacher, principal, counselor) about it	61.4%	38.6%
Asks for help from a member of the family (parent, brothers, cousins)	59.2%	40.8%
Asks for help from other students	46.4%	53.6%
Does nothing and waits for it to stop	81.0%	19.0%

11th Grade

Table: The phenomenon and the student's response to violence – The student's response

	No	Yes
Talks to someone from the school's staff (teacher, principal, counselor) about it	76.5%	23.5%
Asks for help from a member of the family (parent, brothers, cousins)	76.5%	23.5%
Asks for help from other students	58.8%	41.2%
Does nothing and waits for it to stop	94.1%	5.9%

12th Grade

Results – School Atmosphere Questionnaire – Part D

	Average	Standard Deviation	Number of Students
Asocial behaviours	2.63	.94	N=144
Teachers' ability to handle occurrences of violence	3.44	1.19	N=144

10th Grade

Results – School Atmosphere Questionnaire – Part D

	Average	Standard Deviation	Number of Students
Asocial behaviours	3.22	.90	N=128
Teachers' ability to handle occurrences of violence	3.24	1.04	N=128

11th Grade

Results – School Atmosphere Questionnaire – Part D

	Average	Standard Deviation	Number of Students
Asocial behaviours	2.57	.90	N=18
Teachers' ability to handle occurrences of violence	3.29	1.48	N=18

12th Grade

Overall Sense of Security

In general, I feel safe and secure at school.	Never	N=15	10.4%
	Not always	N=11	7.6%
	Some of the time	N=20	13.9%
	Most of the time	N=42	29.2%
	Almost always	N=56	38.9%

10th Grade

Overall Sense of Security

In general, I feel safe and secure at school.	Never	N=12	9.4%
	Not always	N=6	4.7%
	Some of the time	N=13	10.2%
	Most of the time	N=42	32.8%
	Almost always	N=55	43.0%

11th Grade

Overall Sense of Security

In general, I feel safe and secure at school.	Never	N=4	22.2%
	Not always	N=2	11.1%
	Some of the time	N=3	16.7%
	Most of the time	N=9	50.0%
	Almost always	N=4	22.2%

12th Grade

Appendix 10

Internal Evaluation Feedback The School's Evaluation Team – Students' Satisfaction

January 2008

My instructor's name _____

Feedback for an examination of students' opinions about and satisfaction with the "TBWY" program

Dear Student,

The first half of the "TBWY" reform program has been implemented and we are very interested in your opinion about some issues related to the activation of the program. We will appreciate it if you will take your time while filling out this questionnaire.

The School's Evaluation Team

Write an X in the box under the answer that matches the extent to which you agree with the following statements:

Statements – My instructor	1. Don't agree	2. Don't completely agree	3. Generally agree	4. Totally agree
1. I think my instructor knows me.				
2. I feel that I can talk to my instructor about personal matters.				
3. If I have a problem with my school work, I will talk to my instructor about it.				
4. If I have a problem with the other students, I will talk to my instructor about it.				

5. My instructor is available to me during recesses.				
6. My instructor is available to me after school on the telephone.				
7. My instructor knows my areas of interest.				
8. My instructor is interested in me as a person.				
9. My instructor has patience for me.				
10. My instructor helps me solve problems.				
11. I prefer the current instructor's framework more than the old educator's framework.				
12. My instructor helps me succeed in school.				
13. I look forward to my private sessions with my instructor.				
14. My instructor empowers me so that I can cope with difficulties in school.				
15. When I am having trouble at school, I talk to my instructor about it.				
16. I feel that my instructor cares about me.				
17. I would recommend the instructor's program rather than the educator's program to my friends.				

Statements: Perceived Social Climate Index	1. Don't agree	2. Don't completely agree	3. Generally agree	4. Totally agree
1. In my group, the students are considerate of each other.				
2. The students in my group frequently quarrel with each other.				
3. My best friends are in my group.				

4. The students in my group are friendly toward each another.				
5. I don't like most of the students in my group.				
6. Some my classmates have no friends in the group.				
7. In my group, students help each other even without the teacher's intervention.				
8. Any student in my group can speak his mind without being laughed at.				
9. It is important for the students that the group learns well and that it progresses with the material we are learning.				
10. I can rely on the students in my group for help when I need it.				
11. Some of the students in my group always tell the others what to do.				
12. In my group, the students say what they are thinking and feeling.				
13. When the students in my group decide something, everyone is ready to work and to contribute.				
14. If I could, I would transfer to another class.				
15. The students in my group know a lot about each other.				
16. The students in my class don't care if I come to school or not.				
17. In my group, the students understand and forgive someone who misbehaves.				
18. In my group, the students behave in a certain way in order to please others.				
19. I wouldn't like it if most of the members of my group would get good grades.				

20. Most of the students in my group participate in social activities during the weekly leadershiphour.				
21. Most of the students in my group help keep clean the classroom and organize it for the next lesson.				
22. Most of the students in my group let a few students make their decisions for them.				
23. Some students in my group ridicule other students.				
24. In my group, everybody knows who the students are who hardly ever participate in the lessons.				
25. I enjoy the weekly leadershiphour.				
26. The weekly leadershiphour is important for the group's cohesion.				
27. I feel comfortable in my group.				
28. I would like to go back to learning in the framework of a large class, like before.				

In summary, I would like to add that...

Thank you for your cooperation

Appendix 11

Internal Evaluation Feedback The School's Evaluation Team – Instructors' Satisfaction

Dear Instructor,

Establishing positive relations with the students is done, first and foremost, through creating a supporting and safe environment for the students. The key element that creates good communication with the students and a positive learning environment is providing reinforcements and positive results. Personal acquaintance with the students transmits to them that their success and progress is important to their teacher. When students feel that their teacher cares about them, they respond better and they check the limits less because they understand that the teacher is there for them.

The "TBWY" reform program has set a number of goals for itself, including the desire to improve the school climate and the students' scholastic achievements.

The first half is behind us and it is time to examine ourselves. We will do this in two stages:

1. A preliminary feedback from the students
2. Feedback from the instructors (regarding the training course and the program itself).

Please summarize your students' responses on the back of the questionnaire (some of the students responded to the statement on every level).

Below are 5 areas that are examined in this questionnaire and that have been defined according to the "TBWY" program's goals.

The Program's goals:
4. The new program increases the amount of time that the instructor has to listen to each student in the group.
5. The new program enables the instructor to give an emotional and focused response to the student.
6. The new program intensifies the instructor's impartation to the student.
7. The new program enables continuous communication between the instructor and the students' parents.
8. The new program enables the instructor to support and monitor every student in order to increase the student's scholastic achievements.
Overall satisfaction from the program.

This assessment will enable us and you to know how the students feel at this point in time regarding the program, and it will enable us to re-shape our strong and weak points.

Thank you for your cooperation,

The School's Evaluation Team.

Appendix 12

The Department of Education's Advanced Training in Differential Instruction

The Department of Education

Supervision of Hebrew Instruction

SHALHEVET Project* with an emphasis on differential instruction

High School XXX

***SHALHEVET – initials for Combining Language, Comprehension and Expression in Various Fields of Knowledge: The Program's Activation**

Leadership for all verbose-rich subjects, in three frameworks:

For a general assembly, for subject coordinators and for selected professional teams

1. Leadership for subject coordinators – The program coordinator, X, will meet the subject coordinators once every three weeks before the session with the teams of teachers.
2. General assembly – X, will conduct a training session once every three weeks for all teachers of verbose-rich subjects.
Each session will be divided into three parts:
 - A. Acquiring major skills, including a 30-45 min. demonstration.
 - B. Workshops – exercises according to fields of knowledge, conducted by the subject coordinators.
 - C. A general assembly – a presentation of results and a discussion
 - D. Leadership sessions – an additional meeting during the month between the instructors and teachers of the various subjects in order to plan activities.
 - E. The next session during the month opens with a report about experiments in the classroom and afterwards, the acquisition of an additional skill.

Proposal for the Training Program

1. A dialogue with a text, including profile readings.
2. Deciphering questions, including an assignment profile with aspects of comprehension.
3. Formulating questions according to various aspects of comprehension and levels of difficulty.
4. Facilitating writing processes: recognizing indicators, preliminary comments and promoting and writing answers.
5. Skills in argumentation
6. Skills in comparing
7. Preparing for exams
8. Final session – presentation of products and insights.

Each of the above subjects will be addressed (at different levels of implementation) over the course of three weeks.

Appendix 13

Quality Feedback – Instructors 10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

I managed to create a warm and close connection with the students in my group. I was absent for three months due to maternity leave, so the connection was principally by phone. I tried to continue to monitor them, but it was difficult because I wasn't in "complete control".

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

I'm pretty satisfied with the my group's functioning. Most of them took the matriculation exams and did good work. But I still don't feel that commitment connections were created between the members of the group, and I hope I'll succeed in creating a mutual bonding and cohesion in the group next year.

3. What will I take or what did I learn from this experience personally and professionally?

I learned that you have to give a lot of support, especially in my type of group. You have to constantly give them attention and show them that they are important and that we won't give up on them – and only then will they (perhaps) believe in themselves.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

I liked the staff, I felt the warmth and the support. I felt that the team was available for me at all times and for any question and problem, and this helped me a lot. It was good that the sessions were conducted **before** I met with my instruction group.

In closing, I am proud of myself that I am an instructor, even though I couldn't be with the group part of the time because of my maternity leave.

Wishing everyone a wonderful summer vacation....

10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

I liked sitting together with the students in my group. I liked the openness and my accessibility to almost everyone, which is something that has never happened to me before. As a result, I also felt myself opening up. I liked the conversations and the cooperation.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

Generally speaking, my group functioned well. There was almost one hundred percent attendance. Of course there were some difficult times that called for extra work, but all in all, I think most of the students opened up and spoke their mind.

3. What will I take or what did I learn from this experience personally and professionally?

As I mentioned, my connection with them is something that I take from this experience, and it's not always easy for me to connect and to open up.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

I enjoyed the instructors' lessons (surprisingly) and almost none of the lessons were exhausting or boring. I always enjoyed learning something. Thank you Iris and Shosh.

In closing, I am proud of myself that cooperation and accessibility.

Wishing everyone a wonderful summer vacation....

10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

It was hard for me to cope with the label that the school put on my students as being problematical and so forth . I managed to overcome these obstacles and to see in each student the person he is, to get rid of all the noise and to try to see their souls, which were pure as snow.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

All in all, I am satisfied with my group. They bonded as a group and today, they know each other better than at the beginning of the school year. I personally managed to reach most of them, and 80% of them are functioning well as students.

3. What will I take or what did I learn from this experience personally and professionally?

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

The instructors' training with Orit was excellent and it contributed a lot to me both on the personal and on the professional level. It also contributed to the team's cohesion. The instructors' sessions were very productive and interesting.

In closing, I am proud of myself thatI am like I am.

Wishing everyone a wonderful summer vacation....

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

I succeeded more with the group and less with individual students. I don't have time for monitoring and sometimes it's hard for me to separate my functions.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group...

This is a very versatile group, it's not cohesive and there is no common ground. Some of students limited the group as far as instruction hours are concerned, and some of them still like the private conversations.

3. What will I take or what did I learn from this experience personally and professionally?

Not to put pressure on the students during the private conversations or in the group discussions. Every student follows his own path.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

It's nice to be able to say "I can't do this" or "it's hard for me".

In closing, I am proud of myself that I am able to sit with an individual student and have a meaningful conversation.

Wishing everyone a wonderful summer vacation....

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

I succeeded in getting to know the group, in making it cohesive (relatively) and in interpersonal acquaintanceships between the students. I also succeeded to transfer and to discuss some important subjects with them. I had some difficulty with the nature of group. Most of the students in the group are introverts and live in their own world.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

Main difficulties that emerged in the group:

1. Lack of interest - almost every subject is not interesting to them.

2. Frustration - most of the students expressed their satisfaction with their functioning at school (personal, social, scholastic functioning and achievements), but most of them said their achievements are not good enough for their parents.

3. What will I take or what did I learn from this experience personally and professionally?

I liked Orit's workshop and Iris's creative activities very much.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

It was great. I wouldn't change a thing.

In closing, I am proud of myself that

Wishing everyone a wonderful summer vacation....

10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

I like my group very much. I think I was able to create a good connection with them, which is important for me, but there are still some students who don't open up enough. I intend to work on that next year.

3. What will I take or what did I learn from this experience personally and professionally?

As an instructor, I received trust! I think I have changed a little and I see things differently.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

The training and our weekly sessions helped me a lot. I couldn't have managed without this!

In closing, I am proud of myself thatI'm become an instructor!

Wishing everyone a wonderful summer vacation....

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

All in all, I functioned well, in spite of the physical and mental feelings I had this year. So I am quite satisfied. But my general feeling is I that didn't give my all to the group like I have in the past.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

This wasn't an easy group. A lot of the boys are childish and some of them have behaviour problems. Two of the girls are problematical (they have serious learning disabilities and behaviour problems). The biggest achievement in the group was the atmosphere. Toward the end of the year, intimacy had been created as well as an infrastructure for establishing an excellent group.

3. What will I take or what did I learn from this experience personally and professionally?

I have to emphasize personal conversations more.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

Everything helped me! I always take bits and pieces from here and there and I consolidate them according to my nature and the group's nature.

In closing, I am proud of myself that I realized all my goals this year.

Wishing everyone a wonderful summer vacation....

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

Success: consistency – which is part of the role description – consistency in maintaining all of the education hours, continuous sessions with the students, sitting in a circle during the leadershiphour, and attending to discipline problems. Difficulty: creating a sense of belonging to the group in the classroom. Some of the students still prefer a regular classroom.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

There is a process of opening-up in the group, of being able to talk and share. But it's a long process.

3. What will I take or what did I learn from this experience personally and professionally?

The ability to be an active listener – as a tool for personal and human advancement.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

The extent of training was just right ... it could also be continued with peer instruction. Suggestion for next year – give the students training so they take part in the instruction during the leadershiphours.

In closing, I am proud of myself that I am part of the "IBWY" program.

Wishing everyone a wonderful summer vacation....

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

There were successes and there were failures. We saved some students and we helped some of them progress, but there were some who we couldn't help at all. There are students in the group who still aren't part of the group or with whom I didn't succeed to make a connection. I enjoyed seeing a student change.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

There is still a lot of work to do with the group and I'm only half way there. Some of the students in the group are leaving the school and the group has to be reconstructed.

3. What will I take or what did I learn from this experience personally and professionally?

I learned a lot, and principally, I strengthened my strong points.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

Weak students with emotional problems need more attention from the professional team. In certain cases, the instructor doesn't have any other option except to give a warning.

*In closing, I am proud of myself that *Lino is smiling.**

Wishing everyone a wonderful summer vacation....

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

It was fun to have a small group for a change and to devote myself personally to the students. A good connection was created with the parents. I had a problem with teachers who didn't give reports on a regular basis.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

The group became very cohesive (although new and surprising connections were not formed). They don't want to be separated next year. Everyone was very supportive of the learning goal. I wasn't able to "reach" Yasmine Tau on a personal level, although I did make a good connection with her mother Hadassah.

3. What will I take or what did I learn from this experience personally and professionally?

That the group still expects the instructor to maintain a certain "distance".

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

The team sessions are very good, even when we don't get to the point. At the beginning of the year, there was no leadership from the special education team. I liked it that everyone was accessible to each other.

*In closing, I am proud of myself that *I've survived another year!**

Wishing everyone a wonderful summer vacation....

10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

I think I was a good instructor for my group. I think I succeeded to transmit to the students in the group that they are just as worthy as anyone else at school. In addition, I feel that the behaviour of some of the students in the group has calmed down.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group...

My group became cohesive during the year. The difficulties that emerged were mostly the way the other students in their grade treated the group and the comments they made to them (for example during the annual school trip).

3. What will I take or what did I learn from this experience personally and professionally?

I learned to recognize some traits in myself that I wasn't aware of before.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

Gideon helped me a lot! The formal discussions with Gideon and conversations with him in the hallways at school made me feel I can talk to him about anything. Iris and Shosh also helped me with professional guidance.

In closing, I am proud of myself that I managed to create a good connection with the students' parents.

Wishing everyone a wonderful summer vacation....

10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

1. I had a hard time integrating two of the students and in getting one student to join (three students altogether).

2. I didn't feel it was right that the personal interviews were done at the expense of other lessons.

3. All in all, I enjoyed the group and the extra-curricular activities were quite successful.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

Yes, I am satisfied with my group's functioning, except for the three students I couldn't convince to join the group.

3. What will I take or what did I learn from this experience personally and professionally?

I saw myself as an instructor and I think my expectations were too high, so I have to coordinate my expectations and I have to be less serious!!

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

It was excellent. The pleasant and open atmosphere in the sessions helped me in the joint cooperation with the other coordinators and the instruction of the "special education team".

In closing, I am proud of myself that I was a part of such an excellent group

Wishing everyone a wonderful summer vacation....

10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

This year I had a small group of 12 children who were from various study courses and who had various areas of interest and I was able to turn it into a cohesive group that supports each other when needed - and sometimes excessively. The students functioned well in spite of their personal difficulties. I had a problem when the group was sometimes too demanding. I liked the personal interaction.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group....

I am satisfied with the group's functioning. They cooperated with me and they did both the scholastic and the social assignments. The individual in the group became a disadvantage for the group. There were some problems with a few students, but this didn't affect the group. I managed to impart confidence to the group - especially on the individual level - and to show them that they can succeed if they want to.

3. What will I take or what did I learn from this experience personally and professionally?

I acquired many tools for group instruction, cohesion and empowerment, which I will use in the future.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

The instructors' sessions this year helped me prepare my leadership lessons and the training that was conducted during the year contributed a lot to my success in instruction. Gideon, Iris and Shosh helped with every question and request and they supported me during the entire year. Gideon always listened and helped solved problems and Iris gave leadership and was very efficient in individual attention to the students.

In closing, I am proud of myself that I managed to reach each student on a personal level.

Wishing everyone a wonderful summer vacation....

10th grade, 2007/08 school year

It's the end of the year

Let's summarize, give feedback, and think together about this past year.....

Instructor's name: _____

1. About myself personally... as an instructor.

How did I function this year as an instructor? Where did I succeed more and where did I succeed less? What did I like and what didn't I like? What was difficult for me?

As an instructor, I feel I succeeded in creating good connections (and even really good ones) with most of my students in the instruction group – which contributed (I hope) to a better feeling (mine and theirs) and to better and more organized scholastic functioning. I liked working with the group during the lessons. It was really hard at first. I had never taught most of the students from an instruction group and I was used to seeing them in the context of a frontal lesson. It also wasn't easy to really connect the members of the group who hardly study any subjects together.

2. About my group...

Am I satisfied with my group's functioning, the goals I managed to achieve with the group, my achievements with the group? What difficulties emerged in the group...

In general, I'm quite satisfied with my group's scholastic functioning and particularly the "bottom line" of their scholastic functioning. Most of them will take the matriculation exams this year. From the social point of view, I think there is more work to be done with the group in order to create connections between the students.

3. What will I take or what did I learn from this experience personally and professionally?

I got a lot out of Orit's workshop (mostly ideas for activities). Meeting a new team was very interesting and educational for me in many ways.

4. Support, guidance... [instructors' sessions, grade level coordinator, special education staff] what helped me, what helped me less, what did I like, what would I change?

My friends in the instructors' team helped me a lot – ideas, experiences, cooperation and etc. The class coordinator was and is always ready to listen, even to the little things that happen during the day, to give support and suggestions about future management and

etc. The special education team helped me a lot – Iris and Shosh. When we thought there was a need for intervention, they joined us and we worked together.

In closing, I am proud of myself that I created good personal connections with the students in my instruction group and that the year ended with a smile! 😊

Wishing everyone a wonderful summer vacation....

Appendix 14

Letters of appreciation

March 16th 2008

Herzliya Municipality

Education and Welfare Section

Education Department

Mr. Yaacov Nahum, Principal

The New High School

Subject: The District Manager's Visit

Dear Mr. Nahum,

I enjoyed getting acquainted with the "Being With You" program.

My impression of the teachers is that they are professional and committed and that their work is based on a strong belief in the program.

I have no doubt that in the plans, the school is becoming a significant and central of the student's life, and that simultaneously, the teacher is becoming more significant in the school and that he has a bigger influence on the student.

Please convey my thanks and appreciation to Ronnie, the Bible studies teacher, and to Einat, the language teacher, for presenting interesting and relevant lessons, to Nehama, the class coordinators, Aviva, the counselors and everyone on the staff.

Respectfully yours,

Dr. Ora Landa

Substitute Manager, Education Department

The Education and Welfare Section

Herzliya Municipality

November 23, 2008

Yaacov Nahum

Principal

New High School

Herzliya

Subject: The "Hugim" High School management team's visit at your school

I would like to thank you for agreeing to have the "Hugim" High School's management team visit your school.

In my conversation with your school's secretary, it was agreed that the visit will be on Tuesday, February 23, 2009 from 13:00 to 16:00.

Our management team includes about 10 people.

The subjects we are interested in learning about during the visit are:

1. The "TBWY" program's educational vision – How to convert a vision into reality?
2. Unique learning programs in the school.

We would like to meet with students and members of your school's staff.

Thanking you in advance,

Hagit Halphon

Pedagogic Coordinator

"Hugim" High School

Haifa

March 8, 2009

Department of Education

Society and Youth Administration

Tel Aviv District

Mr. Yaacov Nahum

Principal

New High School

Herzliya

Subject: Visit to your school

Dear Mr. Nahum,

I want to thank you for the warm hospitality we enjoyed during our visit to your school.

We got a glimpse of the unique "Being With You" program you are leading, which has an educational concept that converts teachers into facilitators and significant people for the students.

The social education has also been upgraded to a program that combines the core of the social education with the "Being With You" program where the educators instruct small and mixed groups of students.

We met with people from the extensive social education team and we were impressed with their great commitment to the subject of values, while having indecisions about practical issues.

Please express my appreciation to the education staff and first and foremost, to your Social Coordinator Iris Sella, who is leading the education team in working toward achievements in the moral domains.

Sincerely,

Dr. Moshe Robowitz

Manager

Society and Youth Administration

Teal-Aviv District

May 18, 2008

Mr. Yaacov Nahum

Principal

New High School

Herzliya

Dear Yaacov,

I would like to thank you for your hospitality in the science center, along with the Mayor of Herzliya Mrs. Yael Gehrman and the "Everything Is Education" Society.

Your education program "Being With You" as it was presented to me, with inspiration from the "Personal Education" project, is in my opinion the essence of education to which the school aspires – personal treatment and touch, nurturing social and cultural aspects among the students, attending to the student according to his needs and creating a bridge between the child's spiritual world and his being a student in the school.

Your commitment to your students, which was expressed during my conversations with the teachers, is inspiring. I was impressed by the fact that the education staff not only teaches but also educates, which is essentially readiness to listen and to act in order to create a warm and supporting atmosphere at the school.

In the meeting with the students, I saw that you have indeed attained this goal and that your students like the school and that they respect the teachers, and the results can be seen in their scholastic work.

Please convey my thanks and appreciation to the teachers, the students and the parents and to everyone who is taking part in the welcome educational work.

Sincerely,

Yuli Tamir

Minister of Education

Municipality of Ness-Ziona

Education Department

March 3, 2009

Yaacov Nahum

Principal

The New School

Herzliya

Subject: A learning visit to your school

Dear Mr. Nahum,

Since I am familiar with the stages of the establishment of the high school and in light of the fact that I want to become familiar with the processes that were carried out in the school since then and with the new programs in the ideological education concept of giving a significant response to every student, I would like to arrange a meeting for two high school principals from our municipality, our schools' superintendent, our department's manager and the manager of the Institute for Democratic Education, Mrs. Yael Schwartzberg, for a learning tour of your school.

During the tour, we would like to learn about the way a school is established through creating cooperation with institutes of higher education in order to position a school in the city, the processes that led to making decisions about assembling learning groups accompanied by instructors, the pedagogical theories underlying the work and the processes that are occurring in the school today.

I would appreciate it if you could set a date for a meeting.

You can contact me at the following phone numbers: 057-7921900, 054-4722825 or
08-9306038.

Yours truly,

Iliya Merav

Manager

The Schools Division

Municipality of Ness-Ziona

State of Israel
Department of Education
Tel Aviv District
Post-Primary Education Supervision

March 19, 2008

Mr Yaakov Nahum

Principal

New High School

Herzliah

Subject: Letter of appreciation

Dear Mr. Nahum,

On Wednesday, March 12th, there was a meeting with the Tel Aviv District Manager, Mrs. Orly Froman, in which your unique school program "TBWY" was revealed. I would like to mention the development and solidification of the program. Each stage in the process is accompanied by evaluation, discussions and arriving at conclusions which praise the program. The things that the management team and the instructors said were interesting and they showed many strong points, along with indecisions with which you are currently preoccupied. The meeting with the students was fascinating, interesting and exciting and most importantly, it was evident that the students have a significant and influential adult in the school. Thanks to your professionalism and wisdom, you knew how to get everyone involved in the work and to organize an important education program that facilitates a meaningful connection between the teacher and the student. Please convey my deep appreciation and thanks first and foremost to the vice-principal, Nehama, and to the advisors, Iris and Ronnie, the grade coordinators, Gideon, Irit and Amira, the evaluation team coordinator, Aviva, and the instructors who are doing this complicated work with endless devotion and caring. Helen Keller (1880-1968) said: "When we learn that we are members of the same family, that we are all organs of the same body, the spirit of love for our fellow man, with no racial, colour or creed discrimination, will fill the world and will verify in our lives and in our actions the actuality of brotherhood. Until the great mass of the people shall be filled with the sense of responsibility for each other's welfare, social justice can never be attained".

Well done!

Continue doing your welcome work

Ariella Israeli

General Supervisor

Appendix 15

Publications in the Media

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Appendix 16

Polarity in scholastic achievements before and after the reform program

The inter-quarterly range $Q = Q3-Q1$

The inter-quarterly range is the difference between the third (upper) quarter and the first (lower) quarter. In the inter-quarterly range are half of the observations in the middle of the distribution. The breadth of the inter-quarterly range reflects the dissemination in the middle of the distribution.

$Q1$ = the value of the researched variable. One quarter of the observations are smaller than or equal to this value and three quarters of the observations are larger than or equal to this value.

$Q2$ = the value of the researched variable. One half of the observations are smaller than or equal to this value and one half of the observations are larger than or equal to this value.

$Q3$ = the value of the researched variable. Three quarters of the observations are smaller than or equal to this value and one quarter of the observations are larger than or equal to this value.

Calculation of the quarters was according to a principle based on calculating the median:

1. Create accumulated frequencies according to finding the quarters.
2. Use the following equations:

$Q1$ = the first quarter

$Q2$ = the second quarter=the median

$Q3$ = the third quarter

$L1$ = the actual lower limit of the first/second/third quarter group

l = length of the first/second/third quarter group

f = frequency of the first/second/third quarter group

n = total number of instances

cf = accumulated frequency until the first/second/third quarter group

$$Q_1 = L_1 + \frac{l}{f} \left(\frac{n}{4} - cf \right)$$

$$Q_2 = Med = L_1 + \frac{l}{f} \left(\frac{n}{2} - cf \right)$$

$$Q_3 = L_1 + \frac{l}{f} \left(\frac{3n}{4} - cf \right)$$

Appendix 17

Percentages of students entitled/not entitled to a matriculation certificate in Israel, 2007-2008

