

# **Coaching Educational Teams Towards Improving Levels of School Performance**

## **A Case Study Conducted in Israel**

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## Abstract

The research investigated the effect of the Katom Coaching Model (KCM) on improving the quality of school performance.

The KCM is tailored to fit the school and its needs according to the head teacher and the management team's priorities. The frame of work of the coaching intervention includes six phases, during which learning outcomes are systematically monitored (pedagogical, socio-cultural and administrative) while three overall school processes are amplified –

1. The creation /updating of the school vision and its integration into school praxis;
2. The management of organizational learning; acknowledging school successes, celebrating and learning from them; and
3. The management of personal- professional learning in order to create a school coaching culture.

The research was conducted as a case study in a high school in Israel over a period of one school year. Both quantitative and qualitative methods were used (a mixed methodology).

The quantitative data collected included pre and post intervention data.

Quantitative data was collected with the Diagnostic Inventory of School Culture (DISC) questionnaires. Quantitative data was also collected from school records; grades (internal school grades and external grades from the ministry of education national exams), records of teacher evaluation of student studiousness and student behavior and records of teacher attendance.

The qualitative data collected included information from 16 in depth interviews with staff at the end of the intervention, data from documents created by coachees monitoring and reflecting on their own progress, and a research diary.

A Delphi group process was conducted so that expert coaches could engage with the model and discuss findings and conclusions which emerged from the study.

The quantitative findings showed a significant improvement in the quality of school learning outcomes following the coaching intervention. The improvement was evident in both staff conceptions and in school records. The three overall school processes that were tracked produced evidence of progress, especially concerning the integration of the school vision into school praxis. The qualitative findings helped conceptualize ideas which have come to be used while coaching in schools:

1. The facilitation of the transfer of skills and knowledge both as an indication of coaching success and for nurturing the emergence of a coaching culture in school.
2. The use of the parallel cycle concept for the supervision process of coaches in the field.
3. Using the 'levels of change' as an evaluation tool.

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## Glossary of terms

**Classes in the Israeli high schools-** Many high schools in Israel have in addition to regular classes some of the following special classes in each age group, which are meant to address a specific group of learners-

Etgar class- A class in which students are learners who are motivationally challenged. Etgar is the Hebrew word for challenge.

Mabar class- Similar to Etgar but most students in the Mabar class had better grades and were more cooperative in the junior high school.

Mofet class- classes in which teaching is on higher standards. Some of the subjects are not part of the regular curriculum and others are taught at more advanced levels. The Mofet program targets children from the age of 5.

Naale class- a class which is part of a special program for students who come from abroad without their families, and live in a boarding school. 'Naale' classes are a mixed level academically, but all students have poor Hebrew language skills in common.

**Coach (in school)-** A professional facilitator of learning; someone who works with the coachee to bring out what is latent but is not being effectively used, in order to achieve her/ his vision. The coaching framework is collaborative. The learning facilitation is a process powered by the dyadic relationship between coach and coachee and by the personal learning the coach is willing to undertake within the dyadic relationship formed. The coach, by declaring his own vision of personal and professional growth, helps start the dialogue toward the foundation of a common, dyadic vision. Coach and coachee can then collaborate on, creating the coaching framework that can support the fine tuning of major school processes (Kreindler & Beskin, 2006, Appendix 7.)

**Coaching in school-** Coaching in the school environment is a personal and/or group learning process focused on the predefined educational vision formulated by the client. Coaching is transformational; it is personal and professional growth oriented; it focuses on the present and facilitates planned and deliberate movement towards desired milestones. It is action oriented, assists building clarity of purpose and goals and helps plan the way towards achieving them. The coach and coachee each has full responsibility for the forward momentum, vitality and quality of the process. Each brings to the dyadic process his/her own materials, each makes



his/her contribution to the process so that both engage fully in the spiral of learning and growth (Kreindler & Beskin, 2008).

**Coaching culture-** a humanistic approach to work in which growing the organization is embedded in a parallel commitment to growing the people in it. Doing so, a highly professional organization of closely welded and committed staff is developed. (Clutterbuck & Megginson, 2006; Staessens, 1993, cited in Hall & Hord, 2006).

**DISC questionnaire- Diagnostic Inventory of School Culture.** DISC questionnaire is the diagnostic tool which was created for and used during KCM interventions. This is a tool which enables the coach to gain a picture of the current status of the organizational culture in school in an easy and systematic way. Using the questionnaire twice, pre and post intervention, serves as a quantitative measure of the progress. DISC1 and DISC2 are two versions of the questionnaire for staff and students respectively.

**KCM-Katom school Coaching Model.** The KCM1 was the basic model tested in this study, which produced an upgraded version, the KCM2.

The KCM is aimed at achieving significant improvements in school using coaching. The improvements are in terms of defined goals (school learning outcomes, see ahead) and the improvement of overall school processes which nurture school and school members' progress and growth. KCM is based on the humanistic theory. It is designed to assist a head teacher who has identified the need and has the desire to reach out and achieve higher learning outcomes, to engage managers of learning environments in the search for excellence in education. (Kreindler & Beskin, 2007).

**Learning outcome-** The products of learning processes created by school members. Three streams of outcomes are produced; pedagogical\*, socio-cultural\*\* (norms & values), and administrative\*\*\*. (Kreindler, 1999)

\*Pedagogical Learning Outcomes are the products of the school learning community's engagement with the national and local curriculum. The most common expression of this can be found in the results of national, international and school tests and evaluation strategy.

**\*\*Socio-Cultural Learning outcomes**-includes the degree of security (lack of violence) in school, use of clean language, trust and respect, mutual aid, volunteering, honor system – no cheating, and the care of school building and property.

**\*\*\*Administrative Learning outcomes**- student attendance, teacher attendance, punctuality, efficient timetables, efficient examination programme, and aesthetics

**Matriculation exams**- A set of exams each Israeli student must complete successfully by the end of 12 years in school. The exams include 7-12 different subjects. Some are compulsory and uniform for all students (for instance History, Bible) some vary on different levels (for instance English, Mathematics). Other subjects are chosen according to the student's interest (such as additional languages, Biology, Art and many other subjects). Success in these exams is the key to higher education.

**Value of achievement**- striving to get results of excellent quality, encouraging educational systems to operate on a high quality level, enabling the creation of better results using positive competition, competing with, not against one another (Kreindler, 1999; Kreindler & Beskin, 2006; Linckona & Davidson, 2005; West- Burnham, 1997).

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## Chapter 1- Introduction

The introduction chapter presents first, in part 1.1, an overview of my Work Based Project (WBP) which investigated the coaching of educational teams engaged in an effort to improve the quality of school learning outcomes. The coaching model used was the Katom Coaching Model (KCM).

Further on, in part 1.2, I spoke of the need for change in schools in general and specifically in Israel. Then I shared my personal efforts and contribution towards change in the educational system in Israel, and presented the KCM model (part 1.3). An overview of the study and its goals are presented in parts 1.4 and 1.5.

*"The place to improve the world is first in one's own heart, head and hands and then works outwards from there".*

Robert Pirsig in Zen and the art of motorcycle maintenance

The chief aim of my praxis is to facilitate change, improving and thereby contributing to a better educational system in Israel. This is the overall goal which drives me and motivates my daily efforts both as a person and as a professional. At the same time I am constantly learning to enhance my own growth and development.

Coaching, as I see it, is a paradigm of personal and professional growth. Therefore, experiencing work and research reinforces both the educational organizations I work with, and in a parallel manner, myself and my own praxis. It helps to achieve in both aspects transformations, the 'profound change' as Senge (1999) put it.

The changes in schools, in educational networks, similar to my own growth and development, combine inner with outer shifts and transformations. The inner, personal changes involve choosing to emphasize values which better suit and support required behaviors. The outer changes, find expression in new modes of practice and system changes.

These transformations are designed to bring forth significant impacts. In schools they take the form of producing higher levels of performance. My own transformation will be apparent in the creation of an outstanding completed WBP, reflecting a whole and meaningful model of work.

All learning outcomes, those of the educational organizations I work with and my personal ones, will stand as visible benchmarks of the changes achieved, for-

*"We change the world by changing the way we make it visible"*  
(Denzin, 2000, cited in Voithofe, 2005, p.3)

## 1.1 An overview of the WBP

Evidence is now gradually accumulating and being interpreted regarding the extent to which coaching can promote learning and build capabilities for change in school (Brown et al., 2005; Creasy & Paterson, 2005).

"School leaders are increasingly recognizing the value and importance of using coaching as a key skill both in their own professional development and their staffs"(Creasy & Paterson, 2005, p.70).

This WBP is dedicated to the study of coaching educational teams towards improving levels of school performance using the Katom school Coaching Model (KCM).

In this introduction, I outlined the need for change in schools, specifically in the Israeli education system of which I am a part. I continued by presenting the KCM model which was created over the years using my experience and that of others at work. The KCM offers a strategic solution to the many problems in Israeli schools and helps foster performances of excellence. The critical literature review in Chapter 2, presents the knowledge relevant to this research. It is a careful blend of theory, practice, experience and research findings. It considers: schooling, coaching and professional excellence, all of which were key subjects which served as the basis for this research.

Chapter 3 deals with the methodological aspects of this study, discussing my choice of conducting a single case study, using mixed methods to present it. The research design is explained in this chapter and so is the wide range of research tools used in the collection of data. Validity and reliability issues are dealt with and so are ethical points of concern regarding the conduct of the study.

Chapter 4 presents the various findings collected, starting with the quantitative data from questionnaires and school records collected before and after the coaching intervention. It then presents the qualitative data from interviews and documents, most produced during the intervention and some relating to it. The last type of data

presented in this chapter is the Delphi Expert Group findings. The chapter ends with a synthesis of the findings, stressing the inter validation achieved using cross checking and triangulations.

In Chapter 5, I presented and discussed critically ideas drawn from the analysis and synthesis of the findings, and compared them to existing knowledge. I did so while verifying the research hypothesis and answering the research questions. Conclusions and recommendations stemming from the study were presented at the end of the chapter. My plans and efforts towards disseminating the research findings, conclusions and recommendations based on my findings are presented in Chapter 6. Following those, in Chapter 7, I summed up and reflected on the study. I highlighted the main findings from the research and its contribution to coaching theory and specifically to coaching in schools and I suggested areas for further research.

What has gone wrong in schools?

This is my starting point, from which my WBP progresses and presents coaching methods and a framework as the "new set of essentials" (Kee et al., 2010, p.94) enabling improved levels of school performance.

## 1.2 The need for change in schools

The mission of the modern school is to establish, design and maintain a significant learning environment in which learning processes can produce three streams of high quality learning outcomes: pedagogical, socio-cultural (norms & values) and administrative (Kreindler & Beskin, 2006; 2008).

The effective educational leadership required for such results must be held accountable relative to their ability to achieve these outcomes at an acceptable level of quality. Critical visionaries (Sallis, 1996; West-Burnham, 1997) in the field of education consider an acceptable level of quality for the production of learning outcomes to be nothing short of excellence, thus formulating both a moral and a professional critical imperative to serve as a benchmark for educators. The difficulties experienced by professional educational managers attempting to achieve these results necessitate the careful re-examination of the educational paradigms which support the

learning processes in our school system as we know it. The purpose of this re-examination needs to be the proactive redesign of these paradigms in order to achieve a better fit between paradigmatic ideology, blueprints and the quality of the learning outcomes produced (Kreindler & Beskin, 2006; 2008).

During the past decade we have seen a rise in awareness regarding both the moral and the professional imperatives that drive the educational establishment towards a dialectic of quality and excellence (Fullan, 2003; Ofek & Ofek, 2003). This process has contributed towards the redefining of the role of the head teacher and the school educational leadership, presenting new demands and requiring of them new skills and the grounding of existing skills. These demands are varied, complex and very challenging. To meet them head teachers and other educational managers need to formulate more clearly their own identity as professional designers of learning environments and to set their goals critically regarding the quality and excellence benchmarks. They must formulate a personal and professional development plan designed to satisfy these demands.

Traditionally the educational system worked on the basis of a belief that education is not a tangible commodity. Its results were to be evaluated 'in the long run' and not necessarily during the schooling period. The test would be for instance, after graduation, after students had opted to become contributing and responsible citizens. This belief prevented educators from focusing on daily learning processes and measuring educational outcomes in terms of quality and excellence.

The demand for high academic standards and the focus on student results emerged in the United States of America, in the early 80s with the 'nation at risk' call, and as a result of poor national performance reported in international tests. The theory behind the reform required claimed that every student can perform well "irrespective of background characteristics" (Wong & Nicotera, 2007, p. 5). Paradoxically, the call for change was brought about by the politics of failure. The continuing deterioration of national as well as international test achievements needed to be publicly explained. It was obvious that traditional education practices did not meet the needs of many students. These needs were specifically addressed by Freire (1970) who spoke of reaching out to all students, and advancing them to their maximum.

The need for change and renewal in the education system is a social issue which has been discussed worldwide since the late 19<sup>th</sup> century. Nevertheless, up to now, at the

beginning of the third millennium, it seems that most efforts towards change have not yet succeeded (Chen, 2005). Schooling, referred to as the 'chalk and talk' profession, stressed the fact that many educators still work using old methods, with no significant changes to didactics and pedagogy over the past century, no real attempt to suit the new era. Senge et al. (2000) found that the lack of forward progress in schools, the slow process of adoption of technologies and the resistance to new learning paradigms and strategies, was the reason for failure. The 'old manner' created a passive rather than an active learning environment, while "learning is inseparable from action"(Senge et al., 2000, p.38). Doing helps knowing and knowing should be represented by doing. The field forces retarding forward progress in schools were rooted in machine age thinking (Senge et al., 2000). This thinking created a school system separate from daily life, using an authoritarian manner of governing, orientated towards producing standardized products. Covey (2004) said, that we live in a knowledge worker age but our organizations are operated in a way that "suppresses the release of human potential" (Covey, 2004, p.15). Educators have acted for long as controllers and inspectors. Traditional learning was teacher centered rather than learner centered, and failed to address and release the student's full potential. The focus on student learning was a new paradigm of student centered learning, which fitted the humanistic attitude presented by Maslow's and Carl Rogers' work (Rock & Page, 2009). Both theorists spoke about the idea of self actualization, of working towards achieving personal fulfillment using personal unique abilities, focusing on the needs of the students, rather than those of others involved in the educational process, such as teachers and administrators. The humanistic approach had ever since many implications in terms of "school policy and school organization" (Wong & Nicotera, 2007, p.11). It has had implications on the design of curriculum, course content and interactivity of courses.

These ideas were further strengthened in the United States of America, as the call for action 'No child left behind' was announced in 2001, after which all schools and school districts were asked to demonstrate narrowing gaps in achievement (Yoon, 2008). As a result, today educators, leaders and parents, all expect that all students be provided a "high quality academic education" (Schlechty, 2005, p. xi).

Problems of the educational system as presented, are multifaceted and the change needed is multi-dimensional (Wong & Nicotera, 2007; Chen, 2005). Educators must

seek ways of solving the low achievement problem, the curriculum, pedagogy, the administrative structure, the management and the evaluating systems (Chen, 2005). They must find ways for providing the right answers to different needs and in varied learning styles, both for the students and for staff development (Senge et al., 2000). To meet with the needs of the 21<sup>st</sup> century, school management and leadership must shift from managing to leading; from making sure that people are filling their jobs and doing things right, towards seeing that people are doing the right things (Schlehty, 2002, cited in Wong & Nicotera, 2007).

The fundamental solutions needed require time for learning and assimilation, solutions which are longer and slower to produce results. The work in schools should focus on enhancing processes which create an environment which will nurture all the students and improve their results. The solutions should be such as originate from within schools, using and acknowledging its personnel's unique strengths and abilities and the specific characteristics of the school. Doing so maintains responsibility and accountability for the work and the results as defined by the school leadership and personnel and allows further improvement.

In Israel, the talk about quality and excellence began towards the end of the 80's. The implementation of new management approaches in industry, in the Army, and in the public sector impacted the educational system which in turn had a significant influence on the Israeli society (Ofek & Ofek, 2003). The Ministry of Education's policy has embraced affirmative micro as well as macro interventions aimed at achieving quality and excellence in the school system to satisfy the demand for higher quality learning outcomes and the pursuit of excellence (Kreindler & Beskin, 2006, 2008). Sykes, Rosenfeld & Weiss (2006) as well as Weiss et al. (2007), specified the three main challenges the Israeli education system is faced with; low student achievements, a school culture that did not support the creation of quality learning outcomes and the reduction of national and local resources for schooling. According to Svirsky & Konor-Atias (2007), only 45.9% of the Israeli 17 year age group in 2006 passed the matriculation exams. The results in 2008 showed that only 44.4 % of the whole Israeli 17 years age group had passed the exams (Dagan-Buzaglo & Svirsky, 2009). Of these only 86.8% had received results which were according to university acceptance standards. These results mean that less than 40% of school graduates may

be accepted into continuing educational frameworks. Although these numbers are far from satisfying, they represent a 65% increase in the percentage of students who passed the matriculation exams since 1990 (Bar-Yishai & Pior, 2008). Nevertheless, when comparing the Israeli student to students from the OECD (Organization for Economic Co-operation and Development) countries, using international tests, the regression of the Israeli education system is fully evident. Israel was known to be one of the leading countries in student achievements during the 60s. It is now ranked as one of the lowest achieving countries in mathematics, language and science (Dovrat, 2005; Ben-David, 2003). Another problem is demonstrated in the significant and visible achievement gap between populations which the Israeli educational system has created over the years (Dovrat, 2005; Bar-Yishai & Pior, 2008; Ben-David, 2003). In well established Jewish settlements 66.9% passed the matriculation exams of 2008. In contrast, in Jewish development towns only 46.9% passed the same exams. Amongst the Arab -Israeli population the gap was larger, with only 32.4% passing the exams and eligible to a full matriculation diploma. The ultra orthodox Jewish population achieve extremely low results, many do not attend these exams and study only religious studies. (Svirsky & Konor-Atias, 2007; Dagan-Buzaglo & Svirsky, 2009). So far, the Ministry of Education's response to the gap has not succeeded in closing it. Although a great deal of money is invested in the Israeli education, relatively much more than in other countries and although there is an egalitarian commitment to provide good education to all Israeli students, the gaps seem to increase, calling for fundamental changes in programs and organizational structures in schools (Bar-Yishai & Pior, 2008).

As seen, learned Israeli educators; some from the ivy towers of academia and others from the field or from research laboratories have devoted time, energy and creativity in search of an elusive breakthrough solution. It seems that the problem is not lack of knowledge or lack of experienced people. Neither is it the shortage of resources; crowded classrooms and the challenge of integrating students challenged with learning disabilities, although these problems are often highlighted as obstacles preventing the finding of effective solutions. It is not a solution that should be sought, but rather a natural and simple way of 'doing things in schools' that should be found. Conducting everyday life in school should be derived from the definition of what 'being in school' means. 'Why are we here and what do we want to achieve?' Changes



should rely mainly on the dedicated and knowledgeable staff within the school. Most particularly, the change should not be of a 'trendy style' to be changed frequently whenever a new head teacher or head of a local educational system or minister of education changes, as is often the case today (Beskin, 2010a).

### 1.3 My contribution to the change efforts in Israel and the Katom school coaching model (KCM)

After 15 years of teaching, I have been practicing coaching in the field of education for the last 10 years. I coach executives in the field of education, head-teachers, deputies and heads of departments, school managing teams as well as teachers. My personal contribution as part of the effort towards closing the gap that has developed between educational policy in Israel and its results is in the field of coaching in schools; practice and research. An early research I conducted as a coach was focused on learning more about "The Effective Coaching of School Principals" (Beskin, 2005). I had then started coaching in schools, working with individual principals or their deputies. The research was conducted in the Israeli education system, using qualitative methods. I used documents produced during and as a result of my coaching with 6 principals/deputies. Eight (8) other coaches shared their experience with me, each letting me analyze their documented process with a school principal.

My basic assumptions about coaching in school, coaching effects and ways to evaluate coaching, were dramatically influenced by the research results of this early study.

I found that coaching outcomes from my work with a principal or deputy were mostly personal. There was little evidence of organizational benefits. Principals summarized their experience as follows –

*"I felt I made a breakthrough!"*

*"Coaching was a privilege. The biggest present I received since I became a principal" (Beskin, 2005, p.47)*

Looking for learning outcomes at school level, I realized there was some evidence which could be defined as an improved 'administrative outcome', such as

improvement of team work or reports of higher efficiency in specific tasks performed by the principals/deputies. There was no evidence of an improvement in the quality of pedagogical or socio-cultural outcomes. Principals did not focus on achievements for their school. The work done was mostly personal and not in an organizational context, although it dealt with issues concerning school work.

Conclusions from the study informed my practice and influenced this research.

Gradually the focus of my coaching work with school staff changed to encompass the entire learning community, a more holistic approach. The literature review provided is the basis of the newly formed organizational framework for my work, the Katom school Coaching Model (KCM) - Coaching towards excellence in school performances (Kreindler & Beskin, 2006; 2008).

### **The Katom school Coaching Model- KCM**

The KCM is aimed at achieving significant improvements in school. It is conducted using coaching.

"Coaching is about self-actualization, achieving high performance, going beyond the limits. It is about setting goals and developing strategies to achieve them". (Hoult, 2000, p.2).

Any leadership program designed to facilitate effective educational leadership and the achieving of outstanding quality learning outcomes,

"Should be built around a theory of learning made explicit and understood by the facilitators and the participants, in order to bring together theory and practice" (Weindling, 2003, p.4).

KCM is based on the humanistic theory, seeing people "through the lens of their potential" (Covey, 2004, p.72). Whitmore (2004) said that people should therefore be treated as whole, with a strong belief that each person's potential is entirely within, just as an acorn holds its full potential to become a perfect oak tree. A person, like an acorn, needs only "nourishment, encouragement and the light to reach toward" (Whitmore, 2004, p.9) his/her whole fulfillment. Using the Humanistic attitude according to Sparks (2005), advances not only individuals, but also improves relations influencing the whole organization's culture. The KCM stimulates critical thinking and promotes a constructivist outlook on praxis, based on the idea that human growth is achieved through the transformation of systems of meaning, the construction of

new understandings through the re- interpretation of reality (Mezirow, 2000; Hall & Hord, 2006).

KCM is designed to assist a head teacher who has identified the need and has the desire to reach out and achieve higher learning outcomes, to engage managers of learning environments in the search for excellence in education (Kreindler & Beskin, 2007).

Total Quality Management (TQM) in education taught that focusing on improving processes and evaluating them enhances performance and makes improvements possible (West-Burnham, 1997; Sallis, 1996; Pfeffer & Sutton, 2000).

The KCM proposes a strategic approach to coaching, simultaneously promoting three school processes.

The process of creating/updating the school vision and the continuous integration of it into school praxis.

The second process promotes the management of organizational learning; the acknowledgment of school successes, celebrating and learning from them.

The third process is the management of personal and professional learning; encouraging ongoing learning of every member in the community; manager, teacher and student, forming a coaching culture in school.

These three processes combined, finely tuned and synchronized, reinforce and complement each other, producing a synergic spiral effect of improvement of the quality of school learning outcomes; pedagogical, socio-cultural (norms, values) and administrative. The learning outcomes represent benchmarks of excellence for the entire learning community, all driven by the need to self actualize and by the value of achievement.

#### 1.4 An overview of the study

The research was conducted to study the effect and learn more about the possibilities of coaching educational teams towards improving levels of school performance, using the KCM1, Katom coaching model's first version.

The research was a case study. Case studies are known to be useful for both testing a

theory and for describing processes developing in the field (Yin, 1994; Anderson et al., 2005). Case studies were reported to be excellent frameworks for the research of coaching interventions as well (Pasmore & Gibbs, 2007).

The case study took place at S-School, a school serving both boarding and non boarding students. The calm pastoral green surroundings of the school stood in contrast to the difficulties and frustrations the staff faced, trying to fulfill their school programs. The special human structure loomed as a great challenge for the principal and teachers, for each student in S-School and for me as their coach.

In this research I coached the school managing team, as a group and individually, over a period of 20 months, between August 2007 and March 2008.

The coaching was focused towards improving school performance. As their coach, I helped follow, monitor and take close notice of the development of school processes and learning outcomes. In a parallel manner, I monitored my own expertise as a coach.

The study made use of a mixed method approach, which has an essential role in studies of school improvement. The Combination of elements from the objectivist and interpretive paradigms is very well suited for explaining change processes (Yin, 2006, Hall & Hord, 2006). Qualitative and quantitative data were collected before the coaching intervention, throughout the intervention and after the intervention. A wide range of sources and research tools were used as questionnaires, documents, interviews and a research diary, with participants from S-School (managers, staff and students) and from outside the school (myself and a Delphi Expert Group) to help illuminate the case from many angles.

In this study, evidence was found to verify improved levels of school performance by the end of the KCM1 intervention: Learning outcomes of higher quality were measured and described. In addition, significant growth and improved quality of overall school core processes were evident.

These findings enabled me to reach conclusions and offer recommendations about coaching educational teams towards improving levels of school performance with great confidence.

When setting out towards conducting this research I defined 3 main goals which are hereby presented.

## 1.5 Aims for this research

The research was planned to fulfill aims on three levels, starting broadly and narrowing down to a personal goal.

### *To contribute to the establishment and academic grounding of the coaching profession, specifically in the education field*

Coaching is an evolving profession; it still has a relatively small amount of documented empirical research, particularly concerning coaching in the educational field. Nevertheless, there are a growing number of universities around the world, that have begun to offer coaching courses and academic degrees for coaching, which is a sign, that "the field is gaining academic acceptance" (Naughton, 2002, p.2). For coaching to be taken seriously, its methods will need to be "validated by empirical research" Naughton (2004, p.5) added, which will increase the understanding of the coaching process and hence coaching outcomes (Linley, 2006).

Furthermore, the research was aimed:

### *To increase understanding and build new knowledge of ways in which coaching in schools, and specifically, the KCM coaching model, may help and improve school performances.*

The research studied coaching effectiveness within the education field and was held in the Israeli school system.

Education has been struggling for many years,

"The people responsible – primarily superintendents and principals – are overwhelmed, and under- supported in terms of their professional and personal development, which affects the quality of their work...coaching can provide help". (Rentz, cited in Pardini, 2003, p.2)

The KCM coaching model which was used, aimed at linking the effectiveness of coaching to the quality of school performance and to school achievements, the learning outcomes (Kreindler & Beskin, 2007; 2008).

Ultimately, the research aims also focused on my need for personal and professional development and collected evidence on how I could best fulfill this aim:

*To gain further experience and better professional skills in the praxis of coaching*

Ever since I completed research on the effective use of coaching head-teachers for my Master of Education Dissertation (Beskin, 2005), I have continued using coaching at work. My knowledge and experience grew, and with it, the belief that coaching possibilities offer the educational system unlimited options towards development and excellence. Gradually, the KCM1 coaching model started to take shape, and I have been using the emerging model at work with growing success.

It has become a dream, a passion to continue and expand the work done and disseminate it.

By conducting this research it was important for me to increase my understanding and gain more experience toward better analyzing school needs, obtain a clearer focus on helping the educational team in schools to identify their goals and create their optimal plan toward their achievement, and having done it, to share the knowledge with professional colleagues; educators and coaches.

The advancement and improvement of the Israeli school system is of great importance to me.

Using coaching serves the educational system as an infusion drip does a dehydrated patient, slowly invigorating it and leading it to flourish.

I feel the need for change

I see evidence of the effectiveness of coaching in schools daily.

*"When you can give yourself to work that brings together a need, your talent and your passion, power will be unlocked" (Covey, 2004, p.77)*

## Chapter 2 - Critical literature review

Three strands bind together the knowledge relevant to this research - *Schooling*, *Coaching* and *Professional Excellence*, The last being the core value, binding the three together.

It is around these key issues that construction of new knowledge, a careful blend of theory, thought, practice, experience and of research findings were combined. The knowledge produced, served both as the foundation for work with colleagues using the KCM and as the basis for this research.

Section 2.1 will describe the change needed in school and the educational leader's role in it.

Section 2.2 will present educational leadership, behaviors and values of effective leaders in education and some frameworks encouraging teacher leadership.

Next, in section 2.3 the value of achievement will be explained as the catalyst for improvement, supporting high quality learning outcomes at the performance level of excellence.

Section 2.4 explores the actualization and implementation of a common school vision and the expression such implementation receives in all the activities of the learning community in school.

Sub chapter 2.5 is dedicated to learning- Adult learning, learning theories and learning cycles.

In section 2.6 the term coaching is presented, the attitude and profession of coaching, the coach's role and practice.

Section 2.7 considers organizational learning and the creation and management of organizational knowledge. The importance of learning from success and of recognizing and celebrating achievements is explained as well.

Section 2.8 deals with the term 'school culture' and specifically the importance of collaboration and of mutual trust and respect as part of it.

Section 2.9 presents the coaching culture in schools.

Section 2.10 deals with the need to evaluate coaching and suggests some ways of doing so.

Section 2.11 is a summary of the literature review

In part 2.12 the KCM- Katom school Coaching Model is described. The KCM coaching model served as the frame of reference for the processes facilitated and studied in this WBP.

Finally, part 2.13 presents the research questions and hypotheses that drove the research.

## 2.1 Change

*"There is nothing permanent except change"* Heraclitus

The absence of change in an educational organization is not an option.

Nevertheless,

"We can only choose either to change wisely, on the basis of clear direction... or to change unwisely on the basis of chance" (Reeves, 2002, p.31).

As part of an effort to create change wisely, schools have lately been under increasing pressure to prove their competence by improving scores in standard tests, as a proof of change in school work. This pressure forced schools into a quick-fix mode. This mode has shown to have creates dangerous side effects, as systems become addicted to quick fix solutions which often end up creating problems worse than the original ones (Senge et al., 2000).

The pressing need for change induces educators to seek new attitudes and new ways to "effectively change the organizations responsible for student learning" (Brown et al., 2005, p.1). It seems to be, that it is the very nature of the educational organization that must be changed if it is to meet the new policies formulated by the education authorities. Educational organizations strive to establish, design and maintain learning environments fit for adult and student learning, developing constantly the core skills that will enable the school learning community to engage with national curriculum and produce high quality learning outcomes (Kreindler, 1999; Kreindler & Beskin, 2006; Brown et al., 2005).

One of the problems is that many school systems are already "overwhelmed with change" (Senge et al., 2000, p.25). Schools have been going through dozens of programs over the years, usually with no significant results, as part of the habit of



"pursuing projects instead of sustained integrated reform"(Calkins et. al., 2007, p .78).

Reeves (2009) related to the same problem, saying that

"Educators are drowning under the wail of Initiative fatigue, attempting to use the same amount of time, money, and emotional energy to accomplish more and more objectives" (Reeves, 2009, p. 14).

Changes planned throughout the years were on different levels according to Chen (2005). These range from small scale changes, concerning a specific aspect in a school and up to attempts to change an educational system of a local area or state, and are usually referred to as a 'reform'. The problem preventing success in most of the efforts towards change is the common use of the trial and error strategy Chen (2005) said, which has been shown to be mechanical and non- effective. Nowadays, the change strategy used by modern organizations, which should be the one used in education as well, is the R&D, the rational attitude based on investing in Research and Development (Chen, 2005).

Another problem concerning change in schools is that far too much emphasis has been given to reforming schools from the outside, using policies and mandates, whereas "little attention has been paid to how schools can be shaped from within" (Deal & Peterson, 1999, p. xi).

The 'changing from within' in schools expresses a paradigm shift from supervision models of implementing change (Robertson, 2005). According to Ofek & Ofek (2003) significant change is possible only if the responsibility is from within and only in a healthy school culture. Control of teachers' work from the outside (by Supervisors) or from inside the school (by head teachers and other managers) was found to be one of the main factors holding up achievement and suppressing development in school (Ofek & Ofek, 2003). Nevertheless, many policy makers tend to stick to and favor the old 'informed prescriptions', or the 'one size fits all' rather than helping every school create a precise and unique change and improvement process from within, one which is tailored specially to the school's needs (Robertson, 2005; Fillery-Travis & Lane, 2006). These policymakers do not accept change as a process and see it as an event (Hall & Hord, 2006), typically centered on one formal training session before school begins.

A 'profound change' is needed according to Senge (1999) in order to improve schools. The change cannot be a single episode, or a top-down implementation.

It "begins with the courage to change patterns" (Calkins et al, 2007, p.38), which enables a process of

"Inner shifts in people's values, aspirations and behaviors with outer shifts in processes, strategies and systems" (Senge, 1999, p.15).

Strategic changes which involve systematic and well thought out actions created and led consistently by the school itself stand a good chance of producing the change needed. On the other hand, the quick-fix attitude or even an outside led intervention or reform, with a preconceived agenda, tends to have a short term effect (Beskin, 2010a). 'Changing from within' initiatives driven by a leader are powerful as long as they are intensively encouraged. Nevertheless, changing circumstances which involve learning as a main component in the case of profound change, builds commitment through participation and action (Senge, 1999), naturally drawing in new people who share similar values- "we need schools that nurture engagement" (Schlechty, 2005, p. xii). This process does not need to be constantly pushed by the leader or some other dedicated members of the team. Senge (1999) called it, therefore, a 'self-perpetuating' reinforcing cycle of ongoing change. Collins (2001) used a similar metaphor- 'the flywheel consequence', emphasizing how the whole organization, led by its managers, helps create a spiral of improvement- doing the 'right things' and getting the 'right results'. Failing to create the flywheel is either due to doing the 'wrong things', but many times, due to the fact that instead of a slow and thoughtful process, organizations tend to push in different directions, with no consistency towards any specific chosen route. This is a very common situation in schools in which many new programs and projects are implemented.

The leader who does not believe in driving change on his own, must be personally involved in the process, willing to change himself, constantly developing his own learning capacities as part of building personal and institutional capacity throughout the school- "the principal has to be the lead learner" (Fullan, 2003, p.20). The successful leader is by definition "dissatisfied with the status quo" (Reeves, 2002, p.12), dissatisfied, not discontented, and mainly, addicted to improvement.

This type of change, may be achieved by using "learning communities, evidence based leadership, coaching and mentoring" (Robertson, 2005, p.27), which will be discussed further at a later point.

In the next subchapter educational leadership will be investigated.

## 2.2 Educational leadership

One hundred and thirty (130) years ago the first attempts made to understand the role of managers in education were reordered. Managers of schools were mostly expected to focus on the supervision of teachers' work. Change initiatives or new educational projects were almost nonexistent (Oplatka, 2010; 2009).

Today professional standards in education administration are in a continuous quest to find consensus between scholars and practicing administrators regarding the specific characteristics and skills needed for effective school leadership (Tripses et al., 2011).

The issue of defining and of developing effective leadership is of top priority, as research shows that leadership influences school performance and student learning (Davis et al., 2005; Marazano et al., 2005). Although according to Muijs (2011), leadership is distal from students for direct influence, researchers found connections between leadership and outcomes using deferent organizational variables, such as school mission or goal and classroom instruction. These variables were antecedent and/or intervening ones. The data shows, according to Muijs (2011), a reciprocal effect between leadership skills and learning outcomes, because the educational leaders' behavior is part of the learning outcomes (educational outcomes). "The leader is influenced and shaped by the environment s/he finds herself in" (Muijs, 2011, p.49). Another important reason for focusing on educational leadership has to do with ineffective leaders, who create "misery, anxiety and hostility among those who report to them" (Nelson & Hogan, 2009, p.17).

Marazano et al. (2005) reviewed and studied 69 quantitative researches conducted during the years 1970-2005 involving 2800 schools, connecting leadership to student achievements. The study found 21 basic leadership skills and responsibilities recommended for school leaders. The two skills which were found to be most correlated to student achievements and were based on findings from the largest number of schools, were- monitoring and evaluating school effectiveness and focusing on goals. The highest correlation was found with awareness of details in the running of schools and using them wisely (though this was based on a relatively small number of schools). Other leadership skills that were found to correlate highly with

student achievements were flexibility and being a spokesman for the school. A large recent survey amongst Illinois educators, conducted by Tripses et al. (2011), reaffirmed these points as the most important competencies and skills needed by leaders at work, in order to achieve excellence in their practice. Brundrett et al., (2007) also studied characteristics most needed for high performance of school leaders, and his findings identified the following three skills as being essential to the repertoire of an efficient school leader: (1) the creation of a common vision by influencing and using conceptual thinking. (This skill was similar to the 'doing' focus presented by Marazano's et al.(2005) in their findings); (2) striving for excellence- result orientation, holding people accountable; and (3) self efficacy - self management, self assurance. The two last points present a different focus, more of a recommended 'being', or state of mind. Augustine et al., (2009) conducted a large study in the USA, using a survey and interviews of educators of all levels from 10 states. In addition, 170 principals reported daily on how they spent their time at work over a period of two weeks. This study found the following core skills and values to be needed for effective school leadership: Developing and implementing strategic goals - building a common vision around school improvement efforts. Again, this is similar to both earlier studies presented. Additional educational leadership skills reported were supporting instruction for students- supportive learning environment (the point on which principals reported having spent the most amount of time and effort); motivating students; monitoring classroom instruction; and engaging with teachers out of classroom (the point which had received the least amount of the time and effort invested by principals, and was therefore the cause of much frustration to the participant respondents.) Other skills and values found by this study were promoting the development and leadership of school staff, motivating staff, and developing leadership in teams.

From these studies, it appears that defining leadership relates to three aspects- people (character and behavior), processes (motivating people) and systems (connections to the environment) and the focus on each aspect changes (Oplatka, 2010; 2009).

Successful educational leadership, which "results in enhancing learning outcomes for schools" (Brundrett et al., 2007, p.19), focuses attention and resources on strengthening and improving instruction. Such educational leaders implement effective organizational processes in order to create an institutional culture,

supporting and developing the teacher's practice, which influences and catalyzes student achievement.

The principal is in constant struggle between the strategic demands of his/her leadership role and the tactical need to react to everyday events (Oplatka, 2010). Enbar (2009) added to this difficulty the challenging need to live and act within a paradox. For instance, use stable-flexibility; to break through school boundaries in ways of thinking and acting which is not part of the naturally rigid school structure. Two more examples of the paradox-like behaviors the educational leader must use according to Enbar (2009), are responsible-risks and creative-conservative solutions which require a willingness to break free of solutions which are the legacy of the past. Henderson (2011) spoke of two types of leaderships the principal holds, instructional and managerial. The instructional leadership is one of the most frequent education leadership terms discussed (Marazano et al., 2005). Its main characteristics are encouraging the study of teaching and learning in addition to nurturing collaborative work amongst teachers. The instructional leader holds a strong pedagogical vision and expertise and is focused on pedagogical goals, learning outcomes, and works on creating a suitable learning environment (Oplatka, 2009; Muijs, 2011). However, instructional leadership is "a matter of degree rather than an absolute" (Muijs, 2011, p.53), which means that the administrative functions stay a given part of the head teacher's work. Two more leadership terms which originate in the work of Burns, the founder of modern leadership theory (Marazano et al., 2005) are transactional and transformational leadership. The first focuses mainly on relations but mostly avoids taking risks and maintains the status quo. The latter focuses on change (Marazano et al., 2005). Transformational leadership is a leadership that transforms individuals and their organization. It is a popular leadership framework in education, where strong moral purpose and commitment are involved (Muijs, 2011). The distinction between the two terms is close to the distinction between management and leadership added Muijs (2011), which exists mainly in theory and less in practice. However, according to Muijs (2011), the first is referred to as "bad" and the second as the "good" practice. The rapid changes in the requirements of school staff- political, social and economic oriented, according to Oplatka (2010) created the emphasis on accountability and the need to move from bureaucratic leadership frameworks to more participative ones. The distributed leadership next presented, stresses the importance of people, seeing

them as the most valuable resource in the school.

Oplatka (2010) argued that many success stories of a low achieving school which had dramatically changed are usually focused on a specific person. In contrast, the distributed leadership model involves all staff in leading their organization, so that the influence is not necessarily derived from a single manager or a small group of senior managers, but can also come from middle level leaders and teachers. In the distributed leadership "leadership is stretched within and across organizations" (Muijs, 2011, p.51).

According to Muijs (2011), there is a growing dissatisfaction with traditional forms of leadership development resulting in a tendency towards experiential leadership development within the educational community, that is to say, inside school and close to the job (Southworth, 2009). Moreover, according to Marazano et al. (2005, p. 99),

"leading a school requires a complex array of skills...it would be rare indeed to find a single individual who has the capacity or will to master all the needed features"

which a team of individuals, sharing leadership may have, such as a collective and collaborative responsibility for student achievements (Wise & Jacobo, 2010).

Collective leadership is a mutual influence within a system /school, and has the strongest influence on the student; more so than any other individual source of leadership (Seashore et al., 2010). Principals are highly involved with efforts of improving teaching/learning in addition to their managerial responsibilities, as explained in relation to the instructional leadership. In addition, the effective leaders distribute managerial objects and encourage individuals at all levels of the organization to demonstrate educational leadership, depending on expectations and accountability lines (Seashore et al., 2010). Middle level management affects what happens in classes but teacher management is most important. According to Reeves (2009), award winning school districts have made teacher leadership one of their main strategies for continuous success. Teacher management means, according to Southworth (2009), that teachers lead processes within their class rooms and outside of classes, contributing to the development of learning processes and influencing their peers and students to improve their work. Collegial norms for teachers working together are essential, leadership then becomes "a product of inter personal relations

more than an individual action" (Oplatka, 2010, p.254). Teacher management in a distributed leadership work environment creates the potential for school improvement and the creation of quality learning outcomes (Muijs, 2011).

Working in an environment which facilitates distributed educational leadership requires the maintenance of a constant dialogue, high transparency and trust. It involves the need for delegation of power, rather than keeping it amongst the school managers. It is time consuming and is technically difficult to organize (Oplatka, 2010). All these aspects of the educational environment that facilitates educational leadership will be addressed later as part of the quest to assist educational teams to create change and improvement. As will be seen, within the context of coaching, according to Kreindler (2011), educational leadership permeates throughout the entire learning community and facilitates the development of educational leadership skills among students and teachers alike.

Change in educational organizations is usually aimed at achieving high quality learning outcomes, **performances of excellence**. Brundrett et al.,(2007), as mentioned, spoke of striving for excellence as the second of three main educational leadership values, which necessitates creating a school culture that supports excellence and has, as its most prominent value, the '**value of achievement**', which will next be discussed.

## 2.3 Performances of excellence - The value of achievement

*"We are what we repeatedly do. Excellence then, is not an act but a habit"*  
Aristotle

Performance is evaluated as the difference between the potential and the interferences, while interference could be lack of clarity, lack of focus or confidence or a combination of these. (Galloway, 1974; Whitmore, 1996, both cited in Leedham, 2005). The 'value of achievement' is striving to get results of excellent quality, either by growing potential or diminishing interferences.

Encouraging educational systems to operate on a high quality level, enables the creation of better results, better learning outcomes (Sallis, 1996; West-Burnham, 1997, Kreindler, 1999; Kreindler & Beskin, 2006). Moreover, operating



systematically on a quality driven base has an educational influence for society as a whole, making the habit of seeking excellence a way of life (Ofek & Ofek, 2003).

As said before, the aim in most schools nowadays is the expectation of having "ever increasing student scores on standardized tests" (Hall & Hord, 2006, p.9), which places academic performance as the main point of schooling.

The mission of quality education is gradually shifting from sifting individuals, which was previously the main emphasis, to raising the expectations for all students. There is no longer tolerance for allowing "some students to fail while others succeed" (Houston, 2003, p.258). The growing recognition and conviction that all students can learn is important, but only when this belief is shared by many people will the chances for success greatly improve (Cawelti, 2003). Cassey-Carter (2001) referred specifically in his document to excellent schools serving populations from very low socio-economic backgrounds. Even amongst these most difficult schools, high expectations and excellence were the goal. They all rejected the 'ideology of victimhood' that dominates many public schools, and concentrated on high academic achievements. While understanding the difficulties presented by the principals from those schools, there was no "making excuses for them"(Cassey-Carter, 2003, p.24). Excuses would have victimized them and would not have improved or changed the situation. Cassey-Carter's (2003) main finding was the fact that all schools described in his study created a culture of achievement, wide commitment to excellence and exemplary behavior in which college was the goal for all. Achievement, according to these excellent schools' principles, was the key to discipline- self control, self reliance and self-esteem. Individuals do have different potential, but student's attitudes and achievements are "determined by the culture around them"(Linckona & Davidson, 2005, p.17). As teenagers want to 'fit in' Linckona & Davidson (2005) said, if excellence is the culture, they will do their best to fit into it. Calkins et al. (2007) researched high poverty high performing (HHP) schools too, and observed a similar phenomenon-

"Low expectation culture, reform fatigued faculty, high percentage staff turnover, inadequate leadership, insufficient authority all contribute to general lack of success"(Calkins et al., 2007, p.10).

The goal of increasing test scores and emphasizing high achievements as shown up to now, has some times "little to do with the quality of what students learn"



(Schlechty, 2005, p.156). Pedagogical achievements are the most common excellence measurements in educational systems, however, it is important to focus on the improvement of all procedures involving school work (Ofek & Ofek, 2003). This makes the pedagogical achievements themselves not the only issue, though these may improve too while improving the rest. Broadening a school's focus onto a wider achievement scale, from a different point of view, can be seen by the following examples from the east. Japanese education was known for its strong performance on international comparison tests and the harsh reputation of their exam-driven system (Kennedy-Manzo, 2008). Japan officials are now hoping to add and foster some different qualities as well, mostly to help bring down the student stress associated with their previous comparison derived regime. In China too, schools have now started emphasizing new skills to lessen their previous competitive attitude (Cavanagh, 2008).

Performances of excellence in school are expressed in the creation of high quality school learning outcomes of three types- pedagogical learning outcomes as mentioned, in addition, socio-cultural (norms, values) learning outcomes and administrative learning outcomes as well (Kreindler, 1999; Kreindler & Beskin, 2006; 2008). All these learning outcomes, produced by the school community as a whole - the management, teachers, students and their parents should simultaneously, systematically and continuously be improved. Furthermore, unlike the mastery concept focused on reaching some stage of expertise, the assumption should be, that

"No matter how bad or good things are, the goal is to make them better" (Schlechty, 2005, p.39).

The consistent improvement of achievements is thus wider in content, and involves the whole school community. Until recently, educators assumed that it was "individual students, not teachers or schools who were being evaluated" (Brandt, 2003, p.196). Now, as shown, the whole school community takes part in the collaborative creation of the learning outcomes mentioned as part of communicating "high expectations for teachers and students alike" (Marazano et al., 2005, p.15). Students constantly watch and observe "how committed we are to excellence and ethics" (Linckona & Davidson, 2005, p.63), Preaching one thing and practicing another in calling for excellence in performance is non educational. This work necessitates high expectations of self and of others. Excellence should therefore be "acknowledged,

improvement celebrated, supported and shared" (Wagner & Masde-Coaps, 2002, p. 48). Failing to address part of the learning outcomes may be mirrored in the drop of other learning outcomes as well. Alternatively, the process of improving any of the learning outcomes will have a positive influence on the rest.

"High performance demands a very different mental approach" (Clutterbuck & Megginson, 2006, p.35), a suitable mental approach is based on 'the value of achievement'.

All dimensions of school work should be attended to while striving for achievement and the whole school community has to be united in the process of excelling. This necessitates a different state of mind which allows 'positive competition', competing with, not against one another (Linckona & Davidson, 2005). It is competing with one's own personal limitations and/or the marks set by other competitors. By doing so, dangers of destructive competition are avoided and the outcomes serve as a benchmark in the quest for excellence.

'The value of achievement' takes root when

"We achieve our individual best through the challenge and support of others. .. excel beyond what [we] would have achieved in isolation"  
(Linckona & Davidson ,2005, p.19).

By seeing people "through the lens of their potential and their best actions" (Covey, 2004, p.72), positive energy is generated, and embraces others into the process of improvement.

*"When we seek to discover the best in others, we bring out the best in ourselves"*  
(William Arthur John, cited in Linckona & Davidson, 2005)

When improvement is needed, an essential first step is defining the destination - where do we want to go and why? What should be done? How will it be done and by whom? When? And so on.

An agreement on the shared organizational vision of the future should be reached.

## 2.4 The power of vision creation and use

*"A vision without a plan is just a dream. A plan without a vision is just drudgery. But a vision with a plan can change the world"* (Marazano, Waters & McNulty, 2005, p.98)

Vision, "is what we would see if our goals were achieved"(Wiggins & McTighe (2007, p.23). A goal, as opposed to a dream, has a positive commitment to it, and is backed up by daily action (Tolhurst, 2006). Vision is the starting point of transformation processes. It links between today and tomorrow, provides meaning and energizes motivation (Kurland et al., 2010).

Staff members are usually doing their best, but if the system is not aligned towards a known and shared vision, there will rarely be progress.

"When employees try to function in misaligned systems, even when they do their best all you get are random acts of improvement...a false sense of accomplishment" (Conyers & Ewy, 2004, p.24).

In such cases, instead of using the potential energy in its entirety, which all members could channel into one intentional great vector of power, much of the energy gets lost while trying to sum up all vectors of power with each member aiming at various directions of good intentions. If, on the other hand, time is spent in building shared meaning, then people have a "much clearer sense of why an activity is important" (Senge et al., 2000, p.98). Helping people understand clearly significant goals at work focuses them and creates commitment towards achieving them (Covey, 2004).

Though a philosophical basis is necessary in the vision (Paterson, 2003) presenting educational values and beliefs, there should be down-to-earth definitions in it as well, such as describing what a classroom or school needs to look like (Paterson, 2003).

The vision must be centered on the core mission of the school, which allows leaders to convey through it where they are heading, and "sharpen their focus on the primary purpose of the organization" (Suporvitz, 2006, p.2). Nevertheless, vision establishing is a collective act. When principals' visions are not shared visions, when their visions are imposed on teachers and staff rather than developed with them, they have no real meaning. School leaders have to involve teachers in developing a vision of what their future should be like (Schmidt, 2000; Kurland et al., 2010). The collaboration in "Clarifying the value system.. (is) the greatest contribution a leader can make" (Peters & Waterman, 2004, p.291) as part of establishing the shared vision.

If vision is to become a driving force in school, it should involve two consistent processes. First, it should never be completed. The vision is created and then refined, constantly reviewed and clarified. The vision is dynamic; a growing and evolving idea (Owings & Kaplan, 2003).

The second aspect of vision as a process, involves its systematic implementation into all aspects of school life. Having a mission or values statement is different to implementing those values, that is to say, clarity regarding school values and purpose has limited significance unless it is followed by commitment to specific actions (Pfeffer & Sutton, 2000; Sparks, 2005). Therefore, the vision should represent the desirable ways of doing things "in the day to day operations of the school" (Paterson, 2003, p.41). A living document "incorporated into the local landscape" (Suporvitz, 2006, p. 27) embedded into all daily decisions and actions in school (Owings & Kaplan, 2003).

By performing according to the two vision processes explained, having "staff, shareholders, directors and even customers share the same values"(Whitmore, 2004, p.132), and operate daily accordingly, one may hope that performance will always be at its best.

Performance improvement involves learning as a main component. The topic of learning will therefore be discussed next.

## 2.5 Learning

School involves two types of learners: student- learners whose learning was addressed before, and adult-learners: teachers, managers and other staff. The first paragraph (2.5.1) will consider these. Then, some of the important learning theories will be presented in paragraph (2.5.2) leading to the explanation of learning cycles in paragraph (2.5.3).

### 2.5.1 Adult learning

The 'whole person paradigm'-Mind, Body, Heart and Spirit, focuses on four dimensions of human needs, respectively (Covey, 2004);

- to learn- the need for growth and development,
- to live- the need for survival,
- to love – the need for relationships, and
- to leave a legacy – the need for creating meaning in life and contributing through one's actions.

These needs are equally important according to Covey (2004), and should be simultaneously and consistently fulfilled. In an organizational context, specifically in an educational framework such as a school, three of these needs may find an answer within adult learning processes.

The process of learning may be divided in two according to Mezirow (2000).

First, the act of conceiving knowledge and interpreting the information provided, the second, 'meaning forming'- the active process of creating shape from the raw experience which then influences the actions and behavior chosen. "People create meaning and act on the basis of how they perceive the world "(Covey, 2004, p.195).

In order to do so, thought must first be given to defining a set of assumptions about the nature of human reality- Ontology (Vaartjes, 2005) and to the ways of knowing and understanding the reality -Epistemology, tools and ways to know (Kantrovich, 2001). This is important, due to the fact, that how one conceptualizes knowledge according to Hughes (2003), is central to knowledge production which is an important part of learning. Learning changes not only 'what' we know but also 'how' we know, "as people enter new arenas their mental maps no longer chart the terrain they are trying to explore" (Mezirow, 2000, p.71).

Humanistic ontology, one which was chosen in this framework emerged in the 60s through the work of Rogers and Maslow. The Humanistic approach assumes human resourcefulness, a strong belief in the inner personal strength and resources of each individual and his/her capacity for growth. Human natural orientation is towards changing according to the Humanistic theory, to improve, striving towards self actualization by making autonomous informed choices. The Humanistic paradigm is based on the idea that humans are good natured and their behavior is based on intentions and values (Mezirow, 2000; Vaartjes, 2005; Costa & Garmston, 1999).

Human potential is invisible, it lies latent waiting to be manifested. The fulfillment of human potential is acquired through reflection which brings about self awareness (Sparks, 2005; Whitmore, 2004).

By learning and thereby, clarifying one's purpose and ideas, one may actualize potential and by so doing, improve the quality of relationships and the culture of schools (organization) making the production of excellent learning outcomes possible. Adult learning theory was first dealt with by Kapp (1833, cited in Edwards et al., 1996), separated from pedagogy, the theory focused on children learning. Kapp gave this theory its name Andragogy - the art and science of adult learning, a theory which is nowadays known most by the work of Knowles (1984). The Pedagogy and Andragogy learning theories differed from one another, as

"adults have acquired a coherent body of experience assumptions, concepts, values, feelings conditioned responses-frames of reference that define their world" (Mezirow, 2000, p.288).

Instructing adults was supposed to take into account their background, level and previous experience and their intrinsic nature of motivation to learn, that being self directed. The generally accepted model of adult education therefore, involved transferring authority from the educator to the learner, focusing more on process and less on content while dealing with relevant topics which offer value to the learner. Adults learn what is personally relevant and significant for them according to Brandt (1998). Then, they are willing to build new knowledge based on their existing knowledge. Learning should be challenging, and learners are to be supported, while treated as individuals (Shelly, 2003; Rogers, 2003). Adults learn best experientially, through problem solving, through action and by discovering things on their own (Sapars, 2005). They must be proactively engaged in their own development, being in full control, while trying to solve rich and authentic real life problems. (Peel, 2005; Pajares, 2002, cited in Brown et al., 2005).

Critical reflection is used as part of the process, to discover what the most effective actions are, to validate assumptions and consider alternative points of view. Adults learn from success and from praise. (Mezirow, 2000; Brogan, 1999; Vaartjes, 2005). While reviewing most of the above ideas, written concerning 'adult learning', many seem obvious and are part of today's work in school, for both children and adult learning. Indeed, in Knowles (cited in Edwards et al., 1996) later work, he withdrew many of his early distinctions between pedagogy and andragogy.

Children are obviously less experienced or knowledgeable, but any attempt at teaching is based on existing knowledge, on the attempt to engage the children's

natural curiosity and gradually lead them to become independent learners. Successful teachers challenge each child on an individually unique level and use active methods for learning topics which are relevant to the child's world.

As Knowles ideas seem to represent little difference between children and adult patterns and needs in learning processes, one of the main contributions to defining andragogy characteristics and finding them effective for adult learning, could have been the fact that ideas from andragogy trickled into pedagogy. That being so, it became imperative that children were to have the advantage of good learning offered by similar or adapted patterns. Teaching children or helping them to learn, is much like the adult version, and demands in both cases great skill and effort from the teacher.

The learner's age was shown to have little or no bearing on teaching/learning attitudes. However, teaching/learning attitudes are different and are influenced by educational theories.

Hereinafter, main and relevant educational theories will be discussed, theories which dominate schools and influence their performance and theories which have a crucial importance in learning processes, especially concerning school improvement efforts.

### **2.5.2 Learning theories**

The theories which are presented are Behaviorism, Cognitive-informational theory, Social interaction learning theory and Constructivism.

**Behaviorism-** According to this theory, the process of learning is viewed as a "Straightforward mechanism which is portrayed as the result of a behavioral response to some form of stimulus"(Peel, 2005, p.20).

The origin of this theory is the well known experiment carried out by Pavlov in 1927 on animals, later to be extended to human learning and behavior by Skinner. Two main Behaviorist ideas-

1. The consequences of past behavior have an effect on future behavior, and

2. The essence of learning is recognizing and strengthening the stimulus- response connection, positive and negative reinforcement, known as rewards. (Peel, 2005; Laird, 1985; Burns, 1995).

Behaviorism focuses on observed behavior (Hall & Hord, 2006) an objectivist outlook, using cold facts only, and this is part of the criticism of this theory. Burns (1995) spoke about it being rigid and mechanical and therefore suitable only for repetitive tasks which do not involve a higher level of learning. Furthermore, it reduces all behavior to correlation between external stimulus and internal response ignoring cognitive processes such as reflection. The Behaviorist approach fails to acknowledge people acting upon beliefs and striving towards their chosen goals (Peel, 2005). Nevertheless, although human motivation is more complex and broader, the Behaviorist approach fits in with the organizational view of the world (Alexander, 2007), since using rewards or punishments is still a common feature within the workplace" (Passmore, 2007, p.139). The Behaviorist influence in terms of 'rewards or punishments' is still highly visible in many of today's schools as well. It governs much of the teacher's attitude towards students and is paralleled by much of the management's attitude towards the staff.

**Cognitive-informational theory-** Individuals have different needs and subjective interpretations in different contexts. According to Processing theory, a branch of cognitive psychology, the mind takes in information, processes and stores it much like a computer, for later use in short or long term memory. Change in behavior, which is essential as part of a school's efforts to create higher levels of performance, occurs only if people intentionally think and *reflect*. The emphasis is therefore, on helping people to understand processes of thinking; clarifying the connections between their actions and the outcomes (Brown et al., 2005; Sofo, Yeo, & Villafane, 2010). In addition, according to the Cognitive-informational theory, knowledge may become usable only when cognitively processed (Cousins & Simons, 1996 cited in Hughes, 2003; Cox, 2003).

Thinking and reflecting as part of learning were completely ignored by the Behaviorist approach. The Cognitive-informational theory in contrast, based the learning process entirely on the cognitive processes associated with the information gathered; processes which are within each individual, neglecting the power and



benefit of social interaction, which is natural in the surroundings of an organizational framework.

**Social interaction learning theory**-Learning experience benefiting all involved.

Social learning theory according to Bandura's work from the 70s, sees learning as a "continuous dynamic and reciprocal interaction between individuals" (Peel, 2005, p.23). Based on the ideas of the collaborative learning theory and Lewin's field theory (1947) about the group being a 'dynamic whole' rather than a collection of individuals - when people with common goals work in collaboration, ***social interactions and group dynamics influence learning*** (Brown et al., 2005). Passmore (2007) explained, that Bandura's social learning took thinking into a new arena by adding learning by observing others' successes and failures as well, and also 'self efficacy', a person's belief in his own abilities. High self efficacy was found to be connected to better performance (Passmore, 2007).

Because learning is seen as a social interactive activity, groups can provide an effective setting for facilitating learning, and theories of individual learning can also apply to groups. Three levels of learning can be seen- individual, group-team, and organizational, each level contributing to the next (Brogan, 1999). This is a case of "the group as a vehicle that supports the learning of individuals" (Mezirow, 2000, p.229). But group learning can refer to the group as an entity which learns as well.

***Team learning*** is defined as a process were

"group creates knowledge for its members for itself as a system and for others" (Mezirow, 2000, p.253).

The effectiveness of our organizations and schools depends on the capacities of small groups of learners (Mezirow, 2000). In schools, it remains an administrative and pedagogical challenge to create and maintain groups of learners who may benefit from the group's social connection and dynamics.

**Constructivism** – is seen as a Meta theory, as it is derived from several roots –

The importance of language and exchange of ideas from the collaborative process; reflection and meta cognition from the information process (Brown et al., 2005).

Peel (2005) said that Constructivism roots are usually attributed to Piaget's ideas of a child constructing his own schemata based on experience and environment. A suitable

metaphor for the constructivist relations between teacher and learner is that of a midwife to a woman in confinement (Peel, 2005). This metaphor is often used for the relations between coach and coachee as well (Beskin, 2005).

Learning is a process, not a state, one in which *knowledge is "constructed based on one's unique and personal experience"* (Brown et al., 2005, p.13). Cox (2003) stressed the subjective nature of knowledge and experience, and the learning processes as improving on existent knowledge, into new conceptions, and then feeding it back into practice.

"Learning is understood as a process of using a prior interpretation to construct a new or revised interpretation of the meaning of one's experience as a guide to future action" (Mezirow, 2000, p.5)

Mezirow further explained that –

"From a constructivist perspective, human growth is the reconstruction or transformation of systems of meaning"(Mezirow, 2000, p.230).

The learner develops or constructs understandings or interpretations of reality and gives meaning to events (Hall & Hord, 2006). According to Senge et al. (2000) spending enough time in building this meaning is an important process of learning, which clears people's sense of why an activity is important and enables work to be focused on achieving it.

These theories present different philosophical points of view on learning.

The theories offer an overview, pointing out the main elements affecting and contributing to the process of learning.

The next section will try to get closer to and be more practical, looking at 'how' the learning actually occurs. It presents learning cycles, practical models of the different stages of the adult learning process.

### **2.5.3 Learning cycles**

Learning occurs in a cycle of experience, in which the information is gathered, followed by reflection (Kolb, 1984). The process of learning is described as moving through four stages in sequence (Kolb, 1984);

- Concrete experience

- Reflection
- Abstract conceptualization (making generalizations and formulations)
- Active experimentation

Kolb's Single loop learning cycle draws heavily on Dewey, Lewin and Piaget (Peel, 2005). It conceptualizes the process between action and reflection and builds on the idea that learning involves the detection and correction of error: having an experience, reviewing it, concluding from it, and finally planning the next steps. (Senge et al., 2000; Peel, 2005; Smith, 2001b). The single loop learning cycle approaches problem-solving with strategies that have succeeded in the past (Marazano, Waters & McNulty, 2005).

"Observing our previous action reflecting on what we have done, using that observation to decide how to change our next action for the sake of improving "(Senge et al., 2000, p.93).

In practice, learning is far less linearly fashioned. Rather, it consists of phases in which people leap between the stages in a more chaotic way than the cycle suggests (Peel, 2005; Smith, 2001a). It was the need for alternative responses to questions and problem-solving situations that caused the single-loop learning cycle to be perceived as not always enough, particularly when connected to organizational rather than individual processes of learning. Reflection as part of the single loop learning cycle was used in a limited manner, in the attempt to achieve the same outcomes in a more efficient way (Smith, 2001a).

The double-loop learning cycle model developed and conceptualized by Argyris & Schön (1974; 1978), requires thinking on thinking, deliberately challenging the set of norms, the attitudes, and assumptions. Double loop learning allows questions on the variables themselves to be critically debated towards shifting to new strategies (Argyris & Schön, 1978).

Smith (2001a) explained Argyris's theory about human mental maps which influence behavior more than their espoused theories, the theories referred to and declared. The mental maps which individuals and organizations maintain are "the metaphorical pane of glass they look through" (Senge et al., 2000.p.68). The behavior seen is the theory in action (or in use), and it presents a split or dissonance between theory and action. Critical reflection on the theory in action helps acknowledge the splits between the actual actions and the espoused theories governing individual and group thinking .The critical reflection helps re-form the pane of glass by creating new mental models that

serve better (Argyris & Schön, 1974;1978; Senge et al., 2000). The Double-loop learning cycle helps workers to "recognize, develop and share their own theories in use" (Brookfield, 1987, p.157).

"Expands an organization's view of the world while adding new strategies to an organization's repertoire" (Marazano, Waters & McNulty, 2005, p.67).

Unlike the single loop learning cycle, in which one had to make a mistake and reflect upon it to readjust the theory, Argyris & Schön's (1974;1978) conceptualization enables learning by merely reflecting upon the theory in action. The double loop model is more creative, offers a wider range of learning experiences but is therefore more risky too (Smith, 2001a). By adopting the double-loop learning cycle there is a risk of stepping out of the comfort zone of known paths and familiar outcomes. But there is also the potential benefit of greater success which can result from the new creative thinking and from using learning from success and not learning through failure.

Four major types of learners can be identified drawn from Kolb's cycle of learning (Smith 2001b);

- The activist, who enjoys the experience itself;
- The reflector;
- The theorists - who naturally connect between abstract ideas; and
- The pragmatist - who focuses on the planning stage.

(Rogers, 2003; McGill & Beaty, 1995; Smith 2001b).

Each stage of the cycle is best suited to one or another type of learner, so that every individual may start at his 'best style' and then continue following the stages according to the cycle, in order to obtain successful learning (Smith, 2001b).

This information is important when referring to an individual learner, recognizing and suiting her/his preference or tendencies. It is equally important when planning learning for groups, in which all types of learners need to be addressed.

Kolb's learning styles validate the importance of the coach in identifying the coachee's learning style and intervening if needed so that learning occurs (Sofa, Yeo & Villafane, 2010).

The connections between learning and coaching seem to go far beyond this, although at present, the process of learning in coaching is still little understood (Griffiths & Campbell, 2009). Nevertheless, it is accepted that learning is at the heart of coaching or, that coaching is a platform for learning (Skiffington & Zeus, 2003, in Griffiths, 2005). If successful learning could be defined as learning which-

"Occurs through experience and results in permanent or lasting change in knowledge, skills or attitudes"(Griffiths & Campbell, 2009, p.17).

Then learning could be accepted as inherent within coaching processes, as theory is "practically applied and integrated into the minds and actions of the clients" (Griffiths, 2005, p.58).

The roots of the connections between adult learning and coaching may be found in Constructivism and in Kolb's cycle of learning. Griffiths & Campbell (2009) interviewed certified master- coaches from different coaching schools and their clients, analyzing documents and combining the data with theory (a grounded theory methodology). Griffiths & Campbell (2009) found that learning is interwoven throughout the process of coaching and that coaching facilitates "a dynamic interchange between multiple learning theories" (Griffiths & Campbell, 2009, p.27) serving together to deepen and accelerate learning.

Kristal (2010) defined reflection as the connecting point between coaching and adult learning. Reflection, Kristal (2010) said, is the most important element facilitating learning and change, while the coach acts as the agent of change.

As presented, the connections between adult learning and coaching are evident. Furthermore, coaching was mentioned as a facilitator of learning. What, then, is coaching?

## 2.6 Coaching

Part 2.6.1 presents coaching as an emergent profession. Next, in part 2.6.2, first attempts of defining and understanding coaching theory are described. In part 2.6.3 the coach's role is dealt with followed by close occupations in part 2.6.4.

### 2.6.1 What is coaching?

Coaching is a profession which is gradually gaining academic background, research, training, continuing development and a code of ethics. But above all those, coaching is an attitude. According to Brock (2008, p.15) one should "live coaching moment by moment in each interaction". Coaching is "a way of treating people, a way of thinking, a way of being" (Whitmore, 2004, p.18) , not a technique or a tool kit. It is "a way of realizing the potential of staff" (Tolhurst, 2006, p. 3) as it is based on the assumption, the deep understanding and belief, that the coachee is resourceful. It is a way of working with people that leaves them more competent and fulfilled, so they are able to better

"Contribute to their organizations and find meaning in what they are doing" (Flaherty, 2005, p.3).

Coaching is a job-embedded learning framework, providing assistance close to everyday work (Carnahan et al. ,2004; Husbrouck & Penton, 2007; Keller, 2007), one which leaders can use to help improve practice on an ongoing basis. Coaching unlocks the latent potential in the workplace, building the capacity and commitment, through strengthening relationships and partnerships (Robertson, 2005; Gilpin, 2006). It delivers results because of these relationships, formed between coach and coachee while s/he, the coachee, takes part in finding her/his own solutions, working towards maximizing performance (Whitmore, 2004; Grant, 2006). Rather than teaching, coaching helps to learn, it focuses on "the importance of finding new approaches to doing and being" (Robertson, 2005, p.25). Coaching involves deep listening and precise questioning in order to better understand the coachee's structure of thought (Grant, 2006; Rogers, 2003; 2004).

It should be non judgmental, collaborative and client centered, forming a partnership of equals between coach and coachee. It can be seen as two-way learning-

"Both learn of the values, beliefs, attitudes and unique perspectives of the other"(Carnahan et al., 2004, p.15).

Both the coach and coachee have a full responsibility for the forward momentum, vitality and quality of the process. Each brings to the dyadic process her/his own materials, which is her/his contribution to the process so that both engage fully in the spiral of learning and growth (Kreindler & Beskin, 2008).

### **2.6.2 Coaching theory**

Coaching at present is a trade drawing on borrowed theory, in which practice leads the theory. This according to Rogers (2004, p.18), could be seen "either as a strength or a weakness which needs addressing. Perhaps both". Grant (2006) sees this as an opportunity. Rather than trying to fit a specific theoretical approach, as is frequently the case with psychology Grant (2006) said, coaching usually uses an integration of theoretical backgrounds. This is very challenging for a coach who must be flexible in choosing different approaches needed for effectiveness in various situations. Laske (2006) in contrast, pointed out the difficulties due to uncertain agreed upon theory, and called for clearer definitions. Coaching theories are presently "the tower of Babel" Laske (2006, p.54) said, and are gradually being built by practitioners. Laske (2006) stressed the need for a knowledge base and for creating a consistent vocabulary in order to improve the ways of comparing studies and learning from them.

"Any discipline needs to be able to define its unique characteristics in contrast to others"(Walker, 2004, p.16).

Nevertheless, Even without an accepted knowledge base according to Brock (2008)

"Coaching continues to evolve, influenced by psychology and business, and influencing them in turn." (Brock, 2008, p.4).

With this brief summary about the theory of coaching, it is obvious that coaching is multidisciplinary; it originates from roots such as psychology and business administration, sports, education and adult education, sociology and social work, and more. Coaching has yet to establish a synergetic body of knowledge representing the contribution of all these disciplines. Moreover, when reviewing research documents related to coaching, researchers from the field of psychology stand out as the majority. This might create a disciplinary bias for the theory being built which necessitates the intervention of researchers on coaching from other backgrounds, to maintain the balance.

### **2.6.3 The coach's role**

The role of the coach is to unleash the coachee's resourcefulness, while focusing on his/her professional and at times personal development (Creasy & Paterson, 2005). In

so doing, coaching addresses the person as a whole, because the coachee's professional mode of behavior may well be "paralleled to the personal parts of their life" as well (Rogers, 2004, p.81). The coachee is the one to set the agenda. Then, the coach enables her/him to take responsibility for her/his learning, to develop an awareness of her/ his situation and increase her/ his skills (Tolhurst, 2006; Robertson, 2005). Coaches help others recognize their knowledge and strengths, supporting their learning and their application of new practices and in fact serving as cheerleaders (Carnahan et al., 2004).

A coach

"Reminds us of what we set out to do and can work with us to keep building a way... consistent with our projects" (Flaherty, 2005, p.78).

A somewhat different focus is brought by Wiggins & McTighe (2007), who said the coach's main efforts are towards getting the learner to reach performance standards by designing backwards from the desired explicit performance targets which are clearly related to long term goals. This description focuses on the outcomes, and is less process oriented. Another difference is the more active role the coach takes. The source of the difference in defining the coach's role, or rather in illuminating her/his most important activities or duties, is rooted in different coaching attitudes. A non-directive or "ask-not-tell" coaching style (Grant, 2006; Whitmore, 2004) as opposed to a directive attitude, giving advice and feedback. Or similarly, a non interfering facilitative style as opposed to an active, leading style, a continuum defined in Beskin's (2005) early research.

On the one hand, some claim that

"Coaching is not telling people what to do, it is giving them a chance to examine what they are doing in the light of their intentions" (Flaherty, 2005, p. xviii).

On the opposite side stands the consultant or expert type of coaching, in which the coach assumes s/he knows what is best for the coachee (Tolhurst, 2006). Coaches coach on a 'telling- asking' continuum (Suggett, 2006), which Gilpin (2005) classified from 'directing actions', through 'offering advice and guidance', 'providing feedback on observation', 'using structured questioning', and the most non-directive style –'facilitating shared interpretations'. Using different styles of coaching as listed, or combining styles during coaching work may suit different people (coaches and



coachees), according to their personality, their values, their specific role and in different timings – circumstances and career position-newly appointed or senior (Beskin, 2005).

Nevertheless, most coaches, in most cases, avoid taking the expert role of an adviser according to Coggins, Stoddard & Cutler (2003). They honor the coachee's personal choice, assuming that it is the best possible one for her/him at any given moment. They use coaching as an opportunity to collaboratively discover and discuss other solutions as well (Costa & Garmston, 1999). Understanding the coachee's structure of thought is an essential stage, according to Flaherty (2005). Then, in partnership, they modify this structure to a plan of action designed to bring about the intended outcomes, while helping the coachee to see the larger picture (Carnahan et al., 2004). Duckworth & De Haan (2009) used, in their study of coaching, the 'six categories of intervention descriptions'. They found that correlations between the quality of outcomes were the strongest when what the client felt was a challenge, and the support towards making new discoveries. No correlation was found to support advising or telling, which strengthens the non-directive attitude.

A definition for a coach's work in school may then be-

"A professional facilitator of learning; someone who works with the coachee to bring out what is latent but is not being effectively used, in order to achieve her/ his vision. The coaching framework is collaborative. The learning facilitation is a process powered by the dyadic relationship between coach and coachee and by the personal learning the coach is willing to undertake within the dyadic relationship formed. The coach, by declaring his own vision of personal and professional growth, helps start the dialog toward the foundation of a common, dyadic vision. Coach and coachee can then collaborate on, creating the coaching framework that can support the fine tuning of major school processes"(Kreindler & Beskin, 2006, Appendix 7.)

Coaching is based as I have shown before, on a Humanistic outlook on life. It is about how to do things according to Suggett (2006), as the 'what' is usually a given. It is pragmatic, and is about action - "the request for coaching is always triggered by change"(Rogers, 2004, p.9) .Coaching is proactive while other close models of professional assistance, like counseling for instance, are more reactive (Whitmore, 2004).

Coaching, particularly with a professional coach, is a highly structured and dynamic model of working, either one to one with an individual, or with groups, through a

series of meetings. Coaching is a "systematic, evidence -based and incorporated ethical professional practice"(Grant, 2006, p.15). Dotlich & Cairo (1999) mentioned 4 levels of coaching goals: self - awareness, performance improvement, performance breakthrough and transformation. Kristal (2010) suggested the top level of effect or change achieved through coaching, to be one which presents a "new perspective, new point of view or frame of reference" (Kristal, 2010, p.262).Moving through the levels, the coachee achieves speedily increased sustainable effectiveness, and long term excellence in performance (Flaherty, 2005; Rogers, 2004). Coaching "inspires, engages, ignites and creates change" added Tulpa (2007, p.41).

#### 2.6.4 Close occupations

There is a great deal of overlapping between close occupations –counseling, facilitating, mentoring and others, according to Whitmore

"The underlying principles of awareness, responsibility and self belief are common to all...the very core of human growth and effectiveness" Whitmore (2004, p.171).

What is obvious and accepted is that coaching is not a therapy. It does not involve healing and is always based on the absence of a mental health problem. This is another reason for creating the special coach- coachee relationship as explained, in contrast of a doctor -patient relationship (Rogers 2003; Grant, 2006). Walker (2004) suggested an inductive classification as a flow chart of the 'people development industry', to better organize and seek out different, confusingly close professions: Coaching was first classified as client focused (in contrast to relationship focused, where mentoring was mentioned). It is further classified as developing (in contrast to recovering, such as therapy ).It is person focused (in contrast to task focused as consultancy), and is last divided into either profession focused which leads to executive coaching, or to personal focused, which leads to life coaching. Bresser & Wilson (2007) offered the following metaphors for different types of professional helping/treating as car/driver, to better distinguish between the close disciplines- The therapist attitude would be-'what is stopping you from driving?' The counselor's-'listen to your anxieties about driving'. The mentor would share tips from his experience.

A consultant may advice on how to drive a car

And the coach would encourage and support the coachee while driving.

In the school environment there are different professionals involved, as part of the effort towards staff professional development and the promotion of school work. These professionals may work along with the principal, with the managers individually or as a group, with heads of departments and/or with teachers. Because of the obvious overlapping and similarities between the close occupations mentioned, and acknowledging their differences as well, I would rather suggest that a professional coach should choose the 'right' type of intervention for each circumstance. The choice may vary between; coaching, mentoring and consulting, according to the personalities of the people working together, their values and experience, in accordance with the needs as defined and the context of the intervention.

When considering school improvements, learning is a main topic. Organizational learning was mentioned as part of the last subchapter. Nevertheless, I will dedicate the whole of the next chapter to this topic, as both individual and organizational learning must be understood if change and improvements are desired. (Wong & Nicotera, 2007).

## 2.7 Organizational learning

First, in part 2.7.1 I explain the term 'organizational learning' and describe how an organization may produce organizational learning. Then, in the next two parts (2.7.2 and 2.7.3), I explain two main processes associated with organizational learning: recognizing and celebrating success and learning from it.

### 2.7.1 What is organizational learning and how is it achieved?

Organizations and researchers use a variety of terms to describe similar phenomena describing an organization focused on a systematic creation of new knowledge- "knowledge communities" , "competency networks" , "thematic groups" , "learning networks" , "communities of practice" all of whom work as "Social learning

systems"(Wenger, McDermott & Snyder ,2003). Many use the terms "learning organizations" produced by Senge et al. (1999, 2000) or "professional learning communities (PLC)" produced by DuFour (2004). Learning in an organization according to Mezirow (2000), is a continuous act of people learning how to learn together in order to expand their capacity to create better results, through nurturing new patterns of thinking. Learning by all members in school is "more a journey than it is a destination" said Marazano, Waters & McNulty (2005, p.104), a journey where all learners believe they can dramatically enhance the effectiveness of their organization-their school.

Unfortunately, most schools create poor examples of organizational learning, and are instead

"Self perpetuating routines in which defensiveness about any critique of comfortable practice is the norm"(Mezirow, 2000, p.270)

Schools must become true learning communities "in which all- principals, teachers and students continue developing"(Houston, 2003, p.261). A place in which "pupils experience learning as something everybody does" (Gilpin, 2005, p. 3). A place in which supporting each other's learning is the norm. A 'teaching organization' according to Teachy (2002, cited in Sparks, 2006), is where everyone is a teacher and a learner. In so doing, the adults in a school become by their actions, models for learning to their students, showing commitment to "continual questioning and openness to change" (Mezirow, 2000, p.270). Senge et al. (2000) explained the need for learning, saying teachers cannot create and sustain a culture of growth unless the same climate exists for them, which means, that teachers must recognize the value of collective continuous learning (Kurland et al., 2010).

Becoming a learning organization school, according to Senge et al. (1999; 2000) involves having a shared vision, referred to before, creating a shared vision and then activating it in the school through day to day work. In addition, according to Senge et al. (1999; 2000) a professional community should be established, one in which personal mastery should be a goal for every member and team learning a main activity. The most powerful forms of professional development are centered on teams within schools while they concentrate on achieving their purposes by amplifying the best practices of teachers across the faculty (Sparks, 2006) acting as 'communities of practice' (Harris, 2001). Suporvitz (2006) stressed the effectiveness of professional

development as taking advantage of "authentic opportunities to learn from and with colleagues inside the school" (p.82). Team Colleagues do not need to think alike but through regular practice they can learn to "be effective in concert"(Senge, 1999, p.73). DuFour (2004), in his model of professional learning communities (PCL), spoke about the essence of a professional community as learning by doing- action oriented learning which he said was more effective than learning by reading, for the creation of knowledge. Teachers in PCL's are committed to continuous improvement, ensuring that students learn, not that students are taught, which is a change of focus from teaching to learning. Calling these knowledge-based networks 'communities of practice' according to Wenger, McDermott & Snyder (2003), emphasizes the role of practitioners to take charge of knowledge issues –'knowledge capital' including skills, methodologies, and innovation capabilities all focused on driving towards better results. By using the field knowledge produced by field professionals instead of bringing in academic knowledge (Sykes, Rosenfeld & Weiss, 2006), knowledge created from within the system, is a down-up manner instead of top –down (Fullan, 2003). This ownership of knowledge assures that "the immune response isn't activated"(Sparks, 2005, p.186) by teachers, as is common when knowledge and new ideas are imported from outside and enforced.

Creating a platform for organizational learning necessitates a framework including ideological and technical aspects.

The ideological concept has to do with choosing to manage school in a 'loose-tight' manner (Peters & Waterman, 2004; Eaker & Gonzalez, 2006; Hall & Hord, 2006; Wong & Nicotera, 2007; Calkins et al., 2007) which means to maximize individual autonomy, giving people exceptional freedom to do things their own way, while having a firm central direction around a few crucial dimensions, including the learning framework.

"Principles are on the one hand rigidly controlled, yet at the same time they allow (indeed insist on) autonomy, entrepreneurship, and innovation" (Peters & Waterman, 2004, p.318).

Finding the balance between specific frameworks and regulations while at the same time, honoring teacher's autonomy, is delicate and not easily done (Suporvitz, 2006). Costa & Garmston (1999) spoke of the importance of allowing teacher autonomy too, while creating a rigid framework of group learning as well. Autonomous people Costa

& Garmston (1999) said, are the ones who can take a significant part in their organizations' activities for the public's interest and for their own benefit. They should be independent and dependent simultaneously. The 'loose-tight' idea is much like the classroom management suggested by studies, in which effective classes are believed to be the ones in which discipline is sure (coming on time, homework turned in etc.), and on the other hand, those same classrooms emphasize a positive atmosphere (Peters & Waterman, 2004).

The technical aspects have to do with the means by which a school makes resources available for the team learning according to Senge et al. (2000). Scheduling blocks of time for that matter is highly important, since teachers are pressed for time and have no time to create new ideas, put them into practice and then evaluate their effectiveness, unless time is scheduled as part of the program (Wong & Nicotera, 2007; Senge et al., 2000; Tolhurst, 2006; Brown, Rutherford & Boyel, 2000; Brown et al., 2006). Clearing time in a busy system like the educational system is an "essential need for an effective learning process to take place" according to Weiss et al. (2007, p.7), as in a normal school day, there is no time to do anything, beyond classroom teaching responsibilities (Brown et al., 2006).

It is necessary to devote fixed meetings and not to postpone them for routine commitments. Meetings should be scheduled for at least 90 minutes between once a week to once a month (Sykes, Rosenfeld & Weiss, 2006). The Meetings should take place during the workday and not on personal time added Ofek & Ofek (2003), though according to Suggett (2006), using private time shows commitment and serves as an "indication of willingness to take action"(p.9). In addition, comfortable and easily accessible physical conditions are essential for supporting and ensuring the learning (Hall & Hord, 2006; Senge et al., 2000; Sykes, Rosenfeld & Weiss, 2006; Weiss et al., 2007).

Schools which facilitate organizational learning are higher performing schools. Creating a learning school is a strategy designed to cope with the challenging role teachers must shoulder due to the need to improve student learning outcomes through improving their own instructional practices (Brown et al., 2008). These schools "continually change and adapt in such a way as to maximize outcomes" (Kurland et al., 2010, p.9).

Two main processes associated with organizational learning will now be presented, both related to successful experiences;

Celebrating success and acknowledging it, and next, learning from success

### **2.7.2 Celebrating success and acknowledging it**

A leader should be addicted to improvement and to celebrating it (Reeves, 2002). The school leader's job is "observing, assisting, developing, and cheering on teachers every class, every day" Ross(2008, p.1), concluded, having observed an elementary school principal in Los Angeles who enjoyed the highest rate of growth in academic performance of any public school in the state.

Peters & Waterman (2004) spoke about the performance of the best companies, and this is true for the best schools as well-

"The systems in the excellent companies are not only designed to produce lots of winners; they are constructed to celebrate the winning once it occurs" (Peters & Waterman, 2004, p.58).

Linckona & Davidson (2005) explained that celebrating the school's purpose and people's progress is a critical act of cultivating shared vision and strengthens school identity. Schools should therefore devote a formal part of the time to systematic acknowledgement and celebration of achievements and success, and also, the sheer effort teachers are putting into work (Marzano, Pickering & Pollock, 2001; Ofek & Ofek, 2003). "Celebrate progress as well as the accomplishment of your goals" (Sparks, 2006, p.205). A practical and systematic way of creating this kind of celebration habit is indicating precise goals and benchmarks in schools, these serve as "a reminder to regularly celebrate progress"(Wanger, 2006, p. 19). These celebrations, according to Wagner & Masde-Coaps (2002) increase the essence of community, the school family feeling and team welding. Recognizing and celebrating the best examples of school values that are exhibited, both individually and collectively, should therefore be frequently and publicly done (Eaker & Gonzalez, 2006), "celebrate successes, small and large, publicly and privately" added Hall & Hord (2006, p.193). Managers should be looking out for moments where things are going really well, the 'nuggets' according to Grant (2007). These moments often go unnoticed. In addition, many people tend to "shy away from success stories" according to Tulpa (2007, p.41) and it is therefore important to encourage the telling of those stories, speaking about those good moments, by creating opportunities for

doing so. Recognition is a great motivator according to Fournies (2000) but achievements and success are by far the strongest motivators. Motivation to continue doing more of the same but, even more, to learn and improve. People learn by praise (Rogers, 2003), which is the essence of celebrating and acknowledging good work as was explained.

Mostly though, Rogers (2003) added, people learn from success.

### **2.7.3 Learning from success**

Learning from success is a way of life, not a short term project (Zifroni, 2006). It is a retrospective method, designed to convert hidden knowledge from the professional field into processed, known and ready-to-use knowledge.

Learning from success is a shift from the tendency to focus on failure, trying to find the ones to blame thus ruining communication efforts. It is a shift from the idea that learning should be devoted to a conscious "examination of any inconsistency between action and ideal" as Wiggins & McTighe (2007, p.267) suggested, following Argyris & Schon (1978). They spoke of learning as detecting and correcting error between intention and results. Focusing on success instead brings forth confidence, self efficacy and encourages people to progress and to change (Oplatka, 2008). It is a new paradigm replacing the problem-solution or prevention oriented paradigm with focusing on the development of individuals and organizations (Zifroni, 2006); promoting health and well being factors rather than treating illness. The old paradigm saw all people as capable and suitable for most roles, therefore, the growth zone was focused around their weaknesses. The new paradigm in contrast, sees every person with unique and unchangeable talents. Her/his growth zone is therefore around these special talents. There is not much use in devoting time to correcting weaknesses; success and satisfaction come from building and using 'Signature strengths' which are part of one's character (Seligman, 2002, cited in Sparks, 2005).

For effective 'learning from success' a research tool is needed, as Conyers & Ewy, 2004) said –

"If you don't measure it, you don't value it, and you cannot improve it" (Conyers & Ewy, 2004, p.72)



School ought to become "data driven... establish mechanisms for quantifying, collecting and distributing results"(Wiggins & McTighe, 2007, p.160), auditing and assessing what the organization is doing well (Pfeffer & Sutton, 2000). These facts/information are of two kinds- feedback about student learning and engagement and about actions taken in school. These should be clearly and coherently focused on a commonly understood mission. It is important to have the capacity to analyze the data collected and to document the process, considering achievements and the prices paid for achieving them. Otherwise the school becomes data rich but information poor (Davis, 2008; Zifroni, 2006; Sykes, 2006).

The 'learning from success' program, started in Israel as a pilot of 44 high schools between the years 2002-2005, aimed at creating new upgraded schooling knowledge and a systematic way of renewal, by laying the grounds for ongoing learning in school and creating habits for doing so. Goals were targeted for higher pedagogical achievements by students, as well as for social and behavioral progress.

Mentioning and referring to successes of school members on a regular basis; teachers' success, the successes of students or classes, is one of the ultimate motivational and moral improvers and is highly applicable. Moreover, systematic learning from these same successes in order to help improve performance is not only uplifting but is also very useful.

The most suitable solutions for any school are mainly to be found within the school itself, within its people who know their own uniqueness and strengths.

"It is not what we do that changes" according to Crane (2007, p.232)," it is how we do it and the fact that we do it". The 'how' we do things in school, the ways of operation, priorities, attitudes and behaviors (Linley et al., 2009), have much to do with school culture. A concept presented in the following sub chapter. Special attention is devoted to aspects of school culture which make the adoption of reforms and changes for school improvement possible.

## 2.8 School organizational culture

The concept of organizational culture and the need to be able to diagnose and to identify a healthy culture is explained in part 2.8.1. Next, two important factors of the organizational culture are presented, which are both crucial enabling changes and reforms to take place in school; 2.8.2 collaboration, and 2.8.3 mutual trust and respect.

### 2.8.1 What is a School organizational culture?

The earlier concept was organizational 'climate', and was introduced to suit the first systematic strategies of the whole organizational change process in the 60s. Many different surveys were conducted trying to measure the organizational values and norms (for example-autonomy, rewards, communication level). Targets were set accordingly and actions taken towards organizational improvement. Climate studies have a quantitative focus, and can therefore be seen as a summery or average of all the scores of the individual members of the organization on the different issues. The term Culture is a newer concept from the 90s, produced to suit qualitative research methods. Culture is unique for each setting and assessing it requires much more time, through observation, in depth interviews and document analysis. Nevertheless, in school literature, the terms 'culture' and 'climate' are often interchanged, but both can be seen as levels of the same concept (Hall & Hord, 2006; LaTefy, 2005). The culture according to Wanger (2006) is like the personality of an organization, and climate can be seen as part of the broader term. Culture is about how people treat each other and what the consensus about the main issues in school is (Wanger, 2005; 2006; Schlechty, 2005) it must therefore fully reflect a well defined mission, derived from the common and shared vision, and can be seen as "key to the school achievements and student learning" (Deal & Peterson, 1999, p. xii). Culture "influences everything that happens in a school" according to Wagner (2006, p.43), including student's work, staff's work, staff satisfaction, parent engagement etc. It characterizes the school's beliefs, attitude, behavior, traditions, commitments, myths and norms. Schelechty (2005) spoke of different types of norms-moral norms- shared understandings about what is right or wrong, aesthetic norms-taste and style; both types are part of the

organizational tradition . Technical norms- the ways the business is conducted, which are based on experience.

When reforms are planned and change is wanted, it is important to be able to diagnose a school culture. The information gathered about the strengths of and challenges to the current culture helps shape the change strategy and creates a shared understanding about what needs to be done (Ofek & Ofek, 2003; Crane (2007).

In addition, it is extremely important to be able to evaluate and measure the impact of what has been done, mainly in times of tight budgets (Neufeld & Roper, 2003).

The early surveys trying to measure the climate were of low validity and were only partly reliable due to the fact that creation of the closed questions was designed a priori, at the cost of losing important themes, characteristic of the schools (Hall & Hord, 2006). In order to diagnose the school culture, one should collect information from the students, their parents as well as from the teachers, regarding their feelings and thoughts about the school (Ofek & Ofek, 2003; Wiggins & McTighe, 2007).

Signs of a toxic culture are then easy to track, according to Wanger (2005), they find expression in overwhelmed teachers, who experience no joy in teaching, in few parents who attend conferences, in evidence of a 'glass ceiling'-teachers and managers who keep working harder than ever, adding programs, without managing to lessen the tension and stress felt, with people blaming each other for the circumstances. The interesting questions though, are - what evidence would one hope to find in a diagnosis as signs of a 'healthy culture'? And, what culture would one hope to help create through reform?

Wagner (2006) specified main and important aspects of a healthy school culture, emphasizing professional collaboration- staff working together, dealing with professional issues, affiliative collegiality-staff enjoying work together, a feeling of worthiness, belonging and self determination towards improvement .Crane (2007) defined the main parameters of a 'good culture' (the 7 C's) as having a Clear Course, Commitment, Communication, an open and comfortable feeling towards Change, Collaboration, and having Coaching in the organization.

There is much research about the significant length of time needed to change a school (Brown et al., 2006). It may take several years to master new and different instructional and management strategies. Nevertheless, encouraging signs such as

leadership, momentum for change, organizational infrastructure and the creation of new knowledge (Brown et al., 2006) indicate a cultural change and support it. No reform or change can succeed without cultural support according to Deal & Peterson (1999). Implementing new ways of work necessitates the establishment of a 'domain of enduring change' (Senge et al., 2000) by the organization, an openness to improvements. This can be done by creating norms of sharing and collaboration, next discussed, and by establishing an environment characterized by mutual trust and respect amongst the whole school community, which will be presented later.

### 2.8.2 Collaboration

"Education is about collaboration" said Fullan (2003, p.58). Teachers must meet and talk, find creative solutions to increase collaboration where a constant creation and exchanging of knowledge takes place.

"The norm of closed classroom doors must give place to norms that promote collegiality and shared responsibility" (Schlechty, 2005, p.138).

The system barriers introduced the concept of and the need for collaboration in the first place, in contrast to that of isolation patterns of work common in schools (Rebora, 2007; Muhammad, 2006; Hall & Hord, 2006). Teachers tend to operate thinking their contribution is an individual effort rather than a collective one. Educational leaders must therefore "foster the belief in the power of collective efficacy" according to Sparks (2005, p.101), to eradicate the tendency towards isolation. Breaking through the culture of isolation, replacing the habit of bound cultures inhabited by educators in school may help teachers become more connected to each other, to students and to students' needs (Wiggins & McTighe, 2007). Desforges (2002, cited in Roberts & Henderson, 2005) recognized the need for practitioners to work collaboratively in order to make sense of the knowledge and understandings of learning and teaching, so that it can have an impact on classroom practice and therefore on the learning experiences of the pupils. Harris (2001) stressed the importance of communication and collegiality in school work, referring to "a climate for collaboration" (Harris, 2001, p. 483). Achieving a climate of effective professional collaboration according Reeves (2009) requires time, practice and the accountability of each one of the teachers. Collaboration helps teachers to see themselves as part of a team - within departments and between departments in school,

fostering and maximizing opportunities for teachers to work together. Brown et al.(2005) reported on a large scale research, conducted in the USA over a period of two years, using information from more than 50 schools, 20 districts, universities and coaching organizations. One of the main case studies presented in the research, from CLG (Change Leadership Group) at Harvard graduate school of education, conducted a program which was focused on developing and understanding the relationships between human development and organizational growth. The CLG found that working on three continua were the most important in developing schools (Brown et al., 2005):

- (1) Isolation----Collaboration,
- (2) Reaction----Purpose & Focus,
- (3) Compliance----Engagement,

### **2.8.3 Mutual trust and respect**

Wong & Nicotera (2007) pointed out the importance of relational trust as a catalyst and major component to the school's ability to implement school reform initiatives. The relational trust should be part of the social capital, as the DNA of a school community: relations of trust between teachers and students, teachers among themselves, towards parents and towards the principal (Sergioiovanni, 2005). The "courage and capacity to build new cultures based on trusting relationships" (Fullan, 2003, p.45), creating an atmosphere in which truth is heard, and employees speak-out (Maccoby, 2005).

Collins(2001) referred to the desired atmosphere, in which attentive listening to people, to their truth, takes place. There is a great difference between "giving an opportunity to 'say your word'" he said, and the "opportunity to be listened to" (Collins, 2001, p .115).

In schools, Wong & Nicotera (2007) said, positive trust levels are more likely to help improve achievements which is commonly the school- reform goal.

Anderson (2010) said that both trustworthiness and trusting must be evident for high levels of performance: with teachers, students and parents. Trustworthiness Anderson (2010) added, is more difficult to establish, as it creates a risk of losing control and of vulnerability.

Another aspect stressing the importance of creating high levels of trust and respect in school community, is demonstrated in Linckona & Davidson's (2005) following quotation-

"We cannot hope to improve student achievements, decrease disciplinary problems or increase retention unless we can improve the quality of relationships student experience" (Linckona & Davidson, 2005, p.214).

These words stress the importance of modeling the desired relationships, based on trust and collaboration. Modeling, 'walking your talk' is always an imperative condition for implementing any value or behavior. Modeling the quality of relationships among adults in the school has another advantage because adult relations in school are known to be strong predictors of students learning successes (Sparks, 2005).

And last but not least-

*Relationships are the mirror in which you discover yourself*  
(Krishnamurti, in Crane, 2007)

Up to here the **need for change** in schools was discussed. Change, as described, does not develop by itself. Creating change in school necessitates generating an **organizational culture** that is able to accept and contain change that "draws forth new attitudes, beliefs, skills, capabilities, awareness and values" (Senge, 2000, p.334). **Learning** was discussed as well and explained as essential in any change process. Due to the importance of learning, the leadership needed for change should be supportive, knowledgeable and actively transferring knowledge (Senge et al., 2000; Wong & Nicotera, 2007). Costa & Garmston (1999), specified the management culture of work to be one

"Where skilled **coaching** creates a climate, a surrounding and context that reinforces the workers and teams toward achieving results" (Costa & Garmston, 1999, p.4).

Costa & Garmston's (1999) ideas are based on understanding the need for educational workers to continue and professionalize, increase their personal creativity, their collaborative skills and to constantly learn. Educational institutes that establish coaching relationships 'coaching organizations' (Robertson, 2005), are education

cultures which focus on continual learning, improvement towards meeting student needs. Schools with such cultures are characterized by "flexibility, innovation and the ability to adapt to change" (Robertson, 2005, p.41). **Coaching in school**, is at the most developed form, as a **coaching culture** in school, when everyone in school is "coached, and has the opportunity to coach" (Creasy & Paterson, 2005, p.18).

Creating the coaching culture in school

"Delivers - mutual respect, support, trust and a sense of self belief"(Creasy & Paterson, 2005p.70).

According to Professor Elmore from the Harvard School of Education (cited in Keller, 2007), coaching is especially useful in school when combined with organizational learning. I hereby present the **coaching culture** as a school culture supporting change and improvement, fostering both organizational and personal-professional learning for the whole school community.

The **coaching culture** was the main topic Clutterbuck & Megginson (2006) spoke about. They stressed that a clear link was found through research results, between employee communication and their performance. Communication is, according to Clutterbuck & Megginson's (2006) findings, supported by the cultural values mentioned- credibility of leadership, trust between people, scope of knowledge exchange and clarity of purpose.

A **coaching culture** in school fosters success. An ever widening nurturing spiral-

Coaching culture → Better performance → Coaching culture

How is a coaching culture expressed in schools? and  
What benefits for school performances does a coaching culture hold?

## 2.9 A Coaching Culture in School

In this sub chapter I shall speak about the natural way coaching fits into schools. First I will discuss the coaching culture characteristics in school (2.9.1). Part 2.9.2 will present expert school coaches. The management's role in a coaching culture is presented in part 2.9.3. Part 2.9.4 discusses using reflection and feedback and part 2.9.5, speaks about using coaching within teams. The last part, 2.8.6 presents evidence of the success of coaching in schools.

### 2.9.1 The characteristics of a coaching culture in school

Staessens (1993, cited in Hall & Hord, 2006) described in his research three main types of school culture— the 'family type', the 'professional organization' and the 'living apart-together'.

A coaching culture in school could be seen as combining the first two types into a highly professional organization of closely welded and committed staff.

This, being a high capacity type of school, is suggested to be according to McBeath (2003, cited in Roberts & Henderson, 2005), one that is strong on social capital and professional work. Teachers routinely reflect critically on their practice, sharing with others their findings and triumphs (not only their disasters). Teachers listen sensitively to one another, exchanging ideas, acknowledging differences and learning from them.

A coaching culture demands

"A morally rigorous and humanistic approach to work ...where commitment to grow the organization is embedded in a parallel commitment to grow the people in the organization" (Clutterbuck & Megginson, 2006, p.19).

Growing the organization and the people in it is similar to the professional- family type combination suggested before.

Crucial to creating a coaching culture according to Clutterbuck & Megginson (2006), is having a 'coaching energy field' showing that coaching is high on the school agenda and consisting of beliefs and values supporting learning, sharing and disseminating the knowledge created, organizational knowledge and professional- personal knowledge. The educational leadership is about the "actions taken to improve opportunities for leaning"(Robertson, 2006, p.40). Having a coaching culture in school, in which staff support, share and "celebrate each other's diverse talents and



skills" (Tolhurst, 2006, p.5), creates an environment where there is no such thing as failure. Success and failure are viewed as learning experiences; no fear is connected with failure. In such an environment staff performs well, feeling valued and nurtured. A coach in school can be anyone who acts upon a coaching attitude, intentionally or naturally. The coach could be the principal, a head of a department, a teacher, a parent, even a student. They could be trained in using coaching skills or using natural intuitive manners of coaching. Coaching in school can be anything from leadership style to a whole school structure involving the principal, managers, teachers, pupils, parents and teams developing both the interpersonal capacity as well as personal capacity (Suggett, 2006; Roberts & Henderson, 2005; Brown et al., 2005). Individuals and /or groups may be coached, the core quality being- building confidence, "whether coaching an individual, a leader or a group" (Tulpa, 2007, p. 41). Coaching may take place as informal conversations, on the one hand and with specialists on the other, when coaching for specific areas of knowledge (Fullan, 2003). This is usually done by a professional outsider, invited into school to use her/his expertise to help create change or specific needed improvements (like for instance, the role of the KCM coach, the researcher role in this WBP). Many staff development interventions conducted by professional outsiders, focused on all levels (teachers, leaders or teams), use coaching as a "method, technique, skill, program or training" (Henderson, 2011, p.16).

The more people in school become involved in coaching, the quicker the coaching culture takes root and gradually becomes both routine and safe. (Suggett, 2006; Neufeld & Roper, 2003). As coaching in school becomes more frequently used, more people coach and are coached and more school members internalize coaching values and act upon a coaching attitude. Gradually, a coaching culture is created, changes may take root faster and significant improvements may be reached.

### **2.9.2 School expert coaches**

The most common experts- outside coaches deal with instructional mastery or curricular practice, mainly relevant to technical work: the 'content coach' or 'academic coach' and the 'cognitive coach'. The first is almost synonymous to professional tutoring the last is more process oriented and less committed to

goals and action. These coaching experts are usually specially trained teachers with specific expertise (Wong & Nicotera, 2007; Allen et. al, 2008; Griffiths, 2005). 'Reform/Change/Capacity coaches' develop whole school capacity and work more on an organizational level. They examine resources such as money, time and personnel, and allocate them more effectively. They deal with development of leadership as well. (Yoon, 2008; Allen et. al., 2008; Brown et al., 2005). 'Reform/Change/Capacity coaches' are often tied to a particular program and have usually a specific vision of how individual schools need to improve and what should be done there, which may seem more as an expert-adviser attitude (Coggins, Stoddard & Cutler, 2003; Yoon, 2008; Allen et al., 2008). Most of the literature is focused on content coaches, specifically literacy coaches, which is the most common content area in which coaches have been implemented (International Reading Association, 2006, cited in Yoon, 2008). Another expert type of coaching districts according to Keller (2007), are 'student achievement coaches', who work with teams of teachers and discuss mapping and monitoring progress.

The work done by all these coaches is mainly focused on one of the four following forms - Technical work, problem solving, reflective practice or collegial team building (America Institute for research ,AIR, 2004 ,cited in Husbrouck & Penton ,2007). Knight (2009) added, that all school coaches have the following characteristics in common- All focus on professional practice, their work is 'job embedded', intensive and ongoing, it is dialogical and involves partnership. Coaches in school usually work one-on-one with teachers in their classrooms, modeling lessons, and conducting structured classroom visitations that include pre-visit planning, classroom observation and debriefing after the visit (Brown et al., 2006), as their goal is to facilitate the transfer of newly acquired knowledge and skills into actual classroom practices.

Coaches have no formal authority "Their credibility depends only on knowledge skills and the trust they establish" (Neufeld & Roper, 2003, p.17). Coaches negotiate reform work and their own legitimacy as leaders of reform, added Coggins, Stoddard & Cutler (2003). For effectiveness in the coaching process with an expert coach from out of school, teachers and management should accept the coach as person, her/his role and the activities s/he brings.

### **2.9.3 The leader's and management's role in a coaching culture**

The leader's role in school is monitoring the quality of teaching and learning. Coaching, "enables leaders to focus more directly on the quality of education" (Robertson, 2005, p.62).

The leadership team and the principal personally, play a key role in the process of creating and supporting coaching both in ideology and in practice.

Managers in a coaching culture school, use coaching as a leadership style, coaching as a way of leading according to Tolhurst (2006), not a separate set of activities. The school leadership is no longer about supervising others, but about leading through coaching (Kee et al., 2010). In the relations between management and subordinates according to Whitmore (2004), there are actually two options; either giving instructions (telling what to do) or leaving subordinates to manage for themselves. Coaching has "the benefit of both ends with the risk of neither" (Whitmore, 2004, p.23). Another advantage to managing in a coaching attitude is that otherwise managers tend to retain the problem as well as the responsibility for finding a solution for it, whereas using coaching "maintains the ownership of the problem where it belongs" (Crane, 2007, p.121). With coaching as a management style, the manager-coach, creates a collaborative and democratic relationship, different from the "traditional boss directing the team model of leadership" (Tolhurst, 2006, p.239).

A study reported by Holmes (2003) consisted of Semi structured interviews with 10 head teachers who had identified the coaching style of leadership as relevant to them. Other than that similarity, they were broadly balanced (age, experience, gender).

Holmes (2003) used focus groups as well and spoke with leaders from the business sector to add understanding and compare ideas. The study aimed to answer amongst other questions- what factors affect the likely success of coaching as a leadership tool.

Two of the main conclusions suggested being clear about the intended results and focus of coaching partnerships, and the use of coaching as a tool aligned with the overall aims and values of the school in the transformation process.

In order for a leader to use a coach attitude well, he should have a good work-life balance according to Tolhurst (2006). It is therefore essential for the principal to undertake coaching sessions himself, especially at the early stages of creating the coaching culture in school.

"Although leaders may be at different stages of their career, all need ongoing opportunities to renew, refresh, and redirect their educational practice at times" (Robertson, 2005, p.24).

Coaches do not tell leaders who are being coached how to lead, but rather assist them to reflect critically on their practice, encouraging them to "grow their own answers" (Tolhurst, 2006, p.15) allowing leaders to act as agents for growth to know they can contribute and "develop a system rather than being a cog within it" (Robertson, 2005, p.194). Coaches help principals focus more on a leadership than on a management view of the educational system. They help head teachers to clarify to themselves their values and beliefs thereby focusing their personal vision. Later coaches may assist the principals to establish a common school community vision. Coaches facilitate the transfer of coaching skills so that leaders become coaches to their staff (Wise & Jacobo, 2010). A recent study by Henderson (2011), surveyed 4000 educational leaders from New-Jersey. Survey participants spoke about the importance of coaching principals for the achievement of better performance. The main advantage to being coached, they found, was the opportunity to use reflection and high quality feedback. Coaches work closely with the principal to plan changes with leading teachers, with teams of grades or departments (Coggins, Stoddard & Cutler, 2003).

Principals as a result, lead by example as they develop and model their ability to reflect critically on practice and help develop this skill with others (Kee et al., 2010).

Accordingly, and in coordination with the ideas above, a suggested description defining coaching in school could be-

"Coaching in the school environment is a personal and/or group learning process focused on the pre-defined educational vision formulated by the client. Coaching is transformational; it is personal and professional growth oriented; it focuses on the present and facilitates planned and deliberate movement towards desired mile-stones. It is action oriented, assists building clarity of purpose and goals and helps plan the way towards achieving them"(Kreindler & Beskin, 2008, p.2).

#### **2.9.4 Using Reflection and Feedback**

Considerable time and energy are devoted to personal reflection in a school with a coaching culture. The supportive environment enables one to take action on reflective insights and review them with others, according to Mezirow (2000). Learning occurs when events are "interrogated through critical reflection or discussion" (Cox, 2003, p.11).

Building a coaching culture is about creating a 'reflective space' creating opportunities to call a halt to the "frenetic pace of 'doing' and to refocus on 'being'" (Clutterbuck & Megginson, 2006, p.7). Through reflection, people can think critically about their actions, understand the reasons for them and plan their new goals and the effective performance needed to achieve them. The leader is responsible for establishing the framework which specifies the ways in which collaboration and reflection will work in school (Wong & Nicotera, 2007). While leaders may recognize that reflection is important, they find it difficult to put aside time which needs to be structured into the business of leaders and the tight schedules of staff (Robertson, 2005). Reflective dialogue must become a continuous inquiry that builds changes as constructivist theories of learning suggest. Teachers should use reflection and action research methods using data for self reviewing thus providing more development targets related to teaching and learning (Harris, 2001).

Using feedback is one other important activity coaching and working in a coaching culture school provides, with professional coaches, with manager-coaches, amongst peers or within groups and teams.

Feedback helps coachees understand the way s/he is perceived by others (Fillery-Travis & Lane, 2006). It is information from the environment about performance, a process of learning about working relationships and dialogue,

"A two way open ended flow of communication, that balances listening and speaking for the purpose of learning (Crane, 2007, p.104).

Whitmore (2004) Presented a different point of view, saying that feedback should be from within as far as possible, rather than from experts or from the outside. Such information, Whitmore (2004) said, is essential for continuous improvement. Reeves (2002) presented feedback as part of an action oriented process

"Feedback is not about transmission of information. It is about using that information to change us" (Reeves, 2002, p.127).

Feedback must therefore be followed by questions such as –

What did I do well?

How can I use this knowledge?

What will I do differently now?

How and when will I know I am making progress?

Answering these questions should be followed by taking new intentional action.

As seen, the term, 'coaching' includes activities related to "developing the organization capacity of whole schools" (Neufeld & Roper, 2003, p.5). Helping principals and teachers improve their work. Workshops and other methods of professional development do not come close to doing the job, as there is little if any evidence of learning transferred into the classroom (Keller, 2007; Cornett & Knight, 2008). Things learnt while engaged, according to Schelechy (2005), are possibilities, they are a refreshing change, a counter ballast to top down development models usually used in education, (Powel, 2001, cited in Rogers, 2004).

### **2.9.5 Using coaching within teams**

High level teaching needs means of performance management - measuring performance, and coaching in teams offers this opportunity in school (Tolhurst, 2006). Neufeld & Roper (2003) explained that coaching in groups and teams in school, is more effective, and creates the coaching culture faster. Most of the team coaching is usually amongst department members (Husbrouck & Penton, 2007; Creasy & Paterson, 2005). Team learning, according to Senge et al. (1999; 2000), necessitates the transformation of communication skills. The alignment starts with the ability to see and respect each other and establish common mental models regarding reality.

#### **'Group coaching'**

"Offers an opportunity to accelerate learning through the synergy of shared knowledge ... in a learning community" (Carnahan et al., 2004, p. 20).

It is more than a meeting, a conversation or sharing ideas, it is using group strength to assist participants in maximizing their talents and discovering barriers to their learning and growth, and together finding ways to cope with and overcome them. It helps develop awareness. The more aware a team becomes both individually and collectively the better it will perform (Whitmore, 2004). The team leader ('h.o.d'- head of department), must encourage her/his staff to be reflective practitioners, to think about how they learn and about the values and overall strategic directions of their work in school (Tolhurst, 2006). According to DuFour (2004), the questions to be constantly asked in this context are about the student's learning-

What do we want students to learn?

How will we know when s/he has? and

How to respond to difficulties?

This work is conducted as group coaching and /or is often done using peer coaching. Traditionally, as part of professional development, group coaching should have been part of the department head's job (h.o.d), s/he being a most important component in creating the coaching culture (Suporvitz, 2006). Unfortunately, many h.o.ds tend not to take responsibility for this, and use professional, outside coaches for this matter instead.

Peer or co-coaching, is used to encourage teachers to exchange ideas and reflect on teaching practices and student learning. Two colleagues agree to support each other in professional individualized and sustained learning, in self evaluating of their own teaching (Wong & Nicotera, 2007; Tolhurst, 2006; Husbrouck & Penton, 2007; Fullan, 2003). The manner of supporting others using peer coaching can include pupil to pupil coaching as well, expanding the coaching culture even more (Creasy & Paterson, 2005). However, effective peer coaching requires quality training in order to develop the relevant knowledge and skills for teachers to advance each other and themselves (Wong & Nicotera, 2007). The Gateshead 'triangle method' was proposed by consultants as a way of introducing the coaching process into schools and supporting the implementation of it (Roberts & Henderson, 2005). It is used to generate dialogue and reflection about learning and teaching between teachers within and across departments. The use of the triangular model lets three professionals each take a distinct role in the process- coach, coachee and observer. Each member of the triangle will play each of the roles above. This is to enable each person to experience what it is like to be coached as well as to provide an opportunity to experiment in a safe environment while developing their coaching skills.

Other possible professional developing work used in teams are journaling, forming critical friend groups (CFG), and observing each other's lessons, which is an important means of training teachers, and the most effective method. (Linckona & Davidson, 2005; Bar-Hama, 2006; Tolhurst, 2006; Costa & Garmston, 1999).

### **2.9.6 Evidence of success using coaching in school**

A case study presented by Gilpin (2005) of a primary school with 280 children, and 40 staff members from an urban area in the UK, used coaching as part of becoming a learning organization. A 'Wellbeing project' for adults and students was conducted in the school using coaching and stressing achievements of targets integrated into the process. Although the school had social needs, Ofsted inspection stated, that high quality learning and teaching was found at the top 5%, and that this had been secured through effective coaching and mentoring. High staff wellbeing and loyalty to the school was noticed and members of staff felt valued by the focus on their development.

A larger scale case study was reported by Berrill (2005), regarding the creation of the Bedford learning community in UK, gathering 33 schools all demonstrating a coaching culture in them, and using collaborative activities to achieve "outcomes that are beyond the power and scope of an individual school"(Berrill, 2005, p.5).

An important result was that all of the schools which had been at risk of going into 'special measures' amongst the 33, gained 'satisfactory' grading in their Ofsted test.

Another study reported by Suggett (2006) aimed at describing the impact coaching is having on schools, used interviews of staff from six schools in the UK. All interviewees declared there were profound impacts on staff and pupils and that coaching enhances the social/emotional atmosphere of the school. Coaching, said Suggett (2006), is an investment in time and money and the greater the investment the "greater the benefits both to the individual and the organization" (Suggett, 2006, p.11). Conclusions from this study suggested, that for best results, the coaching strategy should be tailored to suit the organizational readiness of each school, reflecting its unique context and particular circumstances.

A 3 year study of the Pennsylvania High School Coaching Initiative (PAHSCI) was reported by Brown et al. (2006): Instructional coaching was used in 26 high-need high schools in nine school districts in the USA, to improve teachers' classroom instruction. The research showed how effective coaching was in supporting development and school change according to The Annenberg Institute for School Reform (2004, cited in Brown et al., 2006) -

- Effective coaching encourages collaborative, reflective practice.
- Effective coaching promotes positive cultural change.



- Effective coaching supports collective leadership across a school system.

However, the main accomplishment presented in the first year's document of the research, was the sheer fact that the model was used. Although subsequently, the achievements of the students were hoped to have improved, how this would occur and be evaluated was not specified, no specific measure was mentioned. The focus of the study was on getting the coaching into school at all levels.

This leads my discussion to the very important issue of evaluating coaching processes.

## 2.10 Evaluating coaching processes

Evaluating a process necessitates acceptable measuring procedures that may indicate the change and progress achieved. Part 2.10.1, will show that this is not an easy task though some ideas are presented.

As coaching was shown to be a means for fostering learning, I considered it relevant to speak about the transfer of learning from the coaching process as an indicator of evaluating it (2.10.2).

### 2.10.1 The difficulties of measuring coaching effect and some solutions

Leedham (2005) estimated that less than 10% of the American organizations and 19% in the UK evaluated the impact of coaching. This, Leedham (2005) said, was no surprise and was due to the fact that evaluating coaching processes is not simple and gets even more complicated when considering coaching processes in schools, where information such as income or ROI do not exist. Coaching effects, according to Greif (2007), are both tangible, such as productivity, and intangible such as leadership or relations.

The

"Difficulty of coaching outcome research is the extreme heterogeneity of issues, problems, and goals...in different coaching interventions"  
(Greif, 2007, p.223).

Every intervention, Greif (2007) said, can be seen as a special case and therefore it is impossible to use a given set of measurements for all performance improvement. Grant & Cavanagh (2004) produced a review of all peer reviewed papers, published up to 2003, on topics close to coaching (business sciences, behavioral sciences, organizational sciences and adult education ,excluding sport coaching and one to one tutoring in education). Grant & Cavanagh (2004) said that only from the late 80s' did empirical work start trying to estimate the effectiveness of coaching processes. Many authors, according to Leedham (2005), suggest that coaching has an impact on the bottom lines, and it may be therefore worthless to spend energy, time and money showing direct links in measurable terms. For instance, coaching seems to improve confidence, which is the most common benefit associated with business results according to 23% of participants in a large business survey (Leedham, 2005). In my early research (Beskin, 2005, Kreindler & Beskin, poster 2006- appendix 1) a head-teacher's coach shared his thoughts with me during his interview-

*"Coaching is very effective ...I don't know how measurable it is... counting on feelings to check success is a weak point in terms of evaluation"* (Beskin, 2005, p. 48).

This quotation echoed what I had read during those days-

"Evidence for the effectiveness of mentoring and coaching, and evidence which points to the benefits of such approaches, is based predominantly on the perceptions of participants.... Whilst the perceptions of the key participants must undoubtedly be central to any evaluation, these do not necessarily tell the whole story. It would be beneficial for further research to be conducted, which seeks to establish the subsequent impact of mentoring and coaching on the performance of heads". (Hobson, 2003, p.iv).

Methods for evaluating coaching, which are based only on recipients perceptions are not reliable enough, agreed Leedham (2005), but at the present time there is no accepted way of evaluating the added value of coaching to the individual or to the organization. As a researcher, this leaves options open in many directions - different methods and research paradigms. It would be useful, according to Grant & Cavanagh (2004), to develop research methods with an increasing emphasis on objective quantitative measurements of outcomes. Griffiths & Campbell (2009) said that although outcomes can be varied according to different forms of coaching, there are a range of qualitative and quantitative studies which "demonstrate universal outcomes of coaching" (Griffiths & Campbell, 2009, p.16). Grief (2007) analyzed dozens of

such documented researches on coaching, and suggested two types of measured outcomes-

1. General measures of success – client satisfaction, degree of goal attainment. These are not typical of any specific intervention and could be similar to measurements in other close fields he said.

2. Specific outcomes measurements- these outcomes depend on the research question. Grades are a natural example for this type of result according to Greif (2007).

According to Stewart, O'Riordan & Palmer (2008), coaching evaluation, like the evaluation of other development interventions, can be divided in two; summative, which seeks to explore effectiveness in terms of outcome evaluation, and formative which is meant to explore the ways in which coaching works and which parameters influence its effectiveness.

Passmore & Gibbs (2007) went further, demanding that the field of coaching should have studies using large samples and control groups with a random selection of participants. Franklin & Doran (2009) presented such a study, demonstrating the benefit flow on improvement of objective performance measures by blind evaluators who were not connected to the coaching. They described their unique study, which was designed for two first year student groups to be coached, using two different models of coaching. Their academic results were compared to results of a wide group of students who did not receive coaching. Findings showed a significant effect on non tangible variables using self pre-post questionnaires but no difference in academic achievements, the tangible variables. This type of study should become the norm in the field of coaching, according to Passmore & Gibbs (2007), and not the exception. Evaluating is an integral part of coaching, discussed along the process and at the end of it. Effective evaluation is designed from the beginning, as part of planning the coaching process, the desired achievements. It is done by relating to questions such as 'what will be considered success? What will success look like?' The precise answers to these questions are a means for evaluating the process and are mainly important to the coachee her/himself or for the organization the coachee is a member of. The objective measures defined as marking milestones and benchmarking successes, trigger organizational knowledge, management and learning, and help fine tune the coaching process itself (Kreindler & Beskin, 2006; 2008).

As seen, evaluating has subjective aspects and coachee's satisfaction for instance, is an important component of it. Evaluating coaching should also hold some objective data important for the precise identification of achievements by the coachee and/or the organization (school). This is important and enables the acknowledgment and celebration of success. Objective data has an additional and important benefit for professional matters. It may be used for self evaluation by the coach and for comparison with other coaching processes as part of the effort to base coaching theory.

### **2.10.2 Transfer of knowledge and skills**

One of the most important and relevant issues studied in education and in psychology fields is the transfer of newly acquired knowledge and skills. This topic is discussed while considering all types of learning, it is therefore as interesting and relevant to speak about transfer concerning learning through coaching. Coaching processes are meant to bring forth change by learning-

"The coach facilitates learning that produces change by enhancing the client's current skills or assisting in learning new skills or the transformations of new values, beliefs or behaviors" (Kristal, 2010, p.45).

Therefore the transfer of knowledge and skills from coaching is a relevant issue to consider.

One of the main questions asked about learning is:

"How to ensure the transfer of learning from the classroom to the workplace" (Merriam & Leahy, 2005, p.1)

The answer to this question has been challenging adult educators and trainers for decades.

All learning involves transfer of some sort, as no knowledge may be considered 'learnt' if it is not evident in some other occasion or context (Salomon & Perkins, 1989). Transfer is defined as the continuing application of knowledge and skills gained in learning activities by the learners in their performance, to another individual or to the organization (Broad, 1997 cited in Merriam & Leahy, 2005). In a review of studies on the topic, Merriam & Leahy (2005) found that social support by supervisors and peers are the most predictive variables of transfer. Billet (2002) added

that authentic learning linked to actual practice is necessary in order that transfer will occur.

## 2.11 Summary of literature review

"There is strong evidence that coaching promotes learning and builds capacities for change in school" (Creasy & Paterson, 2005, p.4).

Creasy & Paterson (2005) added and said –

"School leaders are increasingly recognizing the value and importance of using coaching as a key skill both in their own professional development and their staffs"(Creasy & Paterson, 2005, p.70).

Establishing frameworks for coaching activities and fostering a coaching attitude throughout school promotes community- ties and commitment to work on the part of both students and staff. These ties increase the trust level between all community members, create a safe and collaborative environment and defeat staff isolation. When learning efforts; organizational learning and personal-professional learning become systematic and aligned with a shared school vision, a clarity and focus on school targets crystallizes. Basing school work on the value of achievement catalyzes the progress further.

The coaching environment thus created helps school work and fosters school transformation; the highest level of progress and change.

*Nothing changes without personal transformation* (Deming, cited in Senge et al., 2000)

The experience gained while working and coaching at schools over the years, supported by wide reading and the experience of others, brought together and summarized in the literature review, helped KCM1- Katom school coaching model to gradually emerge.

KCM1, the frame of work examined in this research, is described in the next chapter.

## 2.12 KCM1- Katom school coaching model frame work

Following an extensive review of existing theory and good practice benchmarks in my own practice, the KCM1 model was developed and became the expression of the coaching theory developed by Katom Praxis. The KCM coaching model for schools is the 'theory-first' for this research (Bell & Opie, 2002) and the WBP's objectives are to test and improve it. Hereinafter the coaching process is outlined, providing an insight into the scope of work. The actual work is tailored for each and every school, aimed at facilitating the performances of excellence by management, teachers and students.

KCM1 presents a holistic organizational version of coaching, it is a dynamic model which facilitates excellence by using six lenses which help plan, monitor and evaluate the coaching process- measuring three school quality variables and tracking three major processes as follows-

The three school quality variables-

- Pedagogical learning outcomes
- Socio-cultural learning outcomes
- Administrative learning outcomes

The three major processes-

- I The internalization of the school's learning community's common vision.
- II The management of organizational learning;
- III The management of personal and professional learning; thus forming a coaching culture.

Work in school using the KCM1 is conducted according to the six developmental stages-

- 1. The diagnostic stage** –re-articulation of the school's vision. Diagnostic test using the DISC questionnaires. Data collected from school records. Collaborative design of the coaching program to be implemented.
- 2. Mile stones** – a contract- the first milestone indicating what improvements are expected .A collaborative action plan. Success criteria for the process are defined and celebration of success is planned.
- 3. Coaching** Personal and/or group coaching take place in accordance with the contract.

**4. Fine tuning** –Coaching outcomes and milestones reached are co-operatively evaluated by the leading school management team and by the coaching team. The coaching action plan is focused and re-focused as needed

**5. More Coaching.**

**6. Summary and maintenance** – Post diagnostic test (DISC). Objectives are affirmed. New objectives are set toward the actualization of the vision. Planning ways to maintain and strengthen the achievements realized.

More details about KCM1 are presented in Chapter 5 as part of the discussion, and include information about its development to become KCM2. More information about the DISC questionnaires is presented in chapter 3 as part of the methodology of the research.

Finally, from the literature review and praxis emerged the following research hypothesis and research questions

## 2.13 Research hypothesis and questions

It is typical in education evaluations to address 'outcomes' by hypotheses and 'processes' using questions (Yin, 2006), which is what will hereby be presented.

**The Hypotheses** which follow, are connected to the KCM model presented-

H1. Learning outcomes in a school are significantly strengthened by KCM coaching intervention.

This hypothesis was divided into three hypotheses (H11, H12, and H13):

H11– Pedagogical learning outcomes are strengthened by the KCM (PLO's),

H12– Socio-Cultural learning outcomes are strengthened by the KCM (SCLO's),

H13 – Administrative learning outcomes are strengthened by the KCM (ALO's).

H2. The KCM coaching intervention significantly strengthened and promotes the three core school Processes.

This hypothesis was divided into three hypotheses (H21, H22, and H23):

H21 –Vision internalization is significantly strengthened by KCM coaching intervention.

H22 –Organizational learning is significantly strengthened by the KCM

H23 –Personal and professional learning, forming a coaching culture in school is significantly strengthened by the KCM coaching intervention

H3. Learning outcomes in school and the three school core processes are in simultaneous progress during the KCM coaching intervention.

**The Questions** presented, are ones which emerged from the literature review.

The questions do not only have academic value, but also have practical applications, as suggested by Linley (2006). The questions are either confirmatory or exploratory questions, enabling both to "verify and generate theory in the same study" (Teddlie & Tashakkori, 2006, p.19).

The confirmatory questions are meant to deepen understandings derived from confirming the hypotheses, and to add validation to conclusions reached (Q1, Q2). Answering the exploratory questions is meant to create new knowledge (Q3, Q4).

Q1 Which learning outcomes have improved during the KCM coaching intervention and in what manner? Were there outcomes not enhanced? Why was that?

Q2 What are S-school's characteristics after having gone through the KCM coaching intervention?

Q3 In what ways can the KCM coaching intervention be evaluated?



Q4 In what ways had my work improved during the intervention? What more may be done?

Q41– In what ways had my professional work as a coach improved during the intervention? What more may be done?

Q42– In what ways had the KCM model improved during the intervention? What more may be done?

## Chapter 3 -Methodology

*"Only through doing can one learn how to do"* Aristotle

This study was undertaken in order to construct new knowledge about coaching in schools, to evaluate the effectiveness of the Katom school coaching model (KCM1) and to construct new knowledge about the coaching processes.

The coaching intervention took place in Israel at S-School over the duration of 18 months. The first part of the study ran for one school year, between August 2007-June 2008. The second part of the study continued for an additional 7 months (until February 2009), during which findings were cross checked and verified to add to their generalizability. In addition, the effect of the intervention and its sustainability were monitored. The coaching was conducted with the school managing team, and its express goal was to improve school performance. As coach, I participated in monitoring the development of school processes and collected evidence about the quality of learning outcomes. In a parallel manner, I monitored my own expertise as a coach.

This chapter begins with section 3.1, presenting the discussion over the methodological choices made, leading to the crystallization of the research paradigm of choice, a mixed method research based on a single case study. A case study framework was chosen as the most suitable approach to study both a school improvement program and a coaching intervention (Stake, 1995; 2006; Yin, 2006; Hord & Hall, 2006; Passmor & Gibbs, 2007).

Next, I explained the choice of research tools with the study's objectives in mind, the nature of the research field, of the participants and the research questions and hypotheses (3.2). Section 3.3 summed up both earlier sections, presenting the research design including a diagram of its various phases on a time line. Then, in subchapter 3.4, the research field is described, followed by a review of the characteristics of the research participants and the role I played as the researcher (3.5). In section 3.6 the research variables were defined for the quantitative needs of the study. Issues of validity and reliability were dealt with in part 3.7 followed by an engagement with ethical issues (3.8). In section 3.9, I described the research as it took place; the different stages of the study and the difficulties encountered during the research. Lastly, the DISC questionnaire design and validation process was presented (pre

research stage), including the main findings from the process. At the end of the methodology chapter in 3.10, I provide a summary of the chapter.

### 3.1 The research paradigm

Epistemology is the branch of philosophy dealing with ways of knowing and understanding reality. It is a field dealing with the nature of human knowledge and ways of verifying it, in order to understand better behaviors, tendencies and points of view (Birenbaum, 2000; Kantrovich, 2001). Since this study was undertaken to construct new knowledge about coaching in school, a decision had to be made upon the most suitable way for 'meaning forming' in this study, the active process of creating shape from the raw experience, and interpreting the information provided (Mezirow, 2000). Thought was given to the meaning of knowledge, due to the fact, that how one conceptualizes knowledge is central to knowledge production (Hughes, 2003). The emphasis is not on "what we know, but on our way of knowing" (Mezirow, 2000, p. 52). Less 'what happens to us' and more "what we make of what happens to us" (Huxley cited in Hughes, 2003, p.52).

Having given thought to the implications of 'meaning of knowledge' and of 'constructing new knowledge' in this study, I decided it was necessary to find ways to measure, as objectively as possible, the effect and change achieved by the coaching according to given criteria. This made the quantitative paradigm essential. In addition, I understood it was required, interesting and enriching to collect data in the form of school staff's perceptions about their experiences while going through the coaching process. The need to use my reflections over my experiences as their coach was also necessary. These needs called for qualitative methodology as well. I therefore assumed that findings suited to bringing forth a better understanding and usage of coaching in the educational system must be gathered by both interpretive and measurable means.

The decisions were commensurate first with my practical experience as a professional; derived directly from my main conclusions in my early research (Beskin, 2005), as presented in the introduction.

Secondly, but most importantly, this decision reflects my personal development, or who I am.

My WBP was based on the ontological principles I use to make meaning in both my personal and professional life: a mixed positivist and constructionist paradigm. I completed my University studies firmly in the positivist camp, a math teacher. Over time I developed a critical stance that at first questioned my positivist assumptions about the world, and led me to then, slowly learn to accept a constructivist point of view. Today I have a balanced outlook on life, my meaning making processes draw their strength and vitality from both thinking strategies and that is what makes it possible for me to function as a coach. I feel that my development benefits from the dynamic dialogue and reciprocal fertilization between the two poles of the paradigm – the deductive (the research hypotheses) and the inductive (the constructivist approach) - in the process of building the truth.

The implications of these decisions will be further explained in the next sections (3.1.1- 3.1.3) as I present the mixed method chosen for the research and its design, using one in depth, wide ranged case study.

### **3.1.1 The Qualitative and the Quantitative paradigms**

The quantitative method attempts to test theories in order to determine causes and effects (Taylor & Trumbull, 2000). Typical of this tradition is the measurable investigation, "the effects of a treatment or an intervention"(Newman, 1998, p.18).

This positivist attitude is based on hypotheses created on the foundation of wide knowledge deductively tested, using predictions (Zabar Ben-Yehoshua, 2001). This paradigm helped achieve an objective description of processes studied (the coaching intervention) and enabled measuring the effect of the KCM coaching model.

The opposite paradigm, a qualitative research, is a study of things in their natural setting, in this case the school; trying to interpret the meaning people involved-the head teacher, the school educational leadership and the staff, bring to the setting, the coaching process in the school (Newman, 1998).

This is a naturalistic constructivist approach, in which no manipulations are made on the phenomenon of interest. Complex processes unfold themselves to the researcher, who is either directly or indirectly involved (Golafshani, 2003; Hachohen & Zimran,

1999; Taylor & Trumbull, 2000).

During this study, I was involved in the process both as the coach, and as the researcher, studying coaching effects while conducting them.

### **3.1.2 Mixed Methods -MM**

Nowadays, there is a move toward combining the quantitative and qualitative approaches in the collection and analysis of data, to the extent that some researchers refer to mixed methods as the third methodology or research paradigm (Taylor & Trumbull, 2000; Teddlie & Tashakkori, 2006; Yin, 2006; Cohen, Manion & Morrison, 2011). It has become a common understanding, that-

"Numbers and words are both needed if we are to understand the world". (Miles & Huberman, 1994, p.40)

It is not choosing between words or numbers, between precise or imprecise (Silverman, 2002), it is rather on the continuum, using both the

" 'Technological' perspective of the quantitative with the 'cultural' perspective of the qualitative" (Miller & Lieberman cited in Newman, 1998, p.15).

Considering methods from both ends of the continuum is less dichotomous and makes for a more comprehensive approach (Yin, 2006; Newman, 1998).

A mixed method (MM) research is a synthesis, it draws from the two approaches which are "complementary rather than rival camps" (Jick, 1979, p. 601). It rejects 'methodological orthodoxy' in favor of 'methodological appropriateness' (Patton, 1990 cited in Johansson, 2003). The MM framework is defined, as one-

"In which the investigator collects and analyses data, findings, and draws inferences using integrates both the qualitative and quantitative approaches or methods, in a single study or program." (Teddlie & Tashakkori, 2006, p.4).

The mixed method (MM) approach is particularly well suited and has an essential role in studies of school improvement (Yin, 2006; Miller & Lieberman, cited in Newman, 1998). The Combination of elements from the objectivist and interpretive paradigms "is very useful for explaining ...change process" (Hall & Hord, 2006, p.235). Each approach adds to the body of knowledge by building on the "information derived from the other approach" (Newman, 1998, p.20). It takes into account the need to use

measurements to validate findings and enables the understanding of the world and the behavior of people through their own descriptions.

The KCM coaching model incorporates diagnostic and predictive elements as well as a number of supportive processes that nurture these elements.

In this research, the quantitative phases were designed to try and prove the effectiveness of KCM1 coaching model, a 'theory-first' research (Bell & Opie, 2002), in which the study is designed based on the interest of testing hypotheses. In addition, an important part and goal was the attempt to construct new deep personal and professional knowledge about the following processes-

1. Ways to improve on the theory (the KCM1 as presented in 5.1);
2. Ways to evaluate coaching effect; and
3. Personal expertise.

For these needs, the qualitative paradigm was necessary, to help create a grounded theory derived inductively through systematic collection and analysis of data. Bowen (2006) said that data collection, analysis and theory stand in reciprocal relationship with one another in creating a grounded theory, which emerges out of the data. As a research approach, grounded theory is appropriate for identifying and explaining processes (Bowen, 2006).

### **3.1.3 The research qualitative and quantitative design using a case study**

The research was conducted as a case study chosen to best present the coaching process in a school. "All evaluation studies are case studies" (Stake, 1995, p.95) and my first goal was to evaluate and verify the KCM1. Case studies are well suited to the study of integrated systems and processes such as a school undertaking an overall improvement intervention offered by the KCM1 (Yin, 2006; Cohen, Manion & Morrison, 2011). Most analytical techniques break the system into small parts, study them separately and then put them back together again, trying to find conclusions on the 'whole'. A case study is therefore most suitable for studying a process within a system (Anderson et al., 2005). Organizations, and specifically schools, are systems, whole units, Anderson et al. (2005) said, and should be understood as such, taking notice of relationships and dynamics within it, especially important during the

coaching.

Combining qualitative and quantitative research tools and data (a mixed method), is "well established in case studies" (Johansson, 2003, p.11). Case studies use different and unlimited combinations of techniques, methods and tools of data collecting, to illuminate the case from different angles. The combinations thus achieved are highly synergetic (Johansson, 2003; Pandit, 1996). Case studies are useful for testing a theory (Yin, 1994), which in this research was the foundation of the KCM1 model (see 5.1) and its applications in practice. Case studies are equally useful for describing a process (Lawrence & Hardy, 1999, cited in Anderson et. al., 2005), looking at patterns over time, describing the flow of behavior rather than static situations (Camazine et al. 2001, cited in Anderson et. al., 2005). The processes described in this case study would first be the coaching itself, and in addition, the three school processes mentioned as part of the KCM1 (see 5.1).

This case study created new knowledge, improving the KCM1 and creating the KCM2 by taking the

"Subjective evidence from a small number of people...(and) attempting to identify new patterns or themes in the data"(Leedham, 2005,p. 31)

As an example, a recent study reported by Brown et al. (2006) using a coaching model in schools, used a mixed-methods case study to best look at both the implementation and the impact of a model, much like in this study. Qualitative (interviews, observations, document review) and quantitative (surveys and student outcomes data) methods and data were used. The evaluation had multiple purposes, it was both formative; to help make improvements, and summative; assessing program impact.(Brown et al., 2006).

I chose to use a single case study, an in-depth analysis with multiple sources, usually used within an organization (Jansen, 2010) as the best fit research framework for meeting the WBP research objectives. The yearlong intervention in S-School, a school carefully chosen (as will be described in 3.4), enabled a thorough, in depth investigation. This would not have been possible had one or two more schools been chosen. By choosing one school I gave up the possibility and effect of comparing results and having a wider or more diverse field. One or two additional schools would not have made an important enough difference to make up for the impossibility of deep investigation such as the one I conducted, using the mixed method research, with

the wide range of tools and sources.

During the early stages of planning I considered adopting an action research framework for my study, a personal self reflective enquiry into my own work to "improve and reform practice"(Cohen, Manion & Morrison, 2011, p.345). However, although I had intended to improve my practice during the research, I wanted the main focus of my study to be on adding to the coaching theory and principles which all practitioners of coaching in general and coaching in schools in particular use. Cohen, Manion & Morrison (2011) spoke of the action research as a small scale intervention, and I had planned a wider study, using a range of data-collecting methods and different sources intended to benefit a wide range of coaching practitioners. These will next be explained.

### 3.2 Research tools used for collecting data

Gathering the different types of data, associated with both approaches, served to validate hypotheses, answer different questions or different aspects of the same research question (Teddle & Tashakkori, 2006). All the data represented is

"Pieces of information ...collected in systematic ways to provide an evidential base from which to make interpretations and statements intended to advance knowledge concerning research questions"  
(Lankshear & Knobel, 2004, p.172).

By using different methods of collecting data and different sources of data I had planned to reach 'school level' information and to information which presents the 'personal level', individual's points of view. In addition I wanted to use information from the process itself, as well as information about the process.

Section 3.2.1 presents the tools chosen as best fitted to collect the qualitative data during the study. Then, the tools designed and chosen for collecting the quantitative data are presented (3.2.2). The Delphi Expert Group method is described in 3.2.3, and its use during the last phase of the study. Part 3.2.4 describes the data analysis procedure.



### 3.2.1 Qualitative data tools

Qualitative data was gathered through interviews, document analysis and by using a research diary.

Interviewing is "the art of asking questions and listening" (Denzin & Lincoln, 2000, p.633), which is known to be one of the most common ways to achieve understanding. The questions were to provide the personal point of view in detail, as the quantitative tools gathered the larger scale, school level data (see ahead). Data collected by interviews is "information that would not otherwise have existed" (Lankshear & Knobel, 2004, p.178) and was therefore focused more on the 'how' and 'why' questions rather than on the 'what' (Denzin & Lincoln, 2000). To allow both focusing and openness, the interview was semi-structured. Questions were planned and presented to the interviewees, allowing them to focus around the main processes of the research. The questions concerned values, actions taken and concepts.

Nevertheless, interviewees were encouraged to comment on other items as well, ones they found relevant. (Denscombe, 2002). The openness involved in interviewing and the emotional engagement, from both interviewer and subject, led me to believe that the information gathered this way would be most authentic, vivid and enriching, and at the same time focused on the specific areas of my interest. The interview questions are presented in Appendix 5.

The second type of data used, was documents coachees produced during their coaching which were later analyzed in an 'analysis of documents' procedure (see ahead). This data was chosen and used to capture the 'existing information', the 'what' which was part of the work itself. I could have used for that matter a 'controlled observations' (Nahmias & Nahmias, 1982), in which I would have been documenting actual activities in their natural setting. Such a method of collecting data would have taken much longer, would have been less focused to my needs and I therefore chose to use the existing documents, ones dealing exactly with my points of interest, reflecting actual work done. The documents included coachee's planning papers, papers of self monitoring of their progress and reflections on their actions connected with the coaching.

The last of the qualitative data types I used was a research diary (Appendix 10).

The research diary was used for the purpose of monitoring my own work as coach, and reflecting on it. In a case study it is very important to have a diary or a research log, an intimate reflexive document, allowing me to self monitor the research processes in a chronological flow, mainly for my needs, to reflect on my personal and professional growth (Stake, 1995; Zabar-Ben Yehoshua, 1999).

### 3.2.2 Quantitative data tools

Quantitative data was gathered using the DISC questionnaires measuring perceptions of staff and students; therefore I considered it to be the quantitative 'soft data'.

Questionnaires are useful in taking a picture of a situation (Kaniel, 1997). During the first phase of the research a questionnaire was used to capture and diagnose the situation in the school before starting the coaching model. During the last phase, the same questionnaire was used again, to measure the procedure's effect. Questions can be open-ended, which "invite an honest personal comment from respondents"(Cohen, Manion & Morrison, 2000, p.255) or closed-ended – choosing an answer or answers from a given list, choosing the degree of acceptance (usually 1-5). DISC1+2 (Appendix 13) contains mostly closed ended questions, using the quantitative form of the questionnaire, discrete items of information- numbers or coded words (Blaxter, Hughes & Tight (2001). Choosing this type of questions enabled easy analysis of the data, gaining measurable facts easy to compare . For the research needs, the more vivid, detailed and personal point of view, which could have been exposed using open ended questions, was collected through interviews.

The same questions can be given to all participants or different questions to different subgroups in the research population (Kaniel, 1997). In this study, the research population received two similar versions- one for teachers and another for students, DISC 1 & 2 respectively. Section 3.9.3 describes at length the DISC creation and validation process.

S-School records were the source for the quantitative 'hard data' I collected, using grades, behavior, attendance etc. This type of data was especially important, because of its objectivity, as often

"schools were stigmatized because of the perception that educators used 'soft criteria' and had less accountability ... than effective organizations do" (Conyers & Ewy, 2004, p. VIII).

All the data collecting methods described up to now represent my attempts to study the case and learn about it from as many angles as possible.

The last method of collecting data, which is next presented, was part of my attempt to generalize the findings to wider groups and to other circumstances (Golafshani, 2003).

### **3.2.3 Using the Delphi Expert Group**

Lastly, the Delphi method was used to further help validate my ideas and the conclusions from the findings.

Having collected and analyzed the qualitative data, some ideas arose which I wanted to further validate.

I had planned to broaden and better base my conceptions, by presenting these ideas and collecting participants' reactions to them, during my workshop at the 15<sup>th</sup> EMCC (European Mentoring and Coaching Council) conference in Prague, 2008 (Kreindler & Beskin, 2008). Although reactions at the workshop were approving, I did not manage to collect meaningful documented evidence.

At that point, I decided to use the Delphi method instead, with the benefit of reaching a variety of experts from around the world, as opposed to the random European participants attending the workshop in Prague. Such adaptations and changes of plans are common during case studies, and express the importance of the researcher's flexibility, which is advised not to adhere to any pre- set methodology formulated (Strauss & Corbin, 1998).

The Delphi method

"is an iterative process to collect and distill the anonymous judgments of experts using a series of data collection and analysis techniques interspersed with feedback."(Skulmoski, Hartman & Krahn, 2007, P.1)

The origins of the Delphi method are rooted in the 50's, in the American business community, but have since been widely accepted throughout the world in many sectors including education. Delphi groups have been used in research aimed at developing, identifying, forecasting and validating a wide variety of research findings and conclusions.

In this research, the Delphi Expert Group was designed and used in order to help evaluate the validity of the qualitative findings. A group of experts in both schooling

and coaching was selected to provide feedback on the ideas produced by the analysis of the data collected within the framework of the case study by using their own coaching experience and field theories (their own praxis) to evaluate coaching effectiveness when the Katom coaching model was used.

10 professionals from around the world were involved, 7 agreed to take part in the process, and correspondence at different rates of intensity was conducted with them. Only 4 of them answered the first round and 3 answered the final second round. The correspondence during the Delphi process is attached in Appendix 4.

Section 3.3 ahead, sums up the research frame as described, and presents the four-phase research and types of data collected in each.

### **3.2.4 The analysis of all types of data collected**

All the data mentioned was analyzed in order to discover concepts and relations, with an attempt to organize them into a theory (Strauss & Corbin, 1998).

The Qualitative raw data fieldwork materials from interviews and documents, presented an authentic perspective of the study. This data helped illuminate essential processes, as it was produced by the people who were directly involved in, or influenced by the coaching process (Zabar-Ben Yehoshua, 1997). (The interviewees were not coachees, see 3.5.2).

Codes were extracted from the text. I used coding schemes downwards, differentiating (Jansen, 2010), breaking the data down by simple questions, segmenting data, dividing it into meaningful parts in order to create a consistent well defined and well ordered scheme of objects leading to categories. The categories which were created, were more abstract; themes of conceptions, types of behavior etc. This work completed the first level of analysis (Pandit, 1996; Jansen, 2010). Then, categories were generated through comparing similarities and differences. This was the second level of analysis, which put data 'back together again', making connections and synthesizing categories (Strause & Corbin, 1998; Jansen, 2010; Pandit, 1996). These two levels of analyzing are presented with the findings (in Chapter 4). Coding and creating the categories is demonstrated and explained in Appendix 9.

The quantitative analysis of the data from the questionnaires and from the school records produced descriptive and inferential statistics. Descriptive statistics are typically distinguished from inferential statistics; while the first describe the group studied, what is or what the data shows, the latter helps to reach conclusions that extend beyond the immediate data, and permit inferences from the collected data to more general instances or broader groups (Healey, 2005).

The procedure of this study called for many measurements and for the measurement of a large group of people; teachers and students. Descriptive statistics helped simplify and manage large amounts of data in a practical way, reducing large amounts of data into simple summaries. Inferential statistics were used in order to attempt the documentation of changes in behavior and perception, to infer from the sample data the effectiveness of the coaching process or how the general population of teachers and students might react to coaching interventions. Inferential statistics were used to make judgments of the probability that an observed difference between pre and post measures was a dependable one and did not occur by chance in this study. The quantitative analyzed data is presented with the findings (in Chapter 4). Raw data can be observed in Appendix 12.

In addition to the qualitative and the quantitative analysis processes, the Delphi Expert Group information was analyzed as well during the group process. The analysis is presented with the findings in chapter 4 and more information about the process in Appendix 4.

Following the three separate analysis procedures described, the triangulation method was used in this study. The triangulation was created by using multiple measurements and different types of data analyzed (qualitative, quantitative, the Delphi data and data from my research diary). Triangulation is specially suited in organizational researches, creating greater accuracy by using different points of view (Cohen, Manion & Morrison, 2003; Golafshani, 2003; Jick, 1979). Triangulation was created by using one tool and collecting data from many sources with it (16 school staff members were interviewed) (Guba & Lincoln, 1994). Triangulation was also achieved by using different tools and collecting data with them about the same topic (in this study

indications about school learning outcomes were collected using a staff questionnaire, a student questionnaire and school records) (Guba & Lincoln, 1994).

To strengthen triangulation, results were then compared with the theory. This stage included critically evaluating the theory crystallized from the WBP findings with the academic and research literature, looking for the support necessary to evaluate the external validity of the WBP findings. This last part of the analysis, the explanatory, third level analysis (Janson, 2010), is evident as part of the discussion, in Chapter 5.

### 3.3 Research design

"Research designs are constructed plans and strategies developed to seek, explore and discover answers to quantitative and qualitative research questions." (Taylor & Trumbull, 2000, p.165).

The research was planned and conducted as a sequential mixed design (Cohen, Manion & Morrison, 2011; Teddlie & Tashakkori, 2006; Creswell, cited in Taylor & Trumbull, 2000), separating the qualitative from the quantitative phases chronologically, conducting them one after the other, according to the research needs. Then, after analyzing each type of the data separately, the findings from the different strands were synthesized and triangulated. When using quantitative and qualitative data in case studies, different concepts of triangulation exist which provide an important way of ensuring the validity of the findings (Johansson, 2003; Cohen, Manion & Morrison, 2011; Teddlie & Tashakkori, 2006).

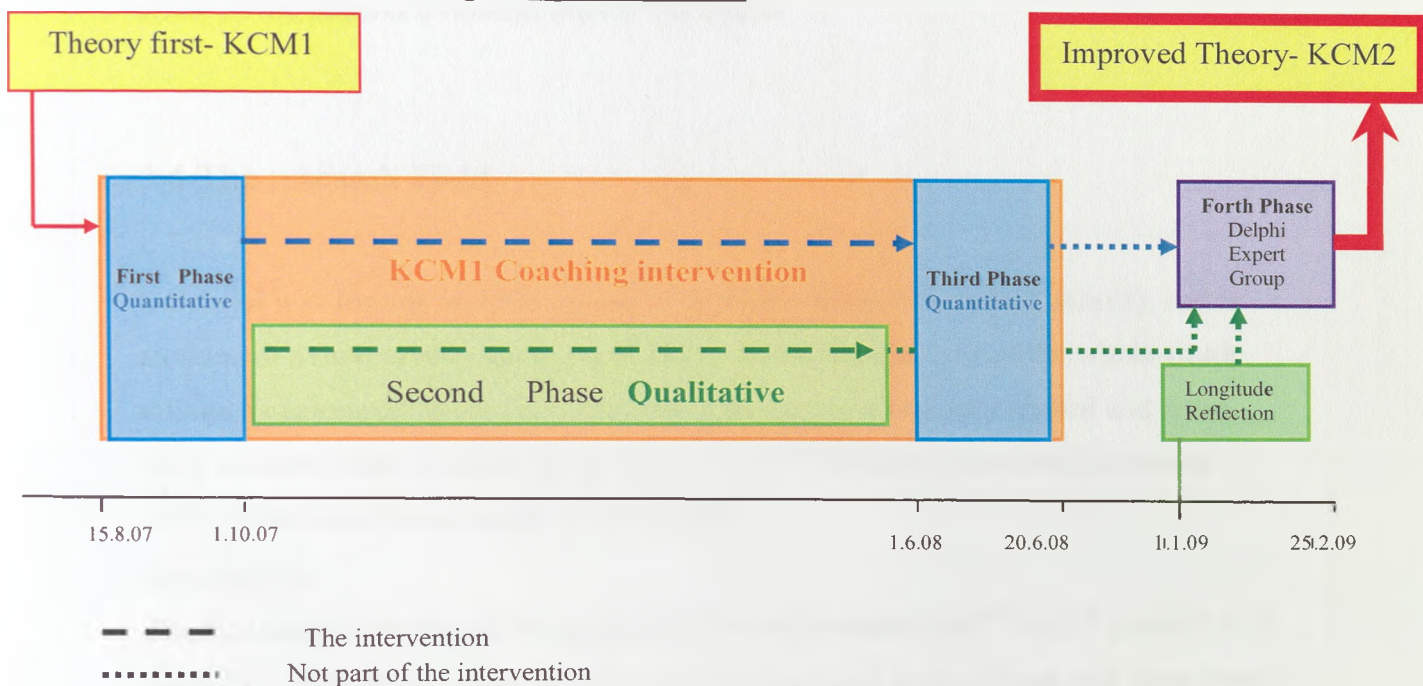
In this study, I used the quantitative data to prove the research hypotheses regarding the first theory, the KCM1 (measured facts - hard data from school records and perceptions on the same topics, using soft data from DISC questionnaires).

The qualitative data collected from interviews, from documents, created throughout and after the intervention and from my research diary, was analyzed and the results of the analysis were used to crosscheck the hypotheses tested by the statistical analysis of the quantitative findings used. The process of crosschecking qualitative and quantitative findings contributed to my ability to evaluate the validity of the research findings. The qualitative findings were used as well to answer the research questions in combination with (in some cases) the data from the Delphi process. Symmetrically,

the validity of interpretations and ideas that emerged while answering the research questions, were evaluated by using the cross check technique with quantitative findings as well.

The research four chronological phases and types of data collected in each phase are illustrated in Figure 1 and described.

Fig 1 4 phase research



**First phase- Pre coaching intervention**, a quantitative stage using DISC1+2 questionnaires and school data, using grades, behavior marks, attendance etc. all data collected accurately identifying and measuring the beginning or entry point (15.8.07- 1.10.07).

**Second phase- While Conducting the coaching intervention** the qualitative phase of the research. Documents produced throughout the intervention were collected and analyzed. Interviews were conducted towards the end (1.10.07- 1.6.08).

Third phase- Post coaching intervention, a quantitative phase, using the same data as was used in the first phase, in order to test the effect of the interventions, compare to early findings and measure change. This data helped planning the ways to maintain and strengthen the achievements as well (1.6.08 - 20.6.08).

Forth phase- This phase was mainly connected to the **Delphi Expert Group** process. The expert participants were presented with both quantitative and qualitative findings as part of my efforts to validate the model, help improve the theory and conceptualize the KCM2 (1.1.09 - 25.2.09). In addition, during January 2009, S-School's managers completed a longitude reflection questionnaire (additional qualitative data) about the effect of the process 6 months after it had ended.

### 3.4 The research Field

**S-School** was formed in 1904, as part of a youth village (a boarding school), and is situated in a rural area in the north of Israel. The school, as part of the whole youth village, is extremely green, beautiful and spacious. It is carefully tended and clean. Sixty teachers were working at the school and 520 students were enrolled during 2007, at the time the research was conducted.

#### The students

The 520 students belonged to age groups varying between the 7<sup>th</sup> to 12<sup>th</sup> grade (13-18 year old). Half of the school's student population lived in the village and came from homes with difficult socio-economic backgrounds, and therefore chose to send their child to the boarding school. A good number of these students were from immigrant families from either Eastern Europe or Ethiopia, a few students were non Jewish and came from Druze or Arab villages nearby. The other half of the student population were day students, bussed to the school from nearby towns and villages. Many of these students came from higher socio- economic backgrounds. Most of S-School students who lived in the boarding school, learned in classes for learners which were motivational challenged ('Etgar' and 'Mabar'). A different type of class was 'Naale', part of a special program for students who had come from abroad without their families, and lived at the boarding school. 'Naale' classes were mixed from the



academic level point of view, but all students had poor Hebrew language. Most external students learned in 'Mofet' classes in which teaching is on higher standards-different subjects and advanced levels in many of the disciplines. All S-School students were encouraged to progress and get any help necessary for success. The combination of two extremely different types of students was relatively new in the school. It was only in the last past five years that external students had been accepted, and that mainly for economical reasons. The school gradually changed, from originally, and for many years, being dedicated to taking care of the boarding school students only, into a school, convinced that all its students should study and graduate, having succeeded in all the matriculation exams.

### S-School teachers

Sixty teachers were working at the school during 2007. Some of them, including the principal, lived in the village. A high percentage of the teachers had a Background in special education and were brought in at the time the school had only students who lived in.

### Choosing S-School as the case study

S-school was unique. It did not resemble any of the approximately 100 different schools I had worked with before in various settlements or sectors. Neither was it like any other boarding school. The calm pastoral green surroundings stood in contrast to the difficulties and frustrations the staff faced, trying to change and fit in to their new school needs, find suitable ways to treat the needs of each child, and help them all study. Its special human structure loomed a great challenge for the principal and teachers, for each student in it and for me as their coach.

KCM1 was planned to suit and be adapted to any school and to any needs defined in it, according to the situation given. Therefore, I found the variety of needs interesting and intriguing for the research. I understood that succeeding in such a complex field could contribute to the external validity of the research.

### 3.5 Research participants

The research participants consisted of staff, students and of professional experts. Section 3.5.1, presents the description of the staff and students who participated in the quantitative phases.

Section 3.5.2, presents the staff members who participated in the qualitative phases and the manner of choosing them.

In 3.5.3, I described the professional experts who took part in the Delphi group.

Last, in 3.5.4 I refer to my own role as researcher and coach.

#### 3.5.1 Participants of the quantitative phases

All 60 S-school staff members were asked to fill in the DISC1 questionnaire twice, at the beginning and at the end of the intervention. In addition, their attendance was monitored during 3 chosen months (February-April) and compared to the attendance of the staff during the previous year.

40 representatives of the 520 students in school were asked and agreed to fill in DISC2. Each of these students had been studying in the school for at least two years. A sample should represent the diversity of the phenomenon within the target population (Jansen, 2010). Therefore, I thought these students would represent the whole student population, because they came from each of the various types of class. I thought that students from 7<sup>th</sup>-8<sup>th</sup> grades were too young to understand some of the questions, and they were new, or had been learning for only a short time in S-School. All S-School students were research participants as their grades were measured.

#### 3.5.2 Qualitative phase participants

First, in part I, the interviewees will be presented and the way they were chosen. Next, part II, the management team, who were the ones to produce papers which were included in the document analysis.

Part I. **The interviewees** were members of school and boarding school personnel, who were not involved directly in the coaching program but were able to speak about

the effect of the process on school life. Choosing these particular participants as informants was due to the fact that they could identify and feel change and improvement in S-school environment.

16 staff members were interviewed, out of which 13 were teachers - 3 males -B1,Y,G ;10 females -A1, A2, O1,R1, R2, L, N, S1,S2, D.

3 were other workers from the youth village - O2, a matron, B2 the housekeeper, and M the head social worker in the youth village.

The choice of informants to participate in depth interviews was as widely diverse as possible (Jansen, 2010), trying to hear teachers from different disciplines, who taught different age groups (High school and junior high school). Teachers who taught in different types of classes, both high level (Mofet and Naale classes) and lower level (Mabar and Etgar classes) though many teachers taught in all classes. I spoke to teachers who had other roles as well, such as heads of discipline (L, S1, G) or administrative roles (B1). I tried to have representatives of younger and less experienced teachers as well as of senior teachers; of teachers who had been in the school for many years and of new teachers, women and men. I went on interviewing until I reached a stage in which no new information was added (Jansen, 2010).

I had wanted to have parents fill DISC2 questionnaire as well, but this was not possible. Because of the special kind of school, many parents were barely involved with their children's education. Some could not speak Hebrew or English, languages the DISC2 is written in. Lacking the parents point of view was one of the reasons I chose to speak to three staff members who were not teachers, but worked closely with the students in other aspects, and could tell if change was apparent.

**Part II. The personnel whose documents were analyzed** were the 7 members of the management team, with whom the coaching took place; coaching as a team and 'one on one' coaching in person, mostly with the principal (EB)and his two deputies (MD & JS).

**EB principal-** male, 35 years old. This was his 4<sup>th</sup> year of headship following a meteoric rise over 10 years of work in the youth village, starting as a youth guide, then an agriculture teacher and then a principal's deputy. Due to the sudden departure of the former principal, he was appointed principal.

During his first year in his new role, I conducted the early research mentioned, and he was one of the principals I coached.

**MD management deputy-** female, 40 years old, a math teacher and home class teacher as well. Second year in this role.

**JS pedagogical deputy-** female, 45 years old, a Hebrew teacher, head of department, and home class teacher as well. Second year in this role.

**DO** – a female, 55 years old, home class teacher and head of Mofet classes. 25 years in school.

**OK1-** a female, 50 years old, home class teacher and head of social activities. 20 years in school.

**OK2-** a female, 40 years old, math and computer teacher, home class teacher and responsible of timetables. 10 years in school.

**ME-** a female, 50 years old, school counselor, joined the team in the middle of the year, 20 years in school.

### **3.5.3 Delphi Expert Group**

I had been in contact with 10 experts, of whom 7 had agreed to participate and took part in the correspondence. Eventually 4 experts participated in the Delphi process itself –

**D-** A coach, researcher and scholar in the field of coaching in organizations Professor of business management and holds a second Ph.D. in coaching research. From the UK. (Male)

**J-** A coach, researcher and scholar in the field of coaching in schools. Professor of education. From New Zealand.(Female)

**P-** An experienced coach, speaker and writer on the topic of coaching. Works partly in educational frameworks as well as in other organizations. From the UK. (Male)

**L** - An experienced coach and writer on the topic of coaching. Works in organizations using specially designed creative methods for increasing coaching effectiveness. From Sweden. (Female).

#### **3.5.4 My role as researcher and coach**

In all case studies, "the researcher is integrally involved in the case" (Cohen, Manion & Morrison, 2011, p.290). I was a coach invited by the school principal and his managing team to use my skills and expertise in S-School, having agreed from the beginning with EB, the school principal, to use the intervention as the base for my planned research. Scrutinizing my own work as a coach brought about the validity and reliability issues, which will be discussed in the following part 3.7. The coach-researcher role has ethical issues as well, which will be related to in part 3.8.

### **3.6 Variable definitions**

The quantitative phases used the DISC questionnaires, as described, which were designed for the KCM, to help evaluate the effectiveness of the coaching intervention. (More about the DISC questionnaires - 3.9.3).

The variables were chosen according to quality variables measured during the intervention; 'Pedagogical learning outcomes' (PLOs), 'Socio-cultural learning outcomes' (SCLOs) and 'Administrative learning outcomes'(ALOs). These variables were joined at times into one variable- 'Learning outcomes' (LOs).

The remaining variables were chosen to suit the three major processes which were tracked during the intervention, as earlier presented; 'Organizational vision' and 'Organizational learning'. The Personal- professional learning process, forming a coaching culture, was embedded partly in the 'Staff attitude to work' variable and partly in the 'Socio-cultural learning outcomes'. This last and very important process was not fully understood while planning the questionnaire and during its validating process. The process tracking the foundation of a 'Coaching culture' in school was only later defined, which was the reason for the lack of specific questions relating to it in the questionnaire. To solve this problem, I used the above mentioned variables, in a combination of the most relevant items in the questionnaire for this matter. (More about this topic see 3.9.2 and 5.3.1).

The definitions of the variables are hereinafter presented; Nominal definitions - 3.6.1 followed by Operational definitions -3.6.2.

### 3.6.1 Nominal definition of variables

**Learning outcomes, LOs-** The products of learning processes created by school's learning community. Three streams of outcomes are produced; pedagogical, socio-cultural (norms & values), and administrative. (Kreindler, 1999)

**Staff attitude to work** –Staff working in collaboration, fully engaged, purpose and focus driven, and acting according to 'the value of achievement', a 'positive competition', where all excel in harmony, beyond what they would have achieved in isolation. (Brown et al., 2005; Lincona & Davidson, 2005).

**Organizational vision** – The organizational vision should be a 'living document', representing the desirable ways of doing things, embedded into all daily decisions and actions of the organization. (Owings & Kaplan, 2003; Paterson, 2003; Suporvitz, 2006).

**Organizational learning** - Organizational learning focuses on creating improved organizational performance. The school's learning community work systematically; creating, managing and disseminating the organizational knowledge, celebrating its success and learning from it.

(Oplatka & associates, 2008; Peters & Waterman, 2004; Mezirow, 2000).

**Coaching culture-** a humanistic approach to work in which growing the organization is embedded in a parallel commitment to growing the people in it. Doing so, a highly professional organization of closely welded and committed staff is developed. (Clutterbuck & Megginson, 2006; Staessens, 1993, cited in Hall & Hord, 2006).

### 3.6.2 Operational definition of variables

**Pedagogical Learning outcomes** -Staff/student conceptions about the quality of all school pedagogical achievements, achievements in certain disciplines, and the way they are reflected in external examination results.

***Socio-Cultural Learning outcomes***-Staff/student conceptions about the degree of security (lack of violence) in school, use of clean language, trust and respect, mutual aid, volunteering, honor system – no cheating, and the care of school building and property.

***Administrative Learning outcomes***-Staff/student conceptions about the pupil attendance, teacher attendance, punctuality, efficient timetable, efficient examination program, and aesthetics and upkeep.

***Learning outcomes***- Staff/student conceptions about the quality of the combined three types of learning outcomes mentioned, in school.

***Staff attitude to work*** -Staff/student conceptions about the degree of staff's collaboration, engagement, purpose & focus drive, and acting according to the 'value of achievement'

***Organizational vision***- Staff/student's conceptions about whether vision is published and referred to on various occasion? Whether projects and study programs reflect a cohesive conception? Whether cultural, educational and social activities at school reflect a cohesive conception? And whether school vision is translated into concrete aims and goals within all discipline teams?

***Organizational learning***- Staff's conceptions about customary manners of organizational learning at school and of ways in which successes are celebrated.

***Coaching culture***-'Mutual trust and respect', 'Feel of safety' (out of Socio - cultural LOs), 'Collaboration' (out of 'Staff attitude to work').

### 3.7 Validity and Reliability

Considering validity and reliability in the mixed method case study research creates the need to relate to each one of the branches (qualitative and quantitative)

specifically. Nevertheless, as it is one whole research it is important to show its Consistency throughout and within its different phases (Lincoln & Guba, 1985, cited in Fridman, 2007).

A valid research of a quantitative paradigm is one in which the results reflect an empirical truth. Within the qualitative paradigm, the term Trustworthiness is used instead, but there is less focus on defining the concept itself and more effort put into finding ways to improve it. This reflects the conception of validation as an ongoing process rather than an absolute or dichotomist concept. A process in which different actions and precautions are taken to support and increase validity of the research (Fridman, 2007).

The validation of all quantitative results was met by using appropriate statistical treatment (Cohen, Manion & Morrison, 2000). Specific terms of validating the questionnaire, the main quantitative tool, were used in addition and are presented in detail in part 3.9.3. The external validity, the degree to which the results were generalizeable to other times and situations and across populations (Fridman, 2007) was achieved mainly by using the combined method design, both deductive and inductive meaning making methods. (Creswell cited in Taylor & Trumbull, 2000). Reliability, which answers the question, "to what extent are the results consistent over time and repeatable?" is difficult. It is even considered by some not a relevant concept, specifically in a case of an organizational research such as a school (Shkedy, 2003; Golafshani, 2003; Jick, 1979).

Nevertheless, while considering the qualitative findings, I took into account the fact that the qualitative paradigm embraces the researcher's involvement so that s/he becomes the main research tool. Therefore, while the credibility of the quantitative paradigm depends on the instrument of measuring, the qualitative paradigm's validity and reliability depend mostly on the "ability and effort of the researcher" (Golafshani, 2003). The instrument of measuring in this case was the DISC questionnaire, and its reliability is discussed and presented in part 3.9.3.

Strengthening validation and reliability of my own work, as researcher, being the 'tool' (Golafshani, 2003), was achieved by a long and intensive field work, in which I spent many days over the period of one year in S-School, close to activities and to the participants. My experiences in doing so were documented using a reflective research diary (Fridman, 2007). Furthermore, I involved other people in the process of



meaning making from the data. First, by using 'peer debriefing'- working closely with another professional at conducting the coaching model, a partner with whom findings and perspectives could be discussed and re-examined (Newman, 1998; Fridman, 2007). Secondly, by allowing participants to assist me in the data interpretation (Golafshani, 2003), as each participant got to read his/her interview and my comments on it, and was encouraged to add or change the written information if necessary. In addition, the main findings were presented to the whole school staff at the beginning of the following year and they were also encouraged to comment on the information presented.

The internal validity, demonstrating connections between data and explanations, was mainly achieved by a meticulous attention to accuracy and triangulation between research tools, which helped minimize bias and distortion of 'the whole picture'. (Cohen, Manion & Morrison, 2003). Triangulation used specifically in an organizational research, can "stimulate us to better define and analyze problems" (Jick, 1979, p.610) Triangulation creates greater accuracy using different points of view and helps capture a holistic look (Golafshani, 2003; Jick, 1979). The triangulation in this study was created by using multiple measures and different types of data (qualitative and quantitative), in which the weakness in each single method was compensated for by others (Creswell, 2003). It was created by using one tool and collecting data from many sources with it (16 school staff members were interviewed) (Guba & Lincoln, 1994). Triangulation was also achieved by using different tools and collecting data with them about the same topic (in this study indications about school learning outcomes were collected using a staff questionnaire, a student questionnaire and school records) (Guba & Lincoln, 1994). To strengthen triangulation, results were then compared with the theory. This procedure was conducted at the end of the study and was important because a case study is always limited, and this procedure helped create a measure of internal validity and generality (Pandit, 1996).

I agree with Creswell's (2003) position that one of the advantages of the mixed methods approach is the development of a reliable explanation. When evaluating the reliability of the WBP findings by cross-checking whether explanations from diverse methods converge and complement each other (Creswell, 2003), it was possible to contribute to the reader's confidence in my findings.

The last and significant reinforcement to the external validity of the study, also involving other people in the process of meaning making from the data, was using the Delphi experts groups' insights and comments as explained in 3.2.3 .

I was asked by a Delphi participant-

*"What were you trying to validate through this Delphi process?"*  
(Appendix 4.2)

My answer to the group was-

*"First, I wanted to validate the model. In addition, I wanted to improve my work. Following the qualitative paradigm (mixed method used), I wanted to make sense of what I had found. I shared my assumptions derived from my data with you, asking if evidence your work supplied, lead you to similar ideas, or if you thought my ideas made sense according to your experience." (Appendix 4.2).*

### 3.8 Ethical issues

Ethics is defined as the discipline related to what is good and bad, right and wrong behavior (Morse, Swanson & Kuze, 2001) .The first principle that was taken into consideration since I was involving human subjects in the research was respect for the person (Levin, 1995). This aspect was expressed by using free voluntary participation and explaining my aims and the possible consequences to all people taking part in the research- informed consent.

Before starting the intervention in S-School, following Israeli ministry of education instructions concerning research in schools, a letter was presented to school staff explaining the intervention, the research planned and requirements from them. The letter was hung throughout the year in the teachers' room. In addition, all aspects of the research were orally explained to the staff at their first gathering before the school-year began, before they were asked to fill in the pre-intervention DISC1 questionnaire. This could have caused problems, as many people were involved, but all personnel signed their approval in the questionnaire, agreeing to cooperate and allow data to be used both for diagnosing the school's starting point and for research needs.

Interviewees were teachers who expressed their willingness to participate. Some even thought, post-factum, that doing so helped them sum up their work and advancement during the year, and mentioned they had enjoyed the coaching type questions. The written interview was sent to each interviewee for approval and /or correcting.

Work with the management team was closer and intense. All of them expressed their eagerness to participate and their total trust in me and the process planned. This was probably due to what Morse, Swanson & Kuze (2001) pointed out as ethically important - allowing maximum beneficence and minimum risk. The question asked daily by the team and by myself as their coach and researcher, was "To what extent do any potential benefits outweigh the potential harm done by the research?" (Cohen, Manion & Morrison, 2003, p.292). The benefits of coaching sessions which became apparent by the school's higher learning outcomes and by the progress of the main processes defined (5.3.3.2), were well appreciated by the management team, as they often mentioned.

Another important issue was keeping privacy and anonymity. This problem was easy to deal with at the quantitative phases of research, as questionnaire participants are easier to disguise, and data was analyzed as a whole. The data I was given from school records was nameless (lists of grades) according to my request and suiting the Ministry of Education's instruction. The qualitative stage work, on the other hand, which was based on close and intimate relations with fewer participants created a problem. The ethical factor considering data from interviews and gathered from documents produced by a small group of people, was considered with great care when publishing the research and articles using the research experience and data.

Scrupulous care was taken in disguising any information which could reveal the participant's identity (changing names) or the school's details. It was especially difficult to promise participants not to be identified by their own colleagues in school who may want to read the research (Dushnik & Tsabar-Ben Yehushua, 2001). The fact that it was written in English to a foreign university made it easier. Still, while publishing in Israel this will be properly considered and discussed with school management.

Delphi Exert Group participants were disguised as well. In this case, this was done as part of the process rules.

Integrity and objectivity, reporting things as faithfully as possible, (Denscombe, 2002) was always a top priority, regardless of the fact that the findings and publication could affect my future work.

Reciprocity and partnership- Dushnik & Tsabar-Ben Yehushua (2001) wrote about the need to share data and researcher's interpretations with participants who are considered partners. There is a question to be considered according to Dushnik & Tsabar-Ben Yehushua (2001) regarding the need to get acceptance by participants to all findings. Sharing data with all participants was difficult because of the number of people involved, but the management team was given all the information. Nevertheless, the main findings were presented by the principal to the whole school staff at the beginning of the following year, as part of acknowledging and celebrating success.

Last but not least was the need to conduct the coaching role under ethical codes as part of professionalism for researchers who are members of a professional group described by Blaxter, Hughes & Tight (2001). Many ethical conflicts can arise when the research is conducted by an 'insider researcher', "in which a researcher researches her/his own institute" (Cohen, Manion & Morrison, 2011, p.89). This was not the case in this research as I was an outsider coach invited to use my skills and expertise in S-School. I was not paid for this work. Ethical coaching codes outlined by the International Coaching Federation 'ICF code of ethics' (2009), which are similar to the Israeli coaching codes of ethics adopted by IKA, the Israeli Chamber of Professional Coaches, of which I am a member, were strictly adhered to. These codes of ethics were found to be similar in all points discussed so far in this section. For instance, considering the conduct of research during coaching:

"I will conduct and report research with competence, honestly and with recognized scientific standards...with the necessary consent and approval of those involved...protect participants from any potential harm."(ICF codes of ethics, 2009, p.2).

Relations between coach and coachee are based on openness and trust. There was an agreement and understanding regarding confidentiality, all that was said as part of the coaching process was confidential. Much personal information and personal insights were revealed throughout many hours of coaching. However, qualitative data was collected from the coaching sessions according to the informed consent agreement reached with the participating coachees. Documents produced during the group

coaching sessions conducted with the management team were used and analyzed: planning and reflecting tables (P-R, see Appendix 3) and summaries of personal achievements (SUM, see in Appendix 4.1). Data from the individual coaching work with the head teacher and his two deputies were presented through my research diary (Appendix 10).

Another issue, which was important since I was coaching in an organization, had to do with conflicts of interest. Organizational interests may create conflicts with the personal interests of the coachee. That could be the case when the coachee is a subordinate and not the head teacher, as was the case while working with MD and JS. The ICF code of ethics stresses the following values relevant to this topic, that

"I will seek to avoid conflicts of interest ... openly disclose any such conflicts". (ICF codes of ethics, 2009, p.4).

I did so by maintaining transparency and early coordination of individual and group expectations between coachees, head teacher and coach (Beskin, 2005; Dolitch & Cairo, 1999).

### 3.9 The study

First in this part, I described the research as it took place (3.9.1). Then I pointed out the main difficulties I had to face during the study and the ways I dealt with them (3.9.2). Last, in 3.9.3, I presented the early part of the study, the pre- research, in which I went through the long process of creating and validating the DISC questionnaire. This section includes findings from the process.

#### 3.9.1 Description of the stages of the study in detail

(Sections 2-7 present the case study stages)

1. **Creating the KCM1**- The KCM1, the basic theory tested in this study, was founded based on the experience and data accumulated in my praxis (Beskin, 2005) and on the burgeoning research data and findings reported by researchers and practitioners both locally and internationally. The KCM1 was further focused and

defined through the process of creating and validating the DISC questionnaires. Creating the DISC included a long phase of pilot studies and trying out of the early versions of the questionnaire leading to the validation procedure of the questionnaires. (More details about creating the DISC questionnaires are presented in 3.9.3.)

The analysis of the academic and research literature together with praxis data led to the formulation of the theoretical framework of the KCM1. Then, the empirical case was selected, to fill the theoretical categories and to extend the emerging theory (Yin, 1989, cited in Pandit, 1996).

**2.The Diagnostic stage** indicated the need to redesign the school's common vision which had been produced a year earlier by the school principal and his staff and no longer represented the new ideas the school was adopting under his leadership and that of the leading management team who wanted to stress achievement as a leading cultural value. Work on formulating the vision started with the principal and was later expanded to include the whole school management team and eventually, all of the S-School teachers took part in a "creating the school vision" work shop at the beginning of the school year. Follow up meetings of the workshop continued to be open to all until the vision was produced and presented to the school's staff.

In order to get a full and accurate picture of the starting point of the coaching process at S-School, faculty and students were asked to complete the DISC 1+2 questionnaires and school data was collected (grades, behavior, attendance etc.) See details ahead. The information collected completed the First phase of the research (quantitative), as presented in Fig.1 (section 3.3).

Pre intervention DISC1 questionnaire -39 staff filled in the pre-questionnaire at a gathering which took place a week before the school year started. Not all 60 teachers were present at the event, and out of the teachers who were, the new ones were unable to fill a questionnaire about the school they didn't know at the time.

Amongst the 39 staff members, 5 (12.8%) were men.

6 members held management roles in school (15.4%).

64.1% of the staff had over 10 years of Seniority.

The age range of the population was evenly distributed

Pre intervention DISC2 questionnaire- was filled in by 40 representatives of the 520 students at school. 20 boys (50%), 14 girls (35%) and 6 (15%) did not mention their gender. The students were randomly chosen, 3-4 students from each of the 4 higher classes, 9<sup>th</sup>- 12<sup>th</sup> grades. All students had been studying at the school at least for two years. I thought that these students would represent the whole student population, because they came from each type of class. I also thought that students from 7<sup>th</sup>-8<sup>th</sup> grades were too young to understand some of the questions, and they were new, or had been learning for only a short time at S-School.

There were 18 students from 9<sup>th</sup> and 10<sup>th</sup> grade- younger students (45%), and 22 from 11<sup>th</sup> or 12<sup>th</sup> grade – older students (55%).

#### Information from school records

The **Attendance** of all S-School staff members was to be monitored during 3 chosen months (February-April) and compared to the attendance of the staff during the same months in the previous year.

**Behavior and studiousness** of all the 11<sup>th</sup> year students was measured and compared to their performance in the previous year.

**Grades** in three main chosen disciplines were measured for all the students in S-School junior high school (7<sup>th</sup>-9<sup>th</sup> grade students).

For the research needs, the percentage of students from the 12<sup>th</sup> and last grade, who had successfully completed their matriculation exams, was compared the percentage of graduates from the previous year.

**3. Milestones** – This part began the Second phase of the research (qualitative), as presented in fig1 (in section 3.3).

The detailed diagnostics presented to the leading management team, helped the team to define clearly the areas in which they wanted change or improvements. A plan was prepared by each member of the leading management team, a plan that identified both personal and professional objectives for the new school year. The individual action plans were conceived in accordance with the diagnostics and with the newly coined common school vision.

The coaching team and the school leading management team created a detailed school coaching plan designed to facilitate the leading management team's efforts to fulfill their personal and professional missions and together lead their school towards the achievement of outstanding, high quality learning outcomes; pedagogical, socio-cultural (norms & values) and administrative, and improve three overall school processes as had been defined (5.3.3.2).

**4. Coaching sessions-** According to the plan, three senior team members were to receive individual professional coaching, the school principal (EB) and both his deputies, the administrative deputy (MD) and the pedagogical manager (JS coordinator of HODs and discipline managers). Sessions were held every two weeks, usually 90 minutes long. The leading management team received group-coaching sessions as well every two to four weeks usually 150 minutes long.

**5. Fine tuning-** Half way through the year a special fine tuning workshop was held with the management team. All came prepared with their 'Planning and reflection tables' (P-R) filled in, a tool which we created to facilitate the self monitoring work of school managers (Appendix 3). At the meeting the managers shared their success stories and re-adjusted the overall action plans and the coaching plan.

**6. More coaching-** The revised school coaching plan included several additional coaching meetings with other members of the school leading management team as well as the coaching sessions originally budgeted.

This stage ended towards the end of the year, when I conducted focused interviews with 16 staff members that were considered to be dedicated members of the staff, well able to verbalize information, in order to gain a more vivid and in depth view of the coaching process. This completed phase 2 of the study (qualitative), as presented in Fig 1 (in section 3.3).

**7. Summary and maintenance** - At the end of a very intensive year of coaching, which unfortunately included a two month country-wide teachers' strike as well (see 3.9.2), I re-administered the DISK questionnaires (details ahead). I also collected



relevant school hard data, the same as had been collected before the beginning of the coaching process. Doing so, I was able to compare the pre and post data and propose action to be taken in order to maintain the gains realized and prepare the information needed by the school leading management team for their following year's action plans.

For maintenance purposes, the principal asked to continue his own coaching in the following school year while he leads the school towards further improvements and higher achievements. This part completed phase 3 of the study (quantitative), as presented in Fig 1 (section 3.3).

Post intervention DISC1 questionnaire - Teachers were given the questionnaire three weeks before school ended, during the intensive time of the matriculation exams. Although many phone calls and personal appeals were made asking the teachers to return the questionnaires, only 34 staff members out of 60 returned the completed questionnaires.

Out of the 34 staff members, 6 (17.6%) were men and 5 members (14.7%) held management roles in school. 94.2% of the staff had over 6 years of seniority, age range of the population was evenly diffused.

Post intervention DISC2 questionnaire - The same students were asked to fill in the post intervention questionnaire (they were told so at the first time they filled the questionnaire). Unfortunately, many who were glad to participate at the beginning of the year, did not cooperate the second time for different reasons. 22 students filled this questionnaire: 12 boys (54.5%), 5 girls (22.7%) and 5 did not mention their gender. 7 students (31.8%) were from the younger age group, 9<sup>th</sup> and 10<sup>th</sup> grade, 13 (59.1%) from the older group, 11<sup>th</sup> or 12<sup>th</sup> grade, 2 did not mention their grade.

**8. After the coaching intervention-** Phase 4 of the research, as presented in Fig1 (section 3.3). In order to help external validity to both the model and the ideas derived from the data, I conducted a **Delphi Expert Group** -two rounds with 4 coaching experts. This phase included the **longitude reflection** questionnaire completed by the managers as well.

### 3.9.2 Difficulties during research

In this part, I presented two main difficulties which had a significant influence on the study. First, the two month strike in the Israeli educational system during the study. Second, a major difficulty related to the DISC questionnaire, which arose as my own concepts of the KCM evolved over time.

1. The school strike- A main and unpredicted difficulty, which affected many aspects of the study, was a strike that broke out at the beginning of the school year and ended two months later.

The first rumors about a planned strike were heard while I was preparing for the study and looking for schools in which the study would be carried out. The unstable situation in the Israeli education system at that time was one of the reasons I had difficulty in finding one or two additional schools for the study, as I had first intended. The strike therefore changed the framework originally planned for the research into a single, in-depth case study instead of the investigation of more schools but with less information from each. This 'difficulty' turned out to be lucky, as the new design turned out to be more suitable, as explained (3.1.3) and S-School was especially suited for the research needs. The need for finding a way to strengthen external validity of the case study was met by adding the Delphi Expert Group process (3.2.3).

The strike had an effect on the coaching intervention itself as well. School work in Israel started two months later, which shortened dramatically the intervention, which was planned to be over a whole school year. As the management team was at work, we used the time of the strike for the diagnostic stage of the model. (The only information missing at the time was the students' questionnaire). We started work two weeks before the school year was supposed to begin (15<sup>th</sup> August). Due to the strike, the management team had free time, which we used for coaching and creating the intervention plan. It turned out that this extra time, working with no students around, focusing only on the team work, helped us create a very well planed intervention and establish close relations needed for it to succeed.

At the end of the intervention, the principal suggested that we continue work into the next year to regain the missing time. Eventually, I continued work there, but the research ended as planned, because of the change of students and staff over the next

year. New staff and students in the following year would have created problems with evaluating the intervention as planned.

2. The DISC questionnaire- A different difficulty I needed to cope with had to do with the DISC questionnaire I had created as part of my efforts to evaluate objectively the coaching intervention. Part 3.9.3 described the long procedure of validating the new questionnaire. At that early planning stage, and actually, even at the beginning of work in S-School, I had not yet identified the significant importance of monitoring processes as well as monitoring the learning outcomes.

Two of the KCM1 processes ('Vision interlunation' and 'The management of organizational learning') were asked about in the questionnaire, though in part 5.3.1, the difficulties of monitoring processes using the questionnaire will be discussed. The third process 'The management of personal-professional learning' in school was a process I had not fully considered while planning the questionnaire. Therefore, no questions were dedicated specifically to it. More so, the emergence of a 'Coaching culture' which I came to realize as a very important outcome of the processes was something I grew to understand only after I had begun the study. As part of a research it is common and legitimate to learn and change. Nevertheless, on a technical level, I wanted to monitor the third process as part of the work. Changing or adding to the DISC questionnaire would have meant the whole validating process needed to be redone...

The solution I chose for the needs of the study was to use the existing information in the DISC as it was, for monitoring the process as explained. (Further related to in part 5.2.2.3). For further work using the KCM, the questionnaire will be modified.

### **3.9.3 DISC-Diagnostic Inventory of School Culture**

#### **The procedure of creating and validating the questionnaire**

DISC1 questionnaire is the diagnostic tool created for and used during KCM interventions, designed to promote performances of excellence in school.

Nevertheless, the questionnaire can be used on its own as well.

The DISC focuses on collecting data about school the organizational culture, staff and student conduct in school and school learning outcomes.

A meticulous and long development of the questionnaire led to the creation of a valid, reliable and easy-to-use tool. Using the questionnaire makes the collection of important information and analyzing its findings possible, creating in depth, new and varied knowledge about the school.

Findings from the use of the questionnaire in 63 schools of different sectors and levels (high schools, junior high schools, primary schools and special education schools) strengthen the theory which is the base of the KCM. KCM's base focuses on simultaneously enhancing three school processes- The assimilation of school vision into all doing stratum in school, The transformation of the school's learning community into a community of learners- organizational learning, and the establishment of a coaching culture - personal and professional learning. Findings of DISC questionnaire show a significant correlation between the advancement of these processes and the progress of school learning outcomes- pedagogical, socio-cultural (norms and values) and administrative (About findings see Appendix 14).

The DISC questionnaire was created for two reasons-

1. A tool which enables the researcher to gain, in an easy and systematic way, a picture of the current status of the organizational culture in school. Collecting relevant data and illuminating points of interest helps create a data base for a collaborate plan for a school coaching framework. The coaching plan is tailored to suit the needs of the school and to help advance the quality of school learning outcomes.
2. Using the questionnaire twice, pre and post intervention, served as a quantitative measure of the progress in the various parameters, and the extent to which the coaching aims, as declared were achieved.

Questionnaires are necessary tools used in researches to gather information, outwardly easy to create. The seemingly simple manner of creating a questionnaire may sometimes cause the lack of systematic and meticulous design.

Creating a valid and reliable questionnaires in educational studies, necessitates a five stage plan and preparation adding to the quality of research results-

- a. Background- learning from theoretical and practical sources
- b. Conceptualization of the questionnaire- choosing the relevant variables.
- c. Planning the questionnaire's frame and methods of analyzing it.

d. Validating the questionnaire

e. Creating reliability, (Radhakrishna, 2007).

These stages will serve as the frame of hereinafter describing the creation and features of DISC1 questionnaire.

### Creating the questionnaire

#### a. Background-

This stage was mainly theoretical, collecting material and making decisions based on experience and professional literature regarding the aims of the questionnaire

- What aspects is the questionnaire meant to advance in the topic?

- Which population will it be aimed at?

In addition, this stage was also based on an early qualitative study, as suggested by Boynton & Greenalgh (2004), as it enlarges the circle of experts involved in the decisions concerning the questionnaire's content. They also said it is essential to check other reliable and validated tools existing.

In this instance the 'Courage' questionnaire (Klein & Napier, 2003) was considered, but using it would have meant adapting it to the educational field, and that would have been complicated. Another questionnaire examined, was Fridman & Granit (2006) 'Organizational values' questionnaire, which was found not suitable for a coaching intervention and did not contain all the parameters chosen as significant according to the KCM.

DISC1 was developed as part of the KCM, and therefore the theoretical background was identical to the concept presented of the whole model.

#### b. Conceptualization of the questionnaire- choosing the relevant variables-

The questionnaire focused on collecting participants' concepts about parameters connected to school culture, ones which are correlated and influence promoting to the various learning outcomes. Therefore, and aligned with the general concepts of KCM, the questionnaire was composed of six chapters:

1. 'Personal and school details'

2. 'School Vision'

3. 'Learning outcomes'- Pedagogical, Socio-cultural (norms and values) and administrative.

4. 'The value of achievement'

5. 'Organizational learning'- ways of learning and manners of acknowledging and celebrating success.

6. The last chapter dealt with cultural school dimensions of staff's attitude to work: – the degree of commitment to work, focus on goals, collaboration and value of achievement, as it is imbedded in their work.

In all, there were 29 closed questions. (For the whole questionnaire see Appendix 13.)

The Katom school coaching model focuses on improving school learning outcomes, therefore the different learning outcomes were the dependent variables, influenced by school cultural parameters the questionnaire was going to map.

Learning outcomes are equally important, reciprocally influencing and developing one another. Neglecting any of the components may soon find expression in the drop of other components. The independent variables are therefore, 'School Vision', 'Organizational learning', and 'Staff attitude to work'.

c. Planning the frame of the questionnaire and methods of analyzing it-.

Special attention was given to providing clear wording and short questions which allow simple and quick answers (Boynton & Greenalgh, 2004; Jenkins & Dilman, 1995). Place was left for commenting openly and for giving examples, as suggested by Boynton & Greenalgh (2004) and Stone(1993), who stressed the need some participants may feel to add their personal reaction beyond the closed frame of the questionnaire.

For questions concerning the dependent variables(learning outcomes), a five level Likert scale was provided, from 'I agree completely' to 'I disagree absolutely', or - from 'excellent' to 'unacceptable'.

For most of the questions which dealt with the independent variables (Vision, Organizational learning, and Staff attitude to work), multi answers were offered (nominal answers) which were phrased in an unequivocal manner, doing the best to

suggest all relevant possible reactions. Some options were added after the early experimentations with the questionnaire. (Radhakrishna, 2007)

#### **d. Validating the questionnaire-**

For validating the questionnaire, an early study was conducted, as suggested by Radhakrishna (2007) using the first version of the questionnaire -after having received approval from the head scientist in the Israeli ministry of education. The questionnaire was given in two Jewish urban high schools of similar size, one known for its very high standards and achievements and the other, for low ones .

15 staff members filled in the questionnaire in each school. This procedure added both to the Construct Validity, which estimates how well the questionnaire helped in measuring what it was attempting to measure (Newman, 1998) and through that to the Content Validity and Face Validity.

Content was found relevant and exhaustive for the questionnaire topic. Following the analysis of questionnaire, and after sharing thoughts with both school principals (Trochim, 2006), two questions were added to complete the picture, and some of the wording was reframed into simpler phrasing. Some of the early Likert scales were changed to gain a homogeneous frame, adding to clarity- the graphic language is as important as the written language (Jenkins & Dilman, 1995), and in addition, unified scales contribute, to easier and accurate analyzing.

The questionnaire was tested by 10 students as well, girls and boys from 10<sup>th</sup>-12<sup>th</sup> grade, and by 10 parents. This process led to designing a different version for students and parents (the DISC2) due to many professional expressions which were found unsuitable.

For testing the Criteria Validity, the updated version of the questionnaire, was given to a group of 70 M.Ed. students, teachers in various schools, each of whom gave the questionnaire to 12-39 staff members in their schools.

The purpose was to test the consistency between the level of school culture parameters, as found through the questionnaire analysis, and the choice of one out of five level descriptions of the same parameters, produced in the 'DISC Rubrics' (see Appendix 6). The Rubrics were written parallel to the questionnaire's scale in the hope of finding a similar result by using two different tools, the DISC and the DISC Rubrics. (Trochim, 2006).

15 students reported their data using both tools. There was almost full coordination between the results. A student said (out of the results gathered)-

*"I want to note, that an impressive consistence was found between the level measured by the DISC in the various issues, the relevant description given in the Rubrics and the reality in our school. The descriptions give a perfect picture of the current situation in our school in every one of the aspects discussed". (Appendix 6)*

Hereinafter, are the words of another student, reporting on the degree of consistency between the description of 'Trust and respect' and the result found by the DISC according to teachers in her school (the mark found in her school for this item, using the DISC, was 3.25, between level 3 and 4. She referred to levels 3 and 4 in the Rubric description, which are quoted following her words).

*"Concerning the degree of 'trust and respect', I tend to agree with the 3ed level description. In regard to the last sentence though, speaking of honesty in tests, I would say that most students are honest in their tests and assignments" (Appendix 6)*

Level 3 of out of DISC1 Rubrics for 'trust and respect'-

"Teachers treat their colleagues with trust and respect. The management tries to attend to staff's needs, not always managing to give a feeling of understanding and support. Parents do get full attention to any need. Students are treated by most teachers with respect, but amongst themselves, lack of trust and respect is often seen. In some classes and with certain teachers, cheating in exams or assignments is regular"(Appendix 6).

The relevant sentence from level 4 (out of DISC1 Rubrics) –

"Most students are honest in exams and in their assignments"  
(Appendix 6)

Schools in which the KCM coaching intervention was carried out collected additional data to help validate DISC1's findings- data from school internal records (such as achievements, attendance, discipline data) and school external exam results, which gave objective information about pedagogical learning outcomes. All these findings were found to be very accurate to school findings out of the DISC1.

The validity of a questionnaire, is most important, because "if validity is confirmed, having reliability is implicit"(Newman, 1998, p.39).

c. Creating reliability-



In order to test the questionnaire readability, information from 892 staff members from 63 schools were analyzed using the Alfa Cronbach test. Findings are presented in the following table. In addition, 10 more tests were carried out, which were each part of a Master of Education degree thesis, all using the DISC questionnaire and some other device for measuring change. (For example- Peled, 2009; Morani, 2009). All these studies resulted with similar degrees of Alfa Cronbach measurements. (Statistical raw information concerning the DISC validation may be observed in Appendix 11).

**Table1** Questionnaire reliability information

| Variable               | No. of Items | N   | %    | Alfa of Cronbach |
|------------------------|--------------|-----|------|------------------|
| School Vision          | 4            | 779 | 87.3 | 0.91             |
| Pedagogical LO         | 4            | 779 | 87.3 | 0.8              |
| Cultural LO            | 7            | 845 | 95   | 0.9              |
| Administrative LO      | 6            | 851 | 95.4 | 0.92             |
| LO inclusive           | 17           | 760 | 85.2 | 0.94             |
| Staff Attitude to work | 4            | 862 | 96.6 | 0.84             |
| Whole questionnaire    | 43           | 493 | 55.3 | 0.94             |

#### A summary of DISC questionnaire creating and validating process

Although more testing of the questionnaire still remains to be done, and slight changes may be considered in order to further increase reliability and validity, it is already clear that this tool is useful. The DISC questionnaire enables a good understanding of the starting point in school, from which a program can be planned for an intervention aimed at improving the processes described, and hence the quality of LOs. (More about changes planned as a result of this research see 5.3.3.2 ). Some more case studies using the DISC were lately conducted, which have all verified the findings described, and suggested more uses for the questionnaire as well (for example Morani, 2009; Peled, 2009).

The processes described which have been found significantly important in fostering schools-

The internalization of the school's common vision

Managing the organizational learning

Managing the personal-professional learning

Were all found to be significant for school progress, as described. As a matter a fact, they are an end as well. The processes were found to contribute to LOs improvement, but, at the same time, as they represent learning on an organizational and individual level in school, they stand as a goal as well. The processes represent an organizational culture, which is based on the everlasting improvement attitude, on the drive for progress and striving towards excellence.

### 3.10 Summary of the methodology chapter

In this chapter I explained at length my reasons for conducting the research as a single case study using a mixed method design, which included aspects of quantitative and qualitative paradigm conceptions and tools.

All findings gathered were analyzed and will be presented in the following chapter-

- The quantitative data from the questionnaires and the school records, before and after the coaching intervention.
- The qualitative data from interviews and analyzed documents produced during the intervention or relating to it.
- The Delphi Expert Group findings.
- The synthesis of findings, stressing the inter-validation achieved using cross checking and triangulations.

## Chapter 4 - Findings

In this chapter, the study findings are presented according to the sequential mixed design used, in which the qualitative and quantitative phases were separated and conducted one after the other (Cohen, Manion & Morrison, 2011; Teddlie & Tashakkori, 2006; Creswell, cited in Taylor & Trumbull, 2000). The findings are therefore presented as follows-

- 4.1 Quantitative data from the questionnaires and the school records, before and after the coaching intervention. (See Appendix 12 as well).
- 4.2 Qualitative data from interviews and analyzed documents produced during the intervention or relating to it. (See Appendix 1 as well).
- 4.3 Additional data from my research diary. This data was not part of the data collected relating to the research questions and hypothesis (See Appendix 10 as well).
- 4.4 Delphi Expert Group findings. (See Appendix 4 as well).

All the findings will be presented in lists with short explanations and summaries. After analyzing and presenting each type of the data separately (parts 4.1- 4.4) the findings from the different strands are synthesized as presented in sub-chapter 4.5. The full combination of the different types of data, the explanations stressing the inter validation achieved using cross checking and triangulations, will be evident as part of the discussion (Chapter 5).

### 4.1 Quantitative data from S-School

The quantitative findings section includes both Descriptive and Inferential statistics. See sections 4.1.1 and 4.1.2 respectively, followed by a summary of quantitative findings in part 4.1.3.

Descriptive statistics are typically distinguished from inferential statistics- while the first describe what is or what the data shows (what is going on in the data), the inferential statistics which follow, helps reach conclusions that extend beyond the immediate data, and make inferences from the collected data to more general instances.

Descriptive statistics were used to describe the basic features of the data from the questionnaires and the school records. They provide summaries regarding the samples and measures, thus helping form the basis of the quantitative analysis of the WBP's data.

The procedure of this study called for many measurements and for the measurement of a large group of people; teachers and students. Descriptive statistics helped simplify and manage large amounts of data in a sensible way, reduced a lot of data into simple summaries. These summaries were then helpful in comparison across other people or other units.

Inferential statistics were used in order to attempt the documentation of changes in behavior and perception, to infer from the sample data, the effectiveness of the coaching process or how the general population of teachers and students might react to coaching interventions. Inferential statistics was used to make judgments of the probability that an observed difference between pre and post measures was a dependable one and did not occur by chance in this study.

The quantitative data collected during the case study in S-School included the following items-

- Pre and Post Questionnaires of staff (DISC1).
- Pre and Post Questionnaires of student representatives (DISC2).
- Pre and Post grades of all 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grade Students in three disciplines- Mathematics, English, Hebrew.
- Pre and Post grades of all 10<sup>th</sup> grade Students in both "behavior" and "studiousness".
- Pre and Post grades of all the results of the matriculation exams.
- Pre and Post measures of staff attendance (February-April 2007, 2008)

#### **4.1.1 Descriptive statistics from the DISC questionnaires**

(The DISC questionnaires are attached in Appendix 13).

**DISC1-** Diagnostic Inventory School Culture is a diagnostic tool designed to gather staff's concepts about different parameters of school culture.

**DISC2**- a similar questionnaire suited to gather students' concepts about most of the parameters addressed in DISC1.

Most questions are presented with five scaled Likert answers (1 being very low and 5 very good).

Part **a** will present the values and the reliability of the questionnaires.

Part **b** will describe the pre intervention questionnaire results and part **c** will do the same with the post intervention questionnaire. Part **d** presents descriptions concerning the Vision variable in DISC2 before and after the intervention.

#### a. Questionnaire's reliability-

The following table shows the results of the different variables in the questionnaires used during the intervention- DISC1 and DISC2 pre intervention, and DISC1 and DISC2 post intervention-

**Table 2** Alpha Cronbach values of the questionnaires' items

| Questionnaire Items    | Pre - Coaching Intervention    |                      | Post - Coaching Intervention   |                               |
|------------------------|--------------------------------|----------------------|--------------------------------|-------------------------------|
|                        | Teachers<br>DISC1              | Students<br>DISC2    | Teachers<br>DISC1              | Students<br>DISC2             |
| Vision                 | $\alpha=0.55$ , N=28           | — <sup>2</sup>       | $\alpha=0.64$ , N=28           | — <sup>2</sup>                |
| Pedagogical LOs        | $\alpha=0.76$ , N=38           | — <sup>3</sup>       | $\alpha=0.68$ , N=32           | — <sup>3</sup>                |
| Socio-cultural LOs     | $\alpha=0.63$ , N=38           | $\alpha=0.69$ , N=38 | $\alpha=0.76$ , N=33           | $\alpha=0.78$ , N=20          |
| Administrative LOs     | $\alpha=0.68$ , N=38           | $\alpha=0.71$ , N=37 | $\alpha=0.63$ , N=33           | $\alpha=0.6$ , N=22           |
| LOs                    | $\alpha=0.76$ , N=38           | $\alpha=0.69$ , N=35 | $\alpha=0.83$ , N=33           | $\alpha=0.81$ , N=20          |
| Safety                 | — <sup>1</sup>                 | $\alpha=0.68$ , N=39 | $\alpha=0.74$ , N=33           | $\alpha=0.61$ , N=21          |
| Mutual Trust & respect | — <sup>1</sup>                 | — <sup>1</sup>       | — <sup>4</sup>                 | $p<0.5$ , $rp=0.45$ ,<br>N=21 |
| Volunteering           | $p<0.05$ , $rp=0.34$ ,<br>N=21 | — <sup>1</sup>       | $p<0.01$ , $rp=0.49$ ,<br>N=33 | $p<0.05$ , $rp=0.6$ ,<br>N=22 |
| Staff attitude to work | $\alpha=0.6$ , N=39            | $\alpha=0.79$ , N=36 | $\alpha=0.72$ , N=38           | $\alpha=0.75$ , N=21          |
| Whole Questionnaire    | $\alpha=0.78$ , N=29           | $\alpha=0.87$ , N=32 | $\alpha=0.88$ , N=21           | $\alpha=0.85$ , N=19          |

Remarks-1- These variables were not gathered due to low correlation

2- Low response prevented combining the items into one variable

3- DISC2 used only one question concerning pedagogical LOs.

4- Although achieved low correlation ( $\alpha=0.23$ ) this item was combined for consistency.

#### b. Pre-Coaching Intervention DISC1-2 Questionnaire Data from S- School -

Table 3 below, presents the diffusion indicators of the variables from the Pre - Coaching intervention questionnaires. The bold lettered variables indicate grouped variables combining answers from 2-7 questions.

**Table 3** Pre- Coaching Intervention Descriptive Statistics

| Variables                              | STAFF - DISC1 |                |    |  | STUDENTS - DISC2  |                |    |
|--|---------------|----------------|----|--|-------------------|----------------|----|
|  | Mean          | Std. Deviation | N  |  | Mean              | Std. Deviation | N  |
| Knowledge / awareness of school vision | 2.29          | 1.13           | 35 |  | 1.44              | 0.97           | 39 |
| The ownership of School vision         | 2.91          | 0.99           | 23 |  | 2.7               | 1.4            | 10 |
| <b>Vision</b>                          | 3.42          | 0.59           | 25 |  | ___2              |                | 13 |
| <b>Pedagogical LOs</b>                 | 2.94          | 0.53           | 39 |  | 3.41 <sup>3</sup> | 0.83           | 40 |
| <b>Socio-cultural LOs</b>              | 3.33          | 0.41           | 38 |  | 3.44              | 0.59           | 40 |
| <b>Administrative LOs</b>              | 3.5           | 0.52           | 38 |  | 3.76              | 0.58           | 40 |
| <b>Total LOs</b>                       | 3.28          | 0.39           | 38 |  | 3.54 <sup>3</sup> | 0.53           | 40 |
| <b>Staff attitude to work</b>          | 4.03          | 0.48           | 39 |  | 3.64              | 0.89           | 38 |
| Manners of Organizational Learning     | 2.62          | 1.67           | 29 |  | ___4              |                |    |
| Acknowledging and Celebrating success  | 2.92          | 1.38           | 36 |  | ___4              |                |    |

|                          |      |  |  |  |      |      |    |
|--------------------------|------|--|--|--|------|------|----|
| Safety                   | ___1 |  |  |  | ___1 | 0.79 | 40 |
| Mutual trust and respect | ___1 |  |  |  | ___1 | 0.63 | 40 |
| Voluntary                | ___1 |  |  |  | ___1 | 0.83 | 40 |

**Remarks** 1- These variables, subgroups of the 'Socio-cultural learning outcomes' grouped variable, were not grouped in this questionnaire due to low Alfa of Cronbach test results or low correlation.

2- The Vision items were not grouped due to low rate of response to questions amongst students. (More information in part d).

3- Pedagogical learning outcomes include one item only in DISC, the first of the four items from DISC1.

4- These variables do not exist in DISC2.

**DISC1-** All items were normally distributed around means between 2.2-3.6 out of 5, apart from the 'staff attitude to work' variable, which was found to have a relatively high mean 4.03 out of 5 with a normal distribution around it.

The staff indicated that in school the administrative learning outcomes were the highest with a mean value of 3.5, Socio-cultural learning outcomes next, with a mean value of 3.33 and the lowest learning outcomes were the pedagogical gaining a mean value of 2.94. All were found to have a relatively small Std. deviation.

Considering of the 'Knowledge /awareness of staff with school vision' (out of 4 stages), it was found that the staff conceptions, on an average were between the following two statements- "There is a vision, but I don't remember what it is"- (2), and "There is a vision, but I only remember part of it" (3) gaining a mean of 2.29 (or 2.86 when translated to a 1-5 scale). Considering 'Ownership of school vision' - (out of 4 stages), it was found that staff, on an average treat the vision as owned between "management alone"(2) to "the teachers and management"(3) gaining a mean of 2.91, but 3.63 had it been, as said, on a scale 1-5, which is the second highest mark. Both these vision variables were found to have a relatively high Std. deviation, indicating lower agreement amongst staff about these issues.

The highest Std. deviation was found considering both 'Acknowledging and Celebrating success' (1.38), and 'Manners of Organizational Learning' (1.67).

**DISC2-** The mean values found for all items, apart from the items concerning vision, were similar and high, between 3.41-3.76. The highest was the students' conception of 'Staff attitude to work' with a mean of 3.64. Amongst learning outcomes,

'Administrative learning outcomes' were the highest with a mean value of 3.76, 'Socio-cultural learning outcomes' next, with a mean value of 3.44 and the lowest 'Pedagogical learning outcomes' gaining a mean value of 3.41. All were normally distributed with a similar Std. deviation (between 0.53-0.83, the highest was found for 'Pedagogical learning outcomes' - 0.83). Considering of the ' Knowledge /awareness of students with school vision' – (out of 4 stages), it was found that the students usually "did not know if the school had a vision"-(1) or else indicated "There is a vision, but I don't remember what it is"- (2), gaining a mean of 1.44. (1.8 translated to a 1-5 scale). Considering 'Ownership of school vision' - (out of 4 stages), it was found that students, on an average treat the vision as owned between "management alone"(2) to "the teachers and management"(3) gaining a mean of 2.7, 3.37 if it were on a scale 1-5. This last Vision variable- 'Ownership of school vision' was found to have a high Std. of deviation 1.4, indicating lower agreement amongst students about these issues.

#### c. Post- Coaching Intervention Questionnaire Data from S- School

Table 4 ahead, shows the diffusion indicators of the variables from the Post- Coaching intervention questionnaires. The bold lettered variables indicate grouped variables.

**Table 4** Post- Coaching Intervention Descriptive Statistics

| Variables                              | STAFF- DISC1 |                |    | STUDENTS- DISC2   |                |    |
|--|--------------|----------------|----|-------------------|----------------|----|
|  | Mean         | Std. Deviation | N  | Mean              | Std. Deviation | N  |
| Knowledge / awareness of school vision | 2.97         | 1.01           | 33 | 1.91              | 1.06           | 22 |
| The ownership of School vision         | 3.50         | 0.64           | 26 | 3.5               | 1.16           | 12 |
| <b>Vision</b>                          | 3.72         | 0.51           | 28 | 2.92 <sup>j</sup> | 1.00           | 14 |
| <b>Pedagogical LOs</b>                 | 3.22         | 0.47           | 32 | 3.5 <sup>l</sup>  | 1.01           | 22 |
| <b>Cultural LOs</b>                    | 3.47         | 0.54           | 33 | 3.48              | 0.59           | 40 |
| <b>Administrative LOs</b>              | 3.74         | 0.51           | 33 | 3.63              | 0.58           | 40 |
| <b>Total LOs</b>                       | 3.51         | 0.40           | 33 | 3.58 <sup>l</sup> | 0.55           | 22 |



|  |      |      |    |  |      |      |    |
|--|------|------|----|--|------|------|----|
| Staff attitude to work                   | 4.21 | 0.56 | 31 |  | 3.75 | 0.76 | 22 |
| Manners of<br>Organizational Learning    | 3.04 | 1.66 | 28 |  | ___2 |      |    |
| Acknowledging and<br>Celebrating success | 2.90 | 1.47 | 29 |  | ___2 |      |    |
| Safety                                   | 3.32 | 0.68 | 33 |  | 3.41 | 0.69 | 22 |
| Mutual trust and<br>respect              | 3.42 | 0.65 | 33 |  | 3.31 | 0.98 | 22 |
| Voluntary                                | 3.78 | 0.70 | 33 |  | 3.61 | 0.84 | 22 |

Remarks-1- Pedagogical learning outcomes include one item only in DISC2, the first of the four items from DISC1.

2- These variables do not exist in DISC2.

3- More about vision in part d.

**DISC1** -Most items were normally distributed around a high mean 3.2-3.8 out of 5, apart from the 'Staff attitude to work' variable which was found to have a high mean 4.21 out of 5 with a normal distribution around it.

The staff indicate that in school 'Volunteering' had the highest mean value of 3.78, 'Administrative learning outcomes' next with a mean value of 3.74. The lowest were 'Pedagogical learning outcomes', gaining a mean value of 3.2 normally distributed.

The std. of deviation were found to be relatively small apart from one's concerning the three following items - 'Awareness/ knowing of the vision' and the two items concerning the learning organization- 'Organizational learning' and -'Acknowledging and celebrating success' in school. Considering of the 'Knowledge /awareness of staff with school vision' - (out of 4 stages), it was found that the staff on an average mostly identify with the saying-

"There is a vision, but I only remember part of it" (3) gaining a mean of 2.97 which is a high mark of 3.71 had it been on a 1-5 scale. Considering -'Ownership of school vision' – (out of 4 stages), it was found that staff concepts, on an average about vision ownership was between "the teachers and management"(3) and " The whole community" gaining a mean of 3.5, but 4.37 had it been on a 1-5 scale – the highest mean given in this questionnaire.

**DISC2-** The mean values found for all items, apart from the items concerning Vision, were similar and high, between 3.41-3.75. The highest was the students' concept of 'Staff attitude to work' with a mean of 3.75. Amongst learning outcomes, 'Administrative learning outcomes' were the highest, with a mean value of 3.63, 'Pedagogical learning outcomes' next, with a mean value of 3.5 but significantly higher Std. of deviation-1.01. Lowest of learning outcomes, though close, were 'Socio-cultural learning outcomes' gaining a mean value of 3.48. 'Socio-cultural learning outcomes' were divided into subgroups- 'Volunteering" which had the highest mean 3.61 then 'Safety'- 3.41 and the lowest – 'Mutual trust and respect' -3.31. Considering of the ' Knowledge/awareness of students with school vision' – (out of 4 stages), the students usually indicated "There is a vision, but I don't remember what it is"- (2), gaining a mean of 1.91. (2.38 if it were on a 1-5 scale). Considering 'Ownership of school vision' –(out of 4 stages), it was found, that on an average students treat the vision as owned between "the teachers and management"(3) and "The whole community" gaining a mean of 3.5, but 4.37 had it been on a 1-5 scale – the highest mean given in this questionnaire. The Std. deviation for this item was the highest as well-1.16, indicating low agreement amongst 12 students commenting on this item. (See more about vision items below).

#### d. Descriptive statistics concerning student conception of Vision items

The student questionnaire DISC2 contained the first 5 questions out of 6 from DISC1 concerning the school vision. In the pre coaching intervention DISC2 questionnaire, there were few students, only 13 out of 40 (32.5%), who answered any of these questions since they didn't understand the term 'Vision'. Many asked for explanations while filling in the questionnaire but as understanding the term was a crucial part of what was asked, they were told to leave questions which were not understood open. 'Vision' group variable items (3 in DISC2 out of 4 in DISC1) were therefore not grouped in pre coaching intervention, due to low rate of response. In the post coaching intervention questionnaire, the percentage of responding students grew to 12 students out of 22 (54%), which was still low (and out of a very small sample of students). Therefore the descriptive information which is hereby presented in the following table should be treated with caution. The table ahead, describes the

remaining vision items (items 2,4,5) which were not mentioned before, ones which were supposed to be grouped into "Vision" variable -

**Table 5** Vision items according to student concept pre-post coaching intervention

| Vision Items   | Pre coaching intervention<br>N=40 |                          |    |     | Post coaching intervention<br>N=22 |                           |    |      |
|--|-----------------------------------|--------------------------|----|-----|------------------------------------|---------------------------|----|------|
|  | Std.Dev.                          | Mean                     | N  | %   | Std.Dev                            | Mean                      | N  | %    |
| Knowledge / awareness of school vision <sup>1</sup>                          | .97                               | 1.44 (1.8 <sup>3</sup> ) | 39 | 97% | 1.06                               | 1.91 (2.38 <sup>3</sup> ) | 22 | 100% |
| Vision published and referred to on various occasions <sup>2</sup>           | 1.4                               | 3.2                      | 13 | 32% | 1.27                               | 2.71                      | 14 | 63%  |
| Ownership of School vision <sup>1</sup>                                      | 1.4                               | 2.7 (3.37 <sup>3</sup> ) | 10 | 25% | 1.17                               | 3.50 (4.37 <sup>3</sup> ) | 12 | 54%  |
| Projects and teaching curricula reflected in vision <sup>2</sup>             | 1                                 | 3.9                      | 13 | 32% | .90                                | 3.50                      | 12 | 54%  |
| Cultural, educational and social activities reflected in vision <sup>2</sup> | .8                                | 3.5                      | 13 | 32% | .99                                | 3.08                      | 12 | 54%  |

Remarks-1- Items which were not part of the combined 'Vision' variable in DISC questionnaires. They are calculated using a 1-4 scale.

2- Items which are part of the combined 'Vision' variable in DISC questionnaires.

3-Number in brackets indicates the value had the scale been between 1-5.

Pre coaching intervention- The highest mean 3.9 (out of 5) was found for the degree to which "The projects and teaching curricula which the school initiates or undertakes reflect a cohesive conception connected to the vision". Next was the item dealing with the degree to which "The cultural, educational and social activities at school reflect a cohesive conception connected to the vision" with a mean 3.5 (out of 5).

Post coaching intervention- "Ownership of school vision" was found to have the highest mean. Next, "The projects" and "The cultural", were found to have high means 3.5 and 3.08 respectively. The same items as in the pre questionnaire.

#### 4.1.2 Inferential statistics

In this part inferential statistics will be presented according to the order of the relevant hypotheses as follows -

H1. Learning outcomes in school are significantly strengthened by KCM coaching intervention.

H11 - Pedagogical learning outcomes are strengthened by the KCM coaching intervention - PLO's,

H12 - Socio-cultural learning outcomes are strengthened by the KCM coaching - SCLO's,

H13 - Administrative learning outcomes are strengthened by the KCM coaching - ALO's.

H2. The KCM coaching intervention significantly strengthened and promoted the three core school Process.

H21 -Vision internalization is significantly strengthened by the KCM coaching intervention.

H22 - Organizational learning is significantly strengthened by KCM coaching

H23 - Personal-professional learning, forming a coaching culture in school is significantly strengthened by the KCM coaching intervention.

H3. Learning outcomes in school and the three school core process progress simultaneously during coaching intervention.

H1. Learning outcomes in school are significantly strengthened by coaching intervention-

I divided the information which was drawn from questionnaires (soft data), and which will be presented in section a. The information drawn from school records (hard data), will be presented in section b.

a. Soft data-Data from questionnaires DISC1 and DISC2-

**DISC1** - Table 6 shows the differences in staff conception of school learning outcomes pre (1) to post (2) coaching intervention

Multivariate analysis of variance (MANOVA) test could have been used, but doing so would mean a loss of close to 50% of data (pre-from 40 to 24, post – from 34 to 25), therefore a t-test was conducted instead.

**Table 6** Group statistics 1-staff Pre Coaching, 2- staff Post Coaching

| Time | Variable           | N  | Mean | Std. Dev. | Std. Error Mean |
|------|--------------------|----|------|-----------|-----------------|
| 1    | LOs                | 39 | 3.29 | .40       | .06             |
| 2    |                    | 34 | 3.52 | .41       | .07             |
| 1    | Pedagogical LOs    | 39 | 2.94 | .54       | .09             |
| 2    |                    | 32 | 3.22 | .48       | .08             |
| 1    | Socio-cultural LOs | 38 | 3.33 | .42       | .07             |
| 2    |                    | 33 | 3.47 | .54       | .09             |
| 1    | Administrative LOs | 38 | 3.47 | .47       | .09             |
| 2    |                    | 33 | 3.74 | .51       | .09             |

**Table 7** T-Test Mean and Std. of deviation Pre- Post Coaching for groups of items-staff

| Variable           | t-test      | Post |      | Pre |      |
|--------------------|-------------|------|------|-----|------|
|                    |             | SD   | M    | SD  | M    |
| LOs                | t(71)=2.46* | .41  | 3.52 | .40 | 3.29 |
| Pedagogical LOs    | t(69)=2.31* | .48  | 3.22 | .54 | 2.94 |
| Socio-Cultural LOs | t(69)=1.25  | .54  | 3.47 | .42 | 3.33 |
| Administrative LOs | t(69)=1.9   | .51  | 3.74 | .47 | 3.47 |

\*p<.05

A significant raise is seen for the following groups of items- **LOs, Pedagogical and LOs**. Administrative LOs received p=0.06, which means that is a borderline result, almost significant.

Socio-cultural Learning outcomes received a higher mean value post intervention, a consistent pattern with the rest, though not significant.

The separate item statistics using a Z-Test, showed non- significant differences in separate items of learning outcomes apart from the question seeking to rate the school pedagogical learning outcomes as a whole, as shown in Table 8.

**Table 8** Z-Test Mean and Std. of deviation Pre- Post Coaching for independent items

| Variable                | z-test | Post |      | Pre  |      |
|-------------------------|--------|------|------|------|------|
|                         |        | SD   | M    | SD   | M    |
| Rate the PLOs in school | 2.52*  | .672 | 3.42 | .743 | 2.95 |

\*p<.05

**DISC2** – The following Table 9 shows the differences in student conception of learning outcomes in school pre (1) to post (2) coaching intervention. A t-test was conducted in order to maintain consistency with the staff questionnaire analysis.

**Table 9** Group statistics 1-student Pre Coaching, 2- student Post Coaching

| Time | Variable                     | N  | Mean | Std. Dev. | Std. Error Mean |
|------|------------------------------|----|------|-----------|-----------------|
| 1    | LOs                          | 40 | 3.54 | .53       | .08             |
| 2    |                              | 22 | 3.58 | .55       | .12             |
| 1    | Pedagogical LOs <sup>1</sup> | 40 | 3.41 | .84       | .13             |
| 2    |                              | 22 | 3.50 | 1.01      | .22             |
| 1    | Cultural LOs                 | 40 | 3.48 | .59       | .09             |
| 2    |                              | 22 | 3.44 | .66       | .14             |
| 1    | Administrative LOs           | 40 | 3.63 | .59       | .09             |
| 2    |                              | 22 | 3.76 | .60       | .13             |

Remark - 1. This independent variable was analyzed with T -Test to maintain consistency. Using Z-test showed no different result.

**Table10 T-Test Mean and Std. deviation Pre- Post Coaching for groups of items- students**

| Variable           | t-test      | Post |      | Pre |      |
|--------------------|-------------|------|------|-----|------|
|                    |             | SD   | M    | SD  | M    |
| LOs                | $t(60)=.27$ | .55  | 3.58 | .53 | 3.54 |
| Pedagogical LOs    | $t(60)=.37$ | 1.01 | 3.50 | .84 | 3.41 |
| Cultural LOs       | $t(60)=.26$ | .66  | 3.44 | .59 | 3.48 |
| Administrative LOs | $t(60)=.78$ | .60  | 3.76 | .59 | 3.63 |

As seen, no significant changes were found in student concepts of the different items, nor were they found in the separate item statistics using z-tests.

**b. Hard data- Comparing data from school records measured learning outcomes pre-post coaching intervention-**

### **H11 - Pedagogical LOs**

The management team and I chose to measure and compare pedagogical outcomes from the S- junior high school (the three lower classes) in three main subjects- Hebrew, Mathematics and English. And in S- high school, (the three higher classes) to compare the eligibility for a baccalaureate diploma.

#### S-Junior high school achievements-

The following two tables' 11-12 present pre and post intervention class achievements, noting the number and percentage of under achieving students in each discipline and class. Table 11 presents grades given at the end of the year previous to intervention.

**Table11** S-School junior high school achievements pre intervention

| Class number                |                    | Hebrew        |                 |      | Mathematics     |                 |      | English         |                 |      |
|-----------------------------|--------------------|---------------|-----------------|------|-----------------|-----------------|------|-----------------|-----------------|------|
|                             | Number of Students | % of failures | No. of failures | Mean | % of failures   | No. of failures | Mean | % of failures   | No. of failures | Mean |
| Seventh 1                   | 28                 | 3             | 1               | 78   | 14              | 11              | 76   | 3               | 1               | 89   |
| Seventh 2                   | 27                 | 3             | 1               | 87   | 3               | 1               | 75.7 | 0               | 0               | 77   |
| Eighth 1                    | 30                 | 3             | 1               | 76   | 30              | 9               | 66.3 | 13              | 4               | 81.3 |
| Eighth 2                    | 31                 | 3             | 1               | 74   | 19              | 6               | 66.6 | 3               | 1               | 78.3 |
| Eighth 3                    | 23                 | 0             | 0               | 70   | 47              | 11              | 6.4  | 0               | 0               | 80   |
| Ninth1                      | 25                 | 0             | 0               | 83   | 16              | 4               | 73.5 | 4               | 1               | 84.4 |
| Ninth2                      | 20                 | 30            | 6               | 66   | 15              | 3               | 66.8 | 5               | 1               | 82.4 |
| Ninth3                      | 29                 | 3             | 1               | 79   | 68              | 20              | 52.5 | 20              | 6               | 72.2 |
| Whole of Junior high school | 213                | mean grade 77 |                 |      | mean grade 67.5 |                 |      | mean grade 80.3 |                 |      |
|                             | Number of failures | 11            |                 |      | 58              |                 |      | 14              |                 |      |
|                             | % of failures      | 5%            |                 |      | 27%             |                 |      | 6%              |                 |      |

In Table 12 the grades are those given at the end of the year of the intervention.

**Table 12** S-School junior high school achievements post intervention

| Class number |                    | Hebrew        |                 |      | Mathematics   |                 |      | English       |                 |      |
|--------------|--------------------|---------------|-----------------|------|---------------|-----------------|------|---------------|-----------------|------|
|              | Number of Students | % of failures | No. of failures | Mean | % of failures | No. of failures | Mean | % of failures | No. of failures | Mean |
| Seventh 1    | 30                 | 0             | 1               | 86   | 0             | 0               | 82.5 | 0             | 0               | 87.6 |
| Seventh 2    | 30                 | 0             | 1               | 85   | 10            | 3               | 78.7 | 0             | 0               | 87.2 |
| Eighth 1     | 29                 | 0             | 1               | 85   | 7             | 2               | 75   | 0             | 0               | 91.3 |
| Eighth 2     | 26                 | 0             | 1               | 83   | 11            | 3               | 69.1 | 0             | 0               | 85.2 |
| Eighth 3     | 15                 | 21            | 3               | 66   | 41            | 6               | 67.5 | 26            | 4               | 70.8 |
| Ninth1       | 25                 | 12            | 3               | 81   | 24            | 6               | 72.0 | 3             | 1               | 85.0 |



|                             |                    |                  |   |    |               |   |      |               |   |      |
|-----------------------------|--------------------|------------------|---|----|---------------|---|------|---------------|---|------|
| Ninth2                      | 27                 | 3                | 1 | 73 | 11            | 3 | 69.2 | 7             | 2 | 78.6 |
| Ninth3                      | 21                 | 0                | 0 | 73 | 9             | 2 | 74   | 14            | 3 | 68.6 |
| Whole of Junior high school | 203                | mean grade 80.15 |   |    | mean grade 74 |   |      | mean grade 83 |   |      |
|                             | Number of failures | 7                |   |    | 26            |   |      | 10            |   |      |
|                             | % of failures      | 3%               |   |    | 12%           |   |      | 4.9%          |   |      |

As no std. deviation were provided by the school; the measurements given were the means of class grades only, a t-test could not be used. However, an overview of the numbers show consistent growth; all grade means grew, and concerning the percentage of failures, a small decrease is seen in English and Hebrew. In Mathematics, student achievements show a significant decrease in the number of failures-

$$\chi^2(4) = 32.20, p < .001$$

### S-High school achievements

The number of school students eligible for a baccalaureate diploma having successfully passed all Matriculation exams, increased by 10.2% .

From 39% in 2007, before the intervention, to 43% after it.

**Table 13** S-School percentage of students entitled to baccalaureate diploma

|               | In 2007 % | % In 2008 | Increase % |
|---------------|-----------|-----------|------------|
| Whole school  | 39        | 43        | 10.2       |
| 'Etgar' class | 0         | 24        |            |
| 'Mabar' class | 38        | 48        | 26.6       |

This result may seem a small increase, adding 8-9 students to the group of students eligible for a baccalaureate diploma; however, this was the percentage they had specified as their goal for that year. Another important point is the fact that this information does not reveal the growing number of students who came closer to this

goal with only one or two exams to pass. This information is seen in the qualitative findings 'Etgar' class (motivationally challenged) increased their eligibility to a full matriculation diploma from 0% before the coaching intervention to 24% after it; The 'Mabar' class (slightly stronger students) increased their eligibility to a full matriculation diploma from 38% before the coaching intervention to 48% after it. These two last findings show a dramatic and important growth.

## H12 Socio-cultural LOs

The cultural outcome measured were students' grades in behavior and studiousness. We compared the grades given to students of the 10<sup>th</sup> grade from the end of 2007, to the grades given to the same students in the end of 2008, the year of the intervention. The following tables 14-15 present these measurements-

**Table 14** Grades on good behavior and studiousness of 10<sup>th</sup> grade students -2007

|           |                 | Behavior       |          |                    |               | Studiousness   |          |                    |               |
|-----------|-----------------|----------------|----------|--------------------|---------------|----------------|----------|--------------------|---------------|
| Class No. | No. of students | Average grades | St. Dev. | Number of failures | % of failures | Average grades | St. Dev. | Number of failures | % of failures |
| Tenth1    | 23              | 72.1           | 17       | 8                  | 34            | 66             | 17.5     | 12                 | 52            |
| Tenth2    | 18              | 74.7           | 15       | 2                  | 11            | 62.5           | 14.9     | 6                  | 33            |
| Tenth3    | 19              | 67.8           | 12.7     | 4                  | 20            | 58.3           | 16.3     | 6                  | 30            |
| Tenth5    | 25              | 97.3           | 5.14     | 0                  | 0             | 92.2           | 9.9      | 0                  | 0             |
| Tenth6    | 22              | 85             | 6.7      | 0                  | 0             | 82             | 12.07    | 1                  | 5             |
| Tenth7    | 17              | 98.8           | 3.2      | 0                  | 0             | 84.4           | 11.9     | 0                  | 0             |
| Total     | 124             | 82.9           | 16.3     | 14                 | 11            | 74.7           | 18.8     | 25                 | 20            |

**Table 15** Grades on good behavior and studiousness of the same students 11<sup>th</sup> grade -2008

|            |                 | Behavior       |          |                    |               | Studiousness   |          |                    |               |
|------------|-----------------|----------------|----------|--------------------|---------------|----------------|----------|--------------------|---------------|
| Class No.  | No. of students | Average grades | St. Dev. | Number of failures | % of failures | Average grades | St. Dev. | Number of failures | % of failures |
| Eleventh1  | 25              | 87.2           | 12.4     | 0                  | 0             | 85             | 16.2     | 0                  | 0             |
| Eleventh3  | 19              | 77.5           | 7.7      | 0                  | 0             | 65             | 8.1      | 0                  | 0             |
| Eleventh5  | 25              | 98.4           | 3.6      | 0                  | 0             | 94.6           | 9.8      | 0                  | 0             |
| Eleventh 6 | 19              | 88.5           | 5.8      | 0                  | 0             | 81.5           | 14.6     | 1                  | 5             |
| Eleventh 7 | 18              | 95.7           | 6.9      | 0                  | 0             | 88.4           | 14.6     | 0                  | 0             |
| Total      | 106             | 90.3           | 10.4     | 0                  | 0             | 84.2           | 15.2     | 1                  | 1             |

Measurements of the difference on good behavior grades show a significant raise-  
 $T(228) = 4.16, p < .001$

Measurements of the difference in studiousness grades show a significant raise-  
 $T(228) = 4.20, p < .001$

The difference in the percentage of failures in behavior from 11% down to 0% and for studiousness from 20% to 1%.

Using measurement of  $\chi^2$  for behavior-  $\chi^2(4) = 13.00, p < .05$ .

And for studiousness -  $\chi^2(4) = 35.00, p < .001$ .

(Both last measurements did not take into account Tenth 2 class as there was no Eleventh 2 class to compare with). These findings show that the school achieved its goals concerning socio-cultural LOs.

### **H13 - Administrative learning outcomes-ALO's**

#### **Comparing staff attendance 2007-2008 during the months February-April.**

Staff attendance at work is significant both morally and financially in school. In many schools however, staff absence is more common than in other sectors. This was one of the things the management wanted to measure and improve. We chose to

measure and compare staff attendance during the three months in the middle of the year, not from the beginning when the intervention had just started. The measurements shown in Table 16, show the percentage of hours lost for each month and on the whole, taking into account the holidays in each month. .

**Table 16** Comparing staff absence at work during the months February-April 2007 and 2008

| Month        | 2007                          |                  |                       | 2008                          |                  |                       |
|--------------|-------------------------------|------------------|-----------------------|-------------------------------|------------------|-----------------------|
|              | Number of monthly hours- 3520 | Hours of absence | Percentage of absence | Number of monthly hours- 3688 | Hours of absence | Percentage of absence |
| February     | A whole month                 | 322              | 9.1                   | A whole month                 | 366              | 9.9                   |
| March        | 3/4 month                     | 240              | 9                     | A whole month                 | 126              | 3.4                   |
| April        | 2/3 month                     | 205              | 8.9                   | 3/4 month                     | 104              | 3.7                   |
| Hours in all | 8483 hours                    | 767              | 9%                    | 10142hours                    | 596              | 5.8%                  |

Findings calculated show significant lower staff absence -  $\chi^2(2) = 212.47, p < .001$ , These findings show that the school achieved its goals concerning staff absence as defined.

H2. The coaching intervention significantly strengthened and promotes the three core school Process.

This part will first present staff conceptions from DISC1 and then student conceptions from DISC2.

Staff conceptions- Considering differences in staff conceptions pre to post intervention of variables related to the three core processes. The following table presents the t-test of grouped variables.

**Table 17** Group statistics 1-staff concepts Pre intervention, 2- staff concepts Post intervention

| Time | Variable               | N  | Mean | Std. Deviation | Std. Error Mean |
|------|------------------------|----|------|----------------|-----------------|
| 1    | Vision                 | 25 | 3.42 | .60            | .12             |
| 2    |                        | 28 | 3.73 | .52            | .1              |
| 1    | Staff attitude to work | 39 | 4.03 | .48            | .08             |
| 2    |                        | 31 | 4.22 | .56            | .10             |

**Table 18** T-Test Mean and Std. of deviation Pre- Post Coaching for groups of items-staff

| Variable               | t-test      | Post |      | Pre |      |
|------------------------|-------------|------|------|-----|------|
|                        |             | SD   | M    | SD  | M    |
| Vision                 | t(51)=2.01* | .52  | 3.73 | .60 | 3.42 |
| Staff attitude to work | t(68)=1.47  | .56  | 4.22 | .48 | 4.03 |

\*p<.05

Significant raise was found in vision- group item.

A Z- test was conducted to find differences in independent items according to staff conception, as shown below in Table 19.

**Table 19** Z-Test Mean and Std. of deviation Pre- Post Coaching for independent items staff

| Variable  | Z-test | Post  |      | Pre   |      |
|---|--------|-------|------|-------|------|
|   |        | SD    | M    | SD    | M    |
| Knowledge / awareness of school vision                | 2.57*  | 1.015 | 2.97 | 1.126 | 2.29 |
| Vision published and referred to on various occasions | 2.52*  | .912  | 3.70 | .862  | 3.08 |
| Ownership of School vision                            | 2.11*  | .648  | 3.50 | .996  | 2.91 |
| Pedagogical projects and curricula reflect vision     | .9     | 3.92  | .69  | .64   | 3.63 |

|  |       |     |      |     |      |
|--|-------|-----|------|-----|------|
| Cultural and activities reflect vision             | .69   | .6  | 3.76 | .64 | 3.65 |
| Vision is translated to targets in discipline team | .26   | .73 | 3.48 | .94 | 3.5  |
| Staff attitude-acting with commitment              | 1.37  | .89 | 4.48 | .59 | 4.32 |
| Staff attitude- focusing on goals                  | .52   | .65 | 4.1  | .87 | 3.97 |
| Staff attitude- acting in collaboration            | .94   | .79 | 4.03 | .71 | 3.9  |
| Staff attitude-encouraging achievements            | 2.12* | .68 | 4.26 | .64 | 3.89 |

\*p<.05

A significant difference in staff conception of independent items of the vision was found concerning the personal and collective knowledge of vision items and the staff concept of their focus on encouraging achievements. These findings concerning school processes give the vision implementation process the highest numerical value.

Student conceptions- Considering differences in student conceptions pre to post intervention, will be discussed as follows- first their conceptions about staff attitude to work and then to the school vision. The items of organizational learning were not part of the student questionnaire (DISC2). The following table presents the t-test for student conceptions about staff attitude to work.

**Table 20** Group statistics 1-student concepts Pre intervention, 2- Post intervention

| Time | Variable               | N  | Mean | Std. Deviation | Std. Error Mean |
|------|------------------------|----|------|----------------|-----------------|
| 1    | Staff attitude to work | 38 | 3.65 | .89            | .14             |
| 2    |                        | 22 | 3.76 | .77            | .16             |

**Table 21** T-test for student conceptions about staff attitude to work

| Variable               | t-test    | Pre |      | Post |      |
|------------------------|-----------|-----|------|------|------|
|                        |           | SD  | M    | SD   | M    |
| Staff attitude to work | t(58)=.48 | .89 | 3.64 | .76  | 3.75 |

As seen, no significant changes were found in student concepts of staff attitude to work, nor were they found in the separate item statistics using z-test.

Nevertheless, it must be mentioned that this group variable was found to have the highest mean both in pre and post student questionnaires 3.64 which grew to 3.75 (out of 5).

Low rates of answers to most of the vision items prevented grouping them into the 'vision variable' as mentioned before and therefore there was no analyzing of the differences. Nevertheless, the first item- knowledge / awareness of vision, which was answered by all Students, pre and post intervention (pre N=38, post N=22), was analyzed using a z test, showing a significant raise as shown in the next table-

**Table 22** Z- test for student Knowledge / awareness of school vision

| Variable                               | Z-test | Pre  |      | Post |      |
|--|--------|------|------|------|------|
|  |        | SD   | M    | SD   | M    |
| Knowledge / awareness of school vision | 2.86*  | 0.97 | 1.44 | 1.06 | 1.91 |

H3. Learning outcomes in school and the 3 school core process are in simultaneous progress during coaching intervention.

#### Significant differences between the strengths of the correlations

In the pre coaching intervention DISC1 questionnaire, 19.2%, 10 out of the 52 correlations were strong and significant. In the post intervention questionnaire, 35.3%, 29 out of the 82 correlations were strong and significant. Using a Z-Test one tailed, relating to the hypothesis with direction, showed a significant improvement,  $Z=2$ ,  $p \leq .05$ . (Using a two tailed Z-test produced a borderline result-  $Z=2$ ,  $p=.06$ , but as I assumed that the number of correlations would grow, I found the one tailed test appropriate). Eleven of these were among groups of items which were not grouped in the pre questionnaire and therefore could not be compared. The fact that these items became statistically bonded and could be grouped after the intervention, having achieved high correlations or high alpha of Cronbach value, shows in itself, that

through the intervention the coaching terminology or language started to take root in school.

Table 23 below, presents correlations between items from DISC1 (staff conceptions), which have changed from non significant correlated to significant correlated throughout the coaching intervention. ( $rp > .35$ ).

12 correlations were found strong and significant in the post- coaching intervention questionnaire having shown a non significant correlation in the pre- intervention questionnaire (these are printed with bold fonts).

5 correlations were found strong and significant in the pre- coaching intervention questionnaire and were not significant in the post- intervention questionnaire.

**Table 23** Change of significant strength of correlations between variables pre to post intervention

|                         | Knowing the vision  | Vision  | Staff Attitude to work   | Pedagogical LOs   | Socio-cultural LOs   | Organizational learning   | Celebrating success   |
|-------------------------|---|---|--|---|--|---|---|
| Knowing the vision      |   | $rp=.48$<br>$p<.05$<br>$N=22$   | <b><math>rp=.42</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=30</math></b> |   | <b><math>rp=.37</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=32</math></b> | <b><math>rp=.4</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=27</math></b> |   |
| Ownership of vision     |   | $rp=.43$<br>$p<.05$<br>$N=23$   |  | <b><math>rp=.65</math></b><br><b><math>p&lt;.001</math></b><br><b><math>N=25</math></b> |  |   |   |
| Vision                  |   |   |  | <b><math>rp=.42</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=27</math></b>  |  | $rp=.53$<br>$p<.05$<br>$N=27$   |   |
| Pedagogical LOs         |   |   |  |   | <b><math>rp=.43</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=31</math></b> |   |   |
| Socio-Cultural LO total |   |   | <b><math>rp=.49</math></b><br><b><math>p&lt;.01</math></b><br><b><math>N=29</math></b> |   |  |   |   |
| Administrative LOs      |   |   | $rp=.42$<br>$p<.01$<br>$N=38$  |   |  | $rp=.43$<br>$p<.05$<br>$N=29$   | <b><math>rp=.5</math></b><br><b><math>p&lt;.01</math></b><br><b><math>N=29</math></b> |
| LOs total               | <b><math>rp=.4</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=33</math></b> | <b><math>rp=.5</math></b><br><b><math>p&lt;.01</math></b><br><b><math>N=28</math></b> | <b><math>rp=.3</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=39</math></b>  |   |  |   | <b><math>rp=.4</math></b><br><b><math>p&lt;.05</math></b><br><b><math>N=29</math></b> |

'Pedagogical LOs', a variable which was not correlated to any other variable pre intervention, was found to be strongly correlated to "Ownership of school vision", the strongest correlation found ( $rp=.65$ ,  $p<.001$ ), and to 'Vision' variable ( $rp=.42$ ,  $p<.05$ ). Both the absence of correlations in the pre-test and the strength of these correlations found, make this finding a significant one.



5 of the new strong and significant correlations, presented in grey background, show the growing affect of vision in S- School by the coaching intervention in correlation to learning outcomes.

2 correlations with the item 'celebrating success' became significant after the intervention - administrative LOs ( $r_p=.5$ ,  $p<.01$ ), and LOs total ( $r_p=.4$ ,  $p<.05$ ).

#### **4.1.3 Summing up quantitative data**

The quantitative data shown was collected from the first and the third phases of the research which were quantitative phases. The data as presented, was collected before and after the coaching intervention and consisted of hard data from school records and soft data from the DISC questionnaires in which all S-School's staff and student representatives presented their conceptions about school processes and school learning outcomes.

The findings indicate:

A general growth in all aspects, many of which were significant.

A fulfillment of the school goals set by the school management at the beginning of the intervention.

The data from the DISC2 questionnaire (student conceptions) were less informative.

## **4.2 Qualitative data**

The qualitative data was collected for two reasons: the first, to support quantitative findings, to help illustrate and add depth and vividness to the quantitative findings confirming the research hypothesis (Quantitative phases of MM).

The second reason qualitative data was gathered, was to answer questions meant to improve the model and my work as a coach (Qualitative phase of MM).

The qualitative data enabled me to broaden my personal understandings from this case study, based on my experience as coach and as the researcher. By listening to other people, and by reading other peoples' documents, I could seek their perspective, their interpretations, meaning and understandings concerning the coaching intervention in their school. This information, from people who were part of the project, who were meant to be personally and professionally affected by the process, was most valuable

and important. With it, I could give deep and validated meaning to the numbers found through quantitative data. With it, I could help base and broaden my reflection on the process, while trying to further improve.

#### Qualitative data was gathered by-

##### 1. Interviews (see interview questions in Appendix 5)

16 staff members were interviewed, each for about an hour during the last month of the school year. 13 teachers- B1,Y,G,A1, A2, O1,R1, R2, L, N, S1,S2, D , and 3 other staff members-O2, B2,M (see interviews in Appendix 1).

##### 2. Documents-

Documents of four kinds were analyzed-

- 'A planning and reflecting table', P-R written by 3 managers- EB, MD & JS (see Appendix 3).
- Summary of personal achievements of plans through coaching intervention, by management team SUM- EB, JS, DO, OK (see in Appendix 4.1, from the examples of qualitative data).
- Reflection on coaching process in perspective of time, L-R written by 3 managers- EB, MD & JS (see Appendix 2).
- My research diary (see Appendix 10).

#### Data categories

The raw qualitative data was categorized into three large groups as follows, related to the research questions earlier presented (see more about manner of categorizing data in Appendix 9)-

**First category-** School improvement and success- which helped answer the general question-

**Q1-**Which learning outcomes had improved during the coaching intervention and in what manner?

And supported quantitative findings related to **H1**.

**Second category- Characteristics of S-School culture**- which helped answer the question-

**Q2-**What are S-School's characteristics having gone through the KCM coaching intervention?

And supports quantitative findings related to **H2**.

**Third category – Evaluating and promoting the effect of the coaching intervention**-  
Answering the questions-

**Q3** In what ways can the KCM coaching intervention be evaluated?

**Q4** In what ways had my work improved? What else should be done?

Q41- In what ways had my professional work as a coach improved? What else may be done?

Q42- In what ways had the KCM model improved? What else may be done?

And supports quantitative findings related to **H3**.

All quotations are hereby presented according to the categories.

The quotations can be located according to the name of participant in Appendix 1.

If a quotation is from the "planning and reflection table" P-R, "longitude reflection on coaching" L-R, or from the "summarizing of achievements" SUM, it is mentioned, and the information can be located in appendixes 3, 2 and 4.1 respectively. This is the qualitative data which was collected as part of the coaching sessions, as agreed upon with the coachees.

#### **4.2.1 First category - I - School improvement and success**

As said, the goal and focus of Katom coaching work, was towards achieving better performances, which improved school learning outcomes would indicate. School learning outcomes were divided into three types -

- Pedagogical learning outcomes (PLOs),
- Socio-cultural learning outcomes (SCLOs) and
- Administrative
- learning outcomes (ALOs).

The LOs will be traced as follows-

**In section Ia.** Success and improvement on a personal level – what was chosen by interviewees as the most important/impressive/significant change/improvement in school.

**In section Ib.** all quotations referring to improvements and changes in school during the year.

The next table presents the first category frame.

**Table 24** First category-I

| <b>I - School improvement and success</b> |                               |                                  |   |              |              |                 |
|---|-------------------------------|----------------------------------|---|--------------|--------------|-----------------|
| <b>Ia Personal level success</b>          |                               |                                  | <b>Ib Changes in school Change levels</b> |              |              |                 |
| <b>Ia1</b>                                | <b>Ia2</b>                    | <b>Ia3</b>                       | <b>Ib1</b>                                | <b>Ib2</b>   | <b>Ib3</b>   | <b>Ib4</b>      |
| Socio-Cultural Learning Outcomes          | Pedagogical Learning outcomes | Administrative Learning outcomes | Awareness                                 | Good results | Breakthrough | Transformations |
| <b>Ia11</b>                               | <b>Ia21</b>                   |                                  | <b>Ib11</b>                               |              |              |                 |
| Relations                                 | Stories                       |                                  | General comments                          |              |              |                 |
| <b>Ia12</b>                               | <b>Ia22</b>                   |                                  | <b>Ib12</b>                               |              |              |                 |
| Socio-cultural activities                 | Acknowledgment                |                                  | Change begins                             |              |              |                 |

### **Ia. LOs improvements on personal level**

All interviewed members of the staff were asked to report on their "*most significant good experience of the year*" and explain why they chose it.

Most described an important personal success .Some spoke of two important experiences (stories).

All were connected to achievements and improvements.

The experiences could be divided into the three following categories:

Ia1. Socio-cultural learning outcomes

Ia2. Pedagogical learning outcomes

Ia3. Administrative learning outcomes

### **Ia1. Socio-cultural learning outcomes**

The largest number of stories regarding the *most significant good experience of the year*- 11 stories, were connected to Socio-cultural learning outcomes. 7 stories were about personal relations (presented in Ia11) and 4 were connected to socio-cultural activity (presented in Ia12).

#### Ia11. Personal relations

**D:** "A student who wouldn't speak; sat like a plant ...has approached me this week for the first time! He behaved like a shadow for two years, and he suddenly came and told me about himself. This gives me air to breathe... there is a lot of disappointment here...it is as if I have finally passed his exam. I told him I was proud to be chosen by him to open up to. A little window was opened".

**N:** "The close relationship formed is the meaningful experience for me... I receive love from them. They share their intimate stories. They tell me about their relations with their boy or girl friends- they are confident that what they tell me will be confidential. Most of them feel confident as I work on establishing relationships with them on a personal level"

**R1:** "I almost lost a student because I was too practical. I thought of teaching her I should have listened instead... Sit with her and drink a cup of coffee. Focus on the child not on grades, the child not the content. I started to spend time with her. She showed me songs she had written"

**A1:** "This is the first year that I have some time. It is my fourth year in S-School and I am not as busy preparing papers and am free to focus on personal relations. I say to a student- 'come sit with me, what is happening with you these days?'"

**G:** "I like seeing the students pursuing me, I invite them home as well"

**O2:** "It was a special experience for me to see two girls, from different backgrounds getting friendly. For instance an Ethiopian student from a low achieving class with a student from the 'Mofet' special program class hugging each other."

**S1:** "Something which touched my heart- when my son was hurt in a car accident, all the system joined to help me. The everyday work is difficult here but when you are in need, the generosity here is unbelievable".

### Ia12. Socio- cultural activity

**B2:** about ODT activity- "very different from the day to day work. One could see how much the students enjoyed it- I saw big smiles and laughter. First of all, they didn't run away like they often do during other social activities."

**A2:** "I went on an excursion to Jerusalem with my class...The atmosphere was so pleasant...I received them when they were young and problematic and suddenly they have all grown into young men...they were like cats and mice to one another until very recently"

**L:**(English teacher) I have been preparing musicals with the English speaking kids in S-Junior High school for the past five years. This year the show was the highlight of the year! We did "Fiddler on the roof" and it was fantastic!... we prepared everything on our own- light, music...it was an experience of a lifetime... next year I plan an even greater challenge- I want to let the boarding school students join as well!"

**O2:** "The delegation to Poland - external students together with boarding school students, for the first time."

### **Ia2. Pedagogical learning outcomes**

Amongst the *most significant good experience of the year*- 6 stories were connected to pedagogical learning outcomes. These are presented in part Ia21. 4 of these stories included acknowledgment of success or else thanks that the speaker received. This was a unique addition to the success story, which only these stories included. These are presented in part Ia22.

### Ia21- the stories

**B1:** "My 12<sup>th</sup> grade class graduated. 18 kids- 10 of them accomplished a full matriculation certificate, 4 had only 1 exam missing and only 4 more than 1 to complete."

**Y:** "The weaker students who manage to pass the exams. I have had quite a few such experiences. Not enough. Some start off saying "I can't..." and it turns out they can!... it suddenly dawns on them and they manage to get good grades. Even the ones who will have fewer exams are working in the village and some are planning to go on studying after their military service"

**A2:** "I prepared a class for the winter exam with only a month and a half of work due to the teacher's strike. Out of 24 students, I allowed 22 to attend the exam and they all passed!"

**S2:** "It was difficult with their final assessments...eventually, with hard and intensive work they managed! 15 kids completed their agriculture papers...they feel like genii !"

**G:** "The aim is to help them succeed in all the matriculation exams. I had one student who did not want to learn or to attend to the exam. I decided I would not give up...On Sunday he is going to write the exam!"

### Ia22. Thanking /Acknowledging the success

**B1:** "They all thanked me for my "drilling into their minds"

**R2:** "My speech at the end of the year's celebration. I was so excited by their achievements...it was like when I got a prize for excellence at university."

**S2:** "I heard some say- you have still not proven yourself... Now I have! All my students knew the material and did well in the exam!"

**G:** "EB calls me the 'Bible magician' ...Because of my work this kid managed to pass the exam".

### **Ia3. Administrative learning outcomes**

Only 3 participants chose an administrative story as the *most significant good experience of the year*. These are presented below.

**R1:** "I was in charge of a new project for 7-9<sup>th</sup> grade students. (Ogen). Teachers volunteer to personally help a student. They all need it, particularly the ones from the boarding school"

**R1:** "I decided to see to it that all children would attend class... I prepared a table and every child who did not miss any lesson that week got a prize. The kids said that prizes should be given to students who have made progress as well. A child who missed 16 lessons and the next week only 7, was told by his friends- their idea – that he had improved, though not enough... This big paper table was never torn (or burnt) like many other decorations on the wall. It was very important to them. Now they all come to class regularly".

**M:** " This year a process of communicating started, with school counseling: Meetings with external help; different issues were tackled, - problem solving and decision making and putting to practice... This is meaningful because we work with youth with so many lacks".

The interviewees' "*most significant good experience of the year*" was found to be mostly part of a socio-culture LO, specifically, relating to personal relations. Personal relations, a concept including love, listening, care etc., was recognized as a theme in itself (a sub category of category II ahead). However, I chose to present these quotations as part of this category (Ia1) because they were amongst the interviewees answers to the question *what was the most significantly good experience of the year?*

## **Ib. Improvements and changes in school**

Most of the qualitative data gathered could be largely defined as related to changes and improvements in school work. To help make sense of the data, I hereby present the quotations sorted and coded twice-

1. Each of the following quotations is tagged at the end as an improvement/change in either pedagogical LOs, socio-cultural LOs or administrative LOs - P, SC, A respectively. (Some are tagged by more than one type of LO).



2. Improvements were divided into 4 stages of changes as follows (for more about the development of the change levels-see 5.3.2.2)

**Ib1.** *Awareness.*

**Ib2.** *Good results.*

**Ib3.** *Breakthrough.*

**Ib4.** *Transformation.*

### **Ib1. First change level- awareness**

The quotations in this part represent an awareness stage, a new and better way of doing things was found, which created a different and unexpectedly good result. This stage is divided into two levels. First, in part Ib11, general comments about change are presented. (Being general comments, no LOs are tagged). Then, in part Ib12, the comments present the beginning of change-what had already happened and what there was still to do.

#### Ib11. General comments about change

**O1:** The management team shows willingness to change and improve

**EB:** P-R "We took on too many tasks, some of which were new to us. On the whole, on examining the first results, we can see that we have achieved many and varied outcomes in a short time"...

**EB:** P-R "It is important to pay attention to our successful achievements. In day to day work we deal with problems and difficulties and fail to notice these small successes on the way."

**L:** (speaking of the intensive work and the many new requests for more work which staff in school receives daily): "Change must occur. A teacher in my team told me about a story she had taught in class, and which reminded her of our situation. She was teaching about the Aborigines in Australia. There is a type of frog that collects water reserves in its pouch. The Aborigines drink this water, taking care never to drink all of it otherwise the frog would die..."

## **Ib12 . Comments about the beginning of change-what has already happened and what is yet to be done**

The First 3 comments present a reactive attitude - things which have to be done by others. The next 4 comments present a proactive attitude, showing personal responsibility for change- what I am planning to do in order to improve the situation.

**R1:** The work with the forum of homeroom teachers seems to help. It must be expanded. A

**EB:** P-R "We must be aware that the new improved working patterns in the management team are not fully implemented yet. It is necessary to continue and reinforce the team work, to hold the meetings as planned and to conduct them with awareness of the importance of teamwork and with great sensitivity to the friends on the team. We must keep to the schedules, the regulations and the good communication skills we acquired". A

**JS:** P-R "In the boarding school classes work is still needed in order to improve pedagogical achievements". P

**N:** "I hope, actually I am sure we are on the way to becoming the leading school of our area. The academic level is rising."P

**R2:**"The system is concentrated on helping strong classes and neglecting the weaker ones. I think I was chosen to be responsible for the weak classes in order to change that" A

**D:** I am always thinking -what else can I do? How else can I make a difference?  
Never to forget a student; creative solutions SC

**L:** My team and I have had success with a certain type of students and I am looking for new challenges. ..We have a 90% success with them and the challenge is to teach to a higher level" P

The first change level included 3 pedagogical LOs, 3 administrative and 1 socio-cultural LOs improved.

### **Ib2. Second change level - good results**

In this level the quotations represent a new and better way of doing things found, which created a different and unexpectedly **good result**.

R2:"The whole group is now polite, gentle. When they first came here I thought to myself- 'who are these hooligans?' now they help everybody..." SC

S2:"The students who returned from the delegation to Poland told me all the kids were very nice. They had had no connections with students from other classes, and now, even the 'Elite ' girls' have become friendly with the boarding school students". SC

O1: The fact that EB, as the principal took part in the event and saw the outcomes- the importance and added value of the students' delegation to Poland, was an opportunity for him to realize the importance of connecting the boarding school students with the day students SC

O2:" The Etgar class had not been scheduled to take the matriculation exam in agriculture. They will now take the highest level of this exam!" P

B2: "It is the beginning of communication between the two groups- the boarding school students and the day students. The contact is not yet very good at present. It is better than it was last year when there was no joint delegation to Poland. This year the 11<sup>th</sup> grade students went to Poland as a joint delegation.. More must be done to connect the two camps " SC

A2:"There were kids who were problematic last year and they are now learning! Things are happening; much is invested in them- a great deal of attention, the new learning centre" P

A1: This year attention is being paid to helping the staff team to consolidate. Many new ideas and useful tools were presented to us which we can use in class as well." SC

The second change level included 5 socio-cultural LOs and 2 pedagogical LOs improved.

### **Ib3. Third change level - breakthrough**

The following quotations represent a new and better way of doing which is deliberately tried out, resulting in a breakthrough.

N: "changes in conducting work here, like having pedagogical meetings with all the staff, different manager's responsibilities are better understood- who does what? We

used to ask them all about everything. Now we know to whom every problem should be addressed. The "mashovit" – a feedback device, is an excellent aid. I stopped running after teachers as now had a source of information. The pressure lessened. A

**R1:** I decided to see to it that all children attend class. There was a lot of invisible drop out. I prepared a table and every child did not miss any lesson that week got a prize. The kids said that prizes should also be given to students who had made progress. A child who missed 16 lessons and the next week only 7, was told by his friends- their idea – that he had improved, though not enough.. This big paper table was never torn burnt like many other decorations on the wall. It was very important to them. Now they all come to class regularly but they still wait to be praised at the end of the week and get prizes. It is a ceremony" A SC

**R1:** This year we worked differently, with folders so that each student had learning outcomes to show every lesson. It worked well. ...students managed better, though maybe the one's who had the copybook would have managed anyway?! P A

**Y:** "At the end of every lesson in all the classes, I give an exam on the lessons' content. This was D's idea to me. She said "do that and see what tigers they will become" I have persisted ever since. If they don't listen they pay the price. Sometimes, if I tell them there will not be an exam at the end they don't listen as much. The whip is gone. I do not give homework I don't need to because they all know the lesson's content. In any case most kids would copy the homework so this way is better.' P A

**A1:** "The new transportation system for the students is a good change. Until recently they all waited near the gate, very dangerously. Now it is organized and we get to have longer lessons at the end of the day" .A

**A1:** "The Mashov computer system is very friendly... there still are problems, but if one puts in all the information on time it is helpful" .A

**R2:** "The management team members all took responsibility (on) certain subjects. Now I know to whom to present every problem" .A

**O1:** " Until last year each student had one day's work at a time. Now it is a whole week which is much more sensible and easy to cope with". A

**O1:** " As a result of discussing ideas in the home class teacher's forum, I changed my attitude to work- at the end of every week I hang up on the wall the names of all the students who received 0 in home work preparing, which meant they had prepared all

their assignments. A student who was 4 times listed got a letter of praise and a prize. Children started running after me asking me to list them ... It is really effective working this way using positive reinforcement, though sometimes it is tempting to comment" SC A

S1:" The pedagogical work has greatly improved this year. I sat with the pedagogical manager JS and planned... All my ideas and suggestions were taken into consideration. This is a pedagogical and administrative change. A P

G: Through the 'Mashovit' computer system you get all information on all school aspects...you are always up to date. It was put into use and has been well implemented...I am in close contact with my colleagues, it brings S-School to a new level of work" A

EB: L-R" I find myself working according to the vision, my missions, I reflect on my work and celebrate success...I stop doing everything myself, I delegate authority." A SC

JS: L-R "My management skills have improved significantly. And so have the HODs management skills". A SC" The staff as a community of learners find ways to solve problems...many students' achievements have improved" SC P A

O1:"At first I did not participate in the homeroom teachers' forum. I thought they were just talking...I continued avoiding the forum until I saw "0" in the computer system for students not preparing their homework (which meant they all had prepared all their assignments!)I realized the forum worked. All homeroom teachers gave ideas, helping each other. It was very productive.SC P A

D:" The students in my class (etgar) prepared "care packages" for Sderot children because, as they said- "they were suffering". They were so dedicated to the preparations...they didn't take any sweet or make any mess, as some thought they would. I was so proud of their behavior, I gave them sweets too..." SC

The third change level included 5 pedagogical LOs, 13 administrative and 6 socio-cultural LOs improved.

#### **Ib4. The forth and highest change level - transformations-**

The following quotations represent the adoption of change. It is planned and is a personal and professional choice due to a change in school culture.

**L:** "One stormy night I took my dog for a walk and passed by the school. An Ethiopian student was there and saw a tree hat had fallen because of the wind. The kid, who did not see me, stopped, bent in the rain and straightened the tree. This is the connection the students have to the place. They care. You see students picking up garbage. They love and honor the school. It is not part of any curriculum. The next day I told him I had seen him..." SC

**G:** "Recently, I heard of at least three families who are planning to come to Israel and are interested in S-School...It is as a result of having the 'Mofet' program here. It is a fantastic program and it upgraded the school." A P SC

**JS:**P-R "There is a real learning community here, learning from the experience of work in school. HODs are treated professionally and are coached when needed." P SC A

**R1:** I almost lost a student because I was too practical. I thought of teaching her; I should have listened instead... sit with her and drink a cup of coffee. Focus on the child not on grades, the child not the content. I started to spend time with her. She showed me songs she had written... SC

**S1:**"S-School has risen because of 'Mofet' classes. It is now prestigious to say I teach here."P SC

**R1:** The teachers' goal is not to give up. The very best teachers were given to my class. Last year I had to run after the students in math lessons. Now the vice principal teaches. The management is now concentrating on this class's learning. SC

**R1:** Before, problems were settled among ourselves. Now we can call in the police if necessary, nothing is overlooked. SC

**L:** "EB takes care to regularly makes a point of showing his appreciation of teachers on the computer system...not only for big and important issues...this changes the school atmosphere" A SC

**N:** "The pedagogical outcomes may seem lower but they are now real and accurate. We are not cheating ourselves anymore. The moral outcomes have improved. SC

**S1:**"When students spoke in a way which was not appropriate, I used to punish him. Today it is different, I tell them what my limits are, I have a dialogue ...Even if I don't agree with them, it is easier for them, because I listen." SC

**S1:**" Now there is more attention to no cheating in the exams. The success percentage is not as important as honesty." SC

**SI:** "A new thing this year- EB puts in mails from parents, in the computer system ("Mashov") for all the community to see. I was embarrassed at the beginning because all the teachers mentioned it- parents had praised my dedication...Now I have got used to it as others are praised as well" SC A

**MD:** "I chose to focus on my student's equipment for class. I give myself a month to reach 100% success. (R1 said)"A SC

**MD:** P-R "Teachers take an active part in the sessions, there is much optimism- 'I see progress; change... 'Teachers seek help and give advice, learn from each other, not necessarily from the most senior ones/ This is a reinforcing process it creates a sense of partnership" A SC

**MD:** "My stubbornness and dedication to my object didn't let me move from my goal' and in the end it carried every one of us along...The process engaged R1 (a first year home teacher), now she makes a point of sending regular e-mails and talking to me whenever she has a new idea. O too feels a greater sense of commitment to her work." SC A

**MD:** P-R "The declaration of each of the home teachers' objectives in the presence of all their peers, and their commitment to a certain percentage of success was a challenge to them all, and created a commitment ...

The fact of having succeeded in achieving their first goals brought down the barriers and reduced their worries in choosing a new goal and committing to a new and higher percentage of success... SC A

**DO-SUM** Creating a learning centre for assisting students with difficulties- "The students received much more than we had at first expected...the organizational aspect was easier than I had expected, at some point we had to stop the "flood" of teachers wanting to help...".DO's self evaluation (score on a 10 point scale) of her success in managing her project was 12 (out of 10). A P

**EB-SUM** (Principal)- the engagement of the members of the leading management team-"The management team is fully engaged...roles are well defined now ...working procedures were settled and are now the base of our everyday work". EB's self evaluation of his success in managing his project was-7 (out of 10) A SC

**JS-SUM** Pedagogical management- "I did not believe there would be such a success!... real independence of all heads of department – they have become managers

of their discipline in school!". JS's self evaluation of her success in managing her project was-11 (out of 10) SC

The fourth change level included 4 pedagogical LOs, 9 administrative and 16 socio-cultural LOs improved.

A summary of the level of change quotations is presented in Table 25. The number of times each type of learning outcome was mentioned according to level of change, throughout the interviews and in the documents. The three first columns indicate the number of times a specific LO was mentioned according to levels of change. The next four columns indicate the number of changes, which present combinations of two or three LOs. The last column counts the total different LOs of every change level. (A story mentioning 3 types of LOs is counted as 3).

**Table 25** LOs according to the 'level of change'

|                          | PLOs | SCLOs | ALOs | SCLO<br>+<br>ALOs | SCLO<br>+<br>PLOs | ALO+<br>PLOs | ALO+<br>PLOs+<br>SCLO | LOs |
|--------------------------|------|-------|------|-------------------|-------------------|--------------|-----------------------|-----|
| <b>b1.Awareness</b>      | 3    | 1     | 3    | 0                 | 0                 | 0            | 0                     | 7   |
| <b>b2.Good results</b>   | 2    | 5     | 0    | 0                 | 0                 | 0            | 0                     | 7   |
| <b>b3.Breakthrough</b>   | 5    | 6     | 13   | 4                 | 1                 | 3            | 2                     | 24  |
| <b>b4.Transformation</b> | 4    | 16    | 9    | 6                 | 2                 | 1            | 2                     | 29  |
| <b>All Changes</b>       | 14   | 28    | 25   | 10                | 3                 | 3            | 4                     | 67  |

While examining Table 25 the following points are evident-

- PLOs are mentioned less than SCLOs and ALOs.
- The higher levels (3+4) of change have more quotations (53 out of 67).
- The higher levels (3+4) of change involve more than one LO.
- The higher levels (3+4) of change may be attributable to higher levels of teacher leadership - teachers leading themselves and their colleagues towards fulfilling their common vision.



**Summing up the first category concerning improvements and change.**

The long and detailed quotations show that much has happened and improved during the school year while the coaching intervention was taking place. The Socio-cultural LOs were referred to mostly, on all levels; personal, collective or school level.

Change and improvements in school as expressed by the quotations revile a distributed leadership work environment. Teachers lead processes within their class rooms and outside of classes, contributing to the development of learning processes and influencing their peers and students to improve their work and the creation of quality learning outcomes (Muijs, 2011; Southworth (2009).

**4.2.2 Second category- II- The school culture**

**IIa** Interviewees' descriptions of school staff as a whole unity, main characteristics and work attitudes. Family type connections, dedication, care, commitment and listening.

**IIb** Illustrates the personal concept of the interviewee considering her/his work in S-school .Home, a challenge or mission, satisfaction, fun.

**IIc** Love and close relations were found as a main theme, which is herby considered- towards students, amongst staff and towards the management team and head teacher.

The next table presents Category II

**Table 26** Second category-II

| II School culture                                     |   |       |  |                             |                   |   |  |   |
|---|---|-------|--|-----------------------------|-------------------|---|--|---|
| IIa<br>Interviewees descriptions of<br>S-School staff |   |       | IIb<br>Personal concept of interviewee's work in<br>school |                             |                   | IIc<br>Love, close relations                  |  |   |
| IIa1  | IIa2  | IIa3  | IIb1   | IIb2                        | IIb3              | IIc1  | IIc2   | IIc3  |
| A Family  | Supportive<br>dedicated<br>team                                   | Other | A way of<br>life   | A Challenge<br>/<br>mission | Satisfac-<br>tion | Love  | Good and<br>close<br>relations<br>Amongst<br>staff | Good<br>relations<br>with<br>manageme<br>nt team<br>and with<br>principal |
|   | IIa21<br><br>Supportive<br>dedicated<br>team                      |       |  |                             |                   | IIc11<br>Love from<br>teachers to<br>students |  |   |
|   | IIa22<br>More<br>quotations of<br>Supportive<br>dedicated<br>team |       |  |                             |                   | IIc12<br>Love from<br>students to<br>teachers |  |   |
|   | IIa23<br>Listening  |       |  |                             |                   |   |  |   |

**IIa. Interviewed members of staff were asked to complete the sentence**

**"Teams in schools are..." and speak specifically about the S-School team**

IIa1. S-School's staff as family to the students

IIa2. Supportive, dedicated caring Teams

IIa3. Other

**IIa1. Teams as family, close relations**

Most of the staff, 10 out of 16, used family like terms to complete the sentence "*teams in schools are...*". Two of the interviewee's commented twice (all together 12 quotations).

**B1:**"like parents to the students ",

**R1:**" School teams are like a Family. Here they are home".

**B2.** Team in First-School is homelike, warm, because it is small, everyone knows each other

**N:** " Here, they are like a warm lap" (opens her hands to a hug)

**A1:** Teams in most schools are big and not family like .

**O1:** "Teams in school have a joint interest. Here, both the whole team and the discipline group are friends, a union."

**A1:** " The team here is the student's family.

**R2 :** " The team is mothers and fathers to the students. "

**S1:** "The team is like a father and mother, united, like a home. If they are stable, the kid will grow up feeling loved and secure.

**S2:** " Mainly to the boarding school students, teachers here replace parents..

**G:** " The S-School team is like parents to the students. If a student does not arrive at the lesson, some teachers come and pull them out of bed."

**A2:** " The personal relations are dominant here."

## **Ila2. Supportive, dedicated caring Teams**

Eight (8) of the interviewees used either the words supportive, dedicated or caring teams to complete the sentence "*teams in schools are...*". These quotations are presented in part Ila21. Fifteen (15) additional quotes, by 10 interviewees, were mentioned freely along the interviews concerning supportive, dedicated and caring work. These quotations are presented in part Ila22. Listening to students was a specific characteristic mentioned by 6 interviewees. These quotations are presented in part Ila23.

### Ila21. Supportive, dedicated caring Teams

**D:** " School teams support students"

**Y:** "Teams in school are a source of support, specifically in S –School;  
Dedicated and professional"

**M:** " Staff is usually tolerant to students".

**O1:** The team here is like a supporting net. Every student chooses his hiding place"

**S1:** " Educational teams are usually caring and supportive "

**O1:** " Most of us are very containing?...special ed..."

**L:** " Educational teams are supportive"

**N:** "Teams elsewhere are like a pile of snakes, indifferent to the students' needs"

**R2:** "In other places schools are grade factories. here the team is a father and mother-parents to the kids."

**Ila22.** More quotes concerning supportive, dedicated caring work

(from other parts of the interviews)

11 out of 16 interviewees mentioned in 25 sayings-

**R1:** "in school we don't give up".

**N:** "We didn't give up on any student and we tried to help."

**S1:** The principal knows all the students' names... We don't give in to the students and don't give up on them...people here are caring and sensitive"

**D:** "We try everything to advance the students...., and think of different things which could help my class. Encourage significant success.. never give up".

**R1:** "I didn't give in on their attendance... I looked for them in the dining room. .I was a real "pain.."

**O1:** "We fight for the success of each student"

**L:** "If we, as teachers don't give the student a reason to believe they can succeed, we do not do our job. Every child, even the weakest, wants, on the first day of school...sometimes, by the second day he is forced to believe he cannot... This is our duty. We must earn it from each child, it is not obvious."

**O1:** "The relations between teacher and student are different here from other places. I know each student personally...A student who knows he is not just a number in the diary is a king! ..I chase them, I call them up...I don't have to!... eventually they understand that it is all due to real caring."

**B1:** some (teachers-GB) sit during all breaks with the kids and the results are evident...

**D:** Teachers come to the boarding school to see the students' performances; they take pictures...to encourage them. I found out one student plays the drum. I photographed him and showed it in class. He was so proud, even though he doesn't know any math.... It is not a duty. I do it of my own free will- it is important to me

**B2:** There are teaches who give their heart and soul. They buy stuff for the kids, they come to visit them in their rooms, watch their performances and their rehearsals

**M:** The school staff is very dedicated and trusting; committed to work. The management team not as much.

**S1:** "They are given my phone number...I am here for them as much as needed."

**A2:** "Containment of different students...people here work with all their heart."

**L:** "We do anything legal and moral to make them succeed. That's why it works!"

**L:** "Catch the kid being good...most of the teachers focus on the bad. The attitude in school is to catch the good and strengthen it."

### IIa23 .Specifically-Listening to one another

7 Comments and stories focused on listening as an important characteristic of work in S- School- listening to students, to staff.

**L:** "I remember working with a class on a project...It was terrible! Kids were hurting each other. I was hysterical. I wanted to give up. The principal called me, seated me in his room and said- 'L, how can I help you? What do you need to make it succeed?' The nicest sentence possible...This is the attitude here, it is part of the school vision- not "Can we do it?", but instead, "What do we need to make it happen!"

**R1:** If there is a serious problem with a student I can always say he can talk with the principal and the principal always finds the time for it

**Y:** I personally speak with students. I see a student with a sulky face, I listen, even if he isn't my student. I have seen it done by others as well. This is the policy.

**B2:** In this place the students are away from home, they need more attention.

**N:** They tell me about their relations with their boy or girl friends .... Most of them feel confident as I work on establishing relations with them on a personal level.

**R2:** "I never spoke rudely to a student, never condescendingly. I listened, believed...There is an environment of openness. There is no false distance between the team and the students. There is sensitivity,"

**G:** "The kids invite me to their homes, tell me their personal problems, about a boyfriend, about their parents."

### **IIa3. Other descriptions of staff**

**L:** "The team acts as a mediator between the student and itself, the student and the discipline, the student and school. A reality check to measure where they are".

**O2:** "The team is like a traffic signal for the students' success."

**S2:** "Teams are educational figures."

**G:** "Teams are an upgrading power for the school"

From these quotation it is highly evident that the school staff has a very high positive opinion (self and collective esteem) about those working at S-School.

### **IIb. "What does work in S-School mean to you?"**

To this interview question there were 3 answers given-

IIb1. A way of life/home

IIb2. A challenge/mission

IIb3. Satisfaction/fun

#### **IIb1. A way of life/home**

Four (4) interviewees commented on the question *"What does work in S-School mean to you?"* By using the phrase *A way of life/home* or similar.

**B2:** "Work in S- School for me is- love, home, life...I love kids and my work, up keeping the place.

**M:** "Work here is a way of life for me.

**O1:** "It is not work, it is life to me."

**O2:** "Work in S-School is my way of life".

#### **IIb2. A challenge/mission**

Six (6) interviewees commented on the question *"What does work in S-School team mean to you?"* using the phrase *A challenge/mission* or similar

B1: "Work in S-School is a mission, a challenge, I am here for Zionist reasons.

Otherwise I wouldn't have been here. I am often told I am crazy.

D: " Work in S-School is –fun and challenging. I feel appreciated by the students, by the principal. I am given a word of praise here and there. Kids are good here on the whole. They don't ruin or disrupt lessons. If it suits them- they come. If not they don't. They are not "anti". It is not a pressuring atmosphere. The green around is calming. There is no pressure, no use of strict methods; we talk with them.

G: "One of the reasons for my being here is that I grew up in poverty. I feel a great attachment to these difficult youngsters; I am a model for them-' Are you really a Dr.? I tell them about myself, where I came from, I give them hope that success is possible. Each achievement should be stressed. It is not obvious."

L: "An opportunity to change and be changed ...that's why I am a teacher! I feel lucky to be here.

### **Iib3. Satisfaction, fun-**

Six (6) interviewees commented on the question "*What does work in S-School mean to you?*" Using the phrase *Satisfaction/fun* or similar.

N: "Work in S-School is satisfaction itself."

D: "Work in S-School is –fun."

A1: "I feel good here. Natural...I can be myself.

R2 "On the whole work is fun here."

A2: Work in S-School is, for me, the best I can have...I feel others are happy to have me here...The team is great and so are the students although they are not easy"

S2:" I like the work here. It is fun."...

All 14 quotations were highly positive sayings, presenting a sense of fulfillment and satisfaction at work.

## **IIc. Love, close connections and caring for one another**

Love, close connections and caring for one another was a main theme, and was mentioned frequently throughout the interviews - not only relating to the questions mentioned-

IIc1. The word love, concerning the students,

IIc2- Good and close relations amongst the staff.

IIc3. Good relations with management team and principal

### **IIc1. The word love, concerning students**

There were 14 comments using the word love concerning the students. In part IIc1 12 quotations (by 7 interviewees) from staff toward students are presented.

In part IIc12 2 quotations concerning love from students to staff are presented.

#### **IIc12. Love from staff toward students**

**R1:-** As we walk in the school grounds, a student comes to R1 and shows a magical trick- she watches and admires his show- "you should show me a trick every day!" The Child grins with pride and goes off." I love them... that is what they need"

**D:** I am attached to them, and often come in the afternoons and evenings to the boarding school to visit them. They never play hooky in my class. They know I love them and like coming to class"

**R2:**" I love the kids, they are fantastic. Since they never got guidance before, they are willing to accept everything, both about life- how to act in various cases and in learning skills."

**G:**(Tells of conversations with students:" I am connected to you. I am G not Dr. S. I love and care for you..."

**S2:** While I was interviewing S2 A student rang her to ask about a question she had just been asked in the matriculation exam. S2 spoke enthusiastically: "Great sweetie, you will get all the points for this! I love you."

#### **IIc22 Love from students towards staff**

**N:** "First- School is known for treating these students well. I receive love from them. They share their intimate stories with me."



**R2:** "I will never forget when I was sick, they rang up to look for me in hospital. They were worried."

### **IIC2- Good and close relations amongst the staff**

Amongst the team 12 comments (one negative) by 7 members

**A1:** "I know that whenever I have a problem I have someone to talk to...It is important to belong to a place where you feel good, you love it and feel loved."

**B1:** "I get on fine with the whole team."

**N:** "In the teachers room there is a warm and friendly family like atmosphere. A great team! I can always ask for anything...I have very good relations with them all

**A1:** "There is a good atmosphere in the teacher's room."

**S1:** "My son was hurt in a car accident. The whole team joined to help me...when I called to ask for help I found that everything was already cared for..The day to day work is difficult here but when a need arises, the caring is endless...this is what binds me to this place. The warmth is S-School's human mineral"

**G:** "I have worked in many schools. Here, there are relations of respect and honor among the teachers. People are considerate, everything I ask for- "No problem!"  
There is a dynamic of help and brotherhood."

**L:** "Teams wish each other well before exams..."

**S2:** Negative: "I was told, when I got here, that the atmosphere was great...Now it makes me laugh. It is only on the surface...But it is normal and I take it in proportion. Still- it looked beautiful".

### **IIC3. Good relations with management team and principal**

There were 17 comments (by 6 members) towards the management team and especially towards EB the principal. These are hereby presented.

**R2:** "I really love the principal! (Write it down!)"

**Y:** "Both students and staff can enter all the managers' rooms, an attitude of the open door, very different from other places I know."

**R2:** "The principal gives moral support...when I cried he comforted me. He is like the 'Wailing wall' ...encouraging. He is a great manager, always caring, helping. Very honest ... Actually that is true about all managers in S-School."

**A2:** "When I need help or consideration I can always count on the management team."

**L:** "The management team's attitude to the teachers is excellent. The principal knows everything that happens...The nice thing about him is his openness to different ways and systems the different teachers use. When I need something I always get it."

**S1:** "The principal is such a wonderful person...I can come at 7 in the morning to speak with him..."

**R1:** "I have been strengthened by the great management team here... There is a lot of cooperation with management; they are very sensitive."

**R1:** "One day a student saw me crying because I heard my son had been wounded. She told the principal and a few minutes later he arrived in class with a glass of water for me. This warmed my heart .I wish my students too, will one day have a manager who finds time for such things"

### **Summing up the second category, concerning S-School culture**

Concerning the quotations presented it seems that the staff is unanimously proud and personally fulfilled by their work in S-School with the students and the general environment of close relations.

#### **4.2.3 Third category –III- Evaluating and promoting the coaching intervention the coaching effect.**

There is a need to design and indicate criteria of evaluation not only at the end of the process, but for use throughout the coaching intervention in order to verify that coaching effect is seen and felt in school. In addition, to ascertain that the coach's skills and attitude are influencing and are gradually seeping into the workplace; that

skills and knowledge gained through coaching are transferred into other experiential fields. The next table presents the third category-

**Table 27** Third category-III

| <b>III Evaluating and promoting the coaching intervention effect</b> |   |   |   |
|--|---|---|---|
| <b>IIIa1</b><br>Internal transfer<br>Within the same person          |   | <b>IIIa2</b><br>External transfer<br>From one person to another |   |
| <b>IIIa11</b><br>From one environment to another Within the school   | <b>IIIa12</b><br>From school environment to the community | <b>IIIa21</b><br>Between peers                                  | <b>IIIa22</b><br>Between two members in a parallel manner |

**IIIa. Transfer of skills and knowledge**

- IIIa1. Internal transfer, transferring within one person
- IIIa2. External transfer, from one person to another.

**IIIa1. Internal transfer, transferring within one person**

These quotations were divided into two parts- first, in part IIIa1 1, I present the comments referring to the transfer of one's own skills and knowledge from one environment of school work to another. Then, in part IIIa12, the comments are presented referring to the transfer of one's own skills and knowledge from the school work environment into the community, to out of school.

IIIa1 1. Transfer of one owns skills and knowledge from one environment of school work to another

JS:L-R: "Coaching is part of me now in all my everyday work, and is done automatically. I use the coaching attitude and tools in all aspects of work in school"

**MD:** L-R: "A good example is the way I prepare the home teacher's lessons-First I choose and define my goal, and then the topic. I look for relevant material. I write the lesson plan, and then see that it suits my goals. After the lesson I try to reflect on it".

IIIa12. Transfer of one owns skills and knowledge from school  
work environment to the outside.

**EB:** L-R -"I communicate with my family focusing on the defined goals and using actions which are taken to best serve them, not depending on emotions to solve crises or disagreements. I plan all my actions on a time scale, connected to my family as well, not only concerning work matters"

**JS:** L-R -"When determining personal goals as a mother or wife I am constantly thinking long term, what it is that I want and what I should do to achieve it."

**IIIa2. External transfer, from one person to another.**

First, in part IIIa21, the transfer of skills and knowledge among peers is presented. Then, in part IIIa22, the quotations representing transfer of skills and knowledge between two members in a parallel manner are shown.

IIIa21. Transfer of skills and knowledge among peers

**R1:** "Did this affect other classes?"(GB)" All teachers who were involved in my class knew and cooperated."

**R1:** "When we sat with MD in the homeroom teachers' forum, N. 'bought' the idea. She asked me where I found the special treat they liked as a prize... The forum provided an opportunity to acknowledge success .I enjoyed it when R. was enthusiastic about my stories.

**R2:** "The fact I enabled my students to sit for the matriculation exam in Hebrew grammar spurred other teacher to do the same this year...I fought for the success of those children"

**R2:** "I learn from the way the management team and the boarding-school team act as I take part in the monthly meetings. When you are in a process of learning you are empowered... I am constantly trying to improve, I am not perfect... "

IIIa22. Transfer of skills and knowledge between two members in a  
parallel manner

**JS:** L-R: "The school vision is in front of my eyes the whole time, both personally and professionally. I make use of it with the HOD (heads of discipline departments) team and with the students I work with. I see the HODs working in a similar way with teachers in their team"

**S1:** "What helped the student succeed was her joining in that enabled my own joining. A teacher has to contain all the hope and power for the students. That is what I need to be there for, and then, I need to gradually give her the responsibility, not leave it all within myself."

**JS :**SUM "I gave the HODs responsibilities and they, in turn, became responsible for their work, less coming to me. It is theirs now."

**EB:** L-R "On the whole, the improvement in my actions, my managing, influences the whole environment, everyone I come in touch with. I suppose it seeps into their work as well."

**Summing up the third category about transfer of knowledge through coaching**

It is evident that there are fewer quotations on this subject. The transfer is an understanding I came to while working in the field and it was only in the last stages of the coaching intervention that I started looking out for transfer evidence and activity designed to enhance it.

**4.2.4 A summary of the qualitative data from all three categories.**

I collected and analyzed qualitative data from documents produced during the coaching intervention as part of it, documents relating to the intervention and interview data from a range of participants. This information enabled a closer look both at the coaching as it was carried out, using evidence of the authentic work and at the effects the coaching intervention had created in the field. This information added important and varied points of view which helped develop my understanding about coaching and about coaching possibilities in schools.

## 4.3 Additional data

All findings up to now were collected according to plan, which means relating to the research hypothesis and research questions. As the intervention proceeded, I used my research diary regularly as suggested (Stake, 1995; Zabar-Ben Yehoshua, 1999).

From my research diary two more themes emerged which had not been categorized amongst the other qualitative findings. These are presented below. First quotations related to the school vision, in part 4.3.1 and then quotations about the concept of parallel cycles, in part 4.3.2.

The quotes from my research diary include the page number which was the original number in the diary (see Appendix 10).

### 4.3.1 Quotations concerning school vision

The process of the internalization of the school vision into everyday work was a main issue throughout the year. These are some quotes reflecting my work with the management team, recorded immediately following the coaching sessions.

"During a whole staff meeting, EB wanted to speak of progress and work towards making the vision known and meaningful .Every member of the management board shared an incident s/he viewed or was part of in the last week, which represented a good example of principal idea presented in the school vision" (p.16).

"EB, the principal "was very anxious to decide on ways and actions to further the implementation of the vision at all school level . It was important, he thought, to show the whole staff the continuation of the process"(p.18).

"Next year, from the beginning, I plan to have the vision as a theme in all classes, it will hang in every class ... "The visual- cosmetic representation of the vision (the posters) may help harness all people ,adults as well as students, to the essence of the issue in school" ( p.55).

#### 4.3.2 Quotations concerning the parallel cycle concept

The parallel cycle concept emerged as part of my supervision meetings. This concept was put to use immediately at work as is evident by the following narrative.

"For quite a while I was stuck, experiencing a lack of progress in coaching the school's leading management team translate the school's vision into concrete working plans within the areas of their responsibility. No advance in the definition of mile stones or in the identification of resources to reach them was achieved. After several dissatisfying coaching meetings with the school's leading management team, the process seemed "stuck" and I decided to avail myself of supervision. During the supervision I learnt about the parallel cycle principle.

I accepted responsibility for what I believed was my own lack of clarity and was determined to harmonize it. I used an organizing table to plan and review my own mile stones for the coaching process for both the team work and the individuals that made up that leading management team. When I felt myself clear, I "reframed" the table and named it the "Assessment and reflection Table" and showed the members of the team how I used it in planning my coaching sessions."(p.13).

"The school principal (EB) explained to himself and later to the team- "this is not an assignment to be done, it is a working tool designed to help us in our every day work, and to self-monitor and adjust our work once in a while."(p.14).

" Within two weeks the whole team was using the tables, plans were set and they were on their way, breakthrough was immediate!"(p.14).

"I have heard a manager, at a coaching session say to her colleagues – "We are acting in 'parallel cycle' to that of our teachers". She explained that they spoke about their teachers, saying they were incapable of doing things, in the same way those teachers spoke about their students... This same manager realized then, that the management team should change the way in which problems were being conceptualized by management if they wanted teacher's 'stuckness' in the classroom to be resolved."(p.25).

## 4.4 Delphi Expert Group Data

Having finished the work on the S-school case study and moving to work elsewhere, and after presenting the first conclusions from the quantitative and qualitative analysis in the 15<sup>th</sup> international coaching conference, of the EMCC in Prague (Kriendler & Beskin, 2008), I decided to conduct this Delphi group to help and further validate and ground my ideas.

In this part I will present the data gathered and knowledge created through this process.

The first Delphi round data will be presented in part 4.4.1

The second round is presented in 4.4.2.

Part 4.4.3 is a summary of Delphi Group findings.

### 4.4.1 Delphi first round

In the first round of the Delphi Expert Group process each participant (D, J, L, & P) was presented with two papers. The first paper was about the Katom model and the second paper contained ideas and preliminary conclusions from the qualitative data. In addition, 17 sayings/questions connected to the two papers were presented.

Participants commented and indicated their degree of acceptance on each of the sayings/questions (on a scale of 1 through 5).

Hereinafter are listed the 17 sayings/questions as were presented to the participants and the main comments the experts sent. An average degree of participant acceptance is presented as well. (Both papers and the full answers participants sent are attached in Appendix 4.1).

*1. My own coaching framework or other coaching frameworks I know have similar stages of work-*

Most said that it is a similar situation (4)

*2. My own coaching framework, or other coaching frameworks I am familiar with, track similar processes*

Agreement (3-4)



**3. I think there are one or more processes missing. If so, please explain which**

Two suggestions- a relationship review and individual student's progress monitored

**4. When coaching, I have actively tried to influence and improve specific processes (if so, please explain which, and in what ways?)**

Client reflection improvement was suggested by two and "whichever the client chooses" by another.

**5. I agree with the definition of the Vision Internalization Process (I)**

Agreement (4-5)

**6. I agree with the definition of the transformative process (II) a learning community becomes a community of learners.**

Three agreed and one said-"a community of learners learning together, sharing and constructing knowledge".

**7. I agree with the definition of the Developing Coaching Culture process (III)**

Agreement (5)

**8. Some other general remark, recommendation etc. I would like to add -**

L: It is fruitful to use creative methods for developing organizational culture and opening up. It is important for the leaders to lead.

J: The timeframe of one year only seems very short to be able to get definite outcome improvements.

**9. I identify similar levels of change throughout the organization, during coaching**

D: Change is a word that has many meanings according to context. I am not sure.

3-4

**10. I use this information, about change levels in my work. (If so, please explain in what ways)**

Low agreement.

**11. I have seen evidence of transfer of coaching skills and knowledge in similar ways in my work as well**

High agreement (4-5)

**12. I have also seen some additional ways to transfer coaching skills and knowledge**

High agreement (4-5)

**13. I agree, that the transfer of skills and knowledge could be seen as evidence of coaching effectiveness**

Yes in part, but the creation of new skills and knowledge is important too. All agreed-5.

***14. I try to facilitate the transfer of knowledge and skills. (If so, please explain in what ways).***

All agreed-5, Self coaching skills are part of the mix, Using coachable moments Through using meta cognition of the learning process with participants.

***15. I have been aware of the common parallel situation of "stuckness" between coach and coachee, as explained by "parallel cycles".***

Two thought 5- This is an interesting area. What external evidence do you have for this? I can see real value in exploring this in more depth. Do you have references?

Two thought-1 An unhelpful concept

***16. I have deliberately used the parallel cycles' idea as explained, to help coaching processes when needed.***

D: I work with moments of discontent Eric DeHann. Look at critical incidents in coaching. Three wrote-1

***17. Some other general remark, recommendation etc. I would like to add-***

L: there is for me a problem calling all this coaching. I would call it organizational work or organizational development. Stuckness in a situation like this is more often discussed among coach and managers and with a super coach, a professional colleague or on a continuous follow-up.

J: Did you do narrative analysis? Was there any observations in your data gathering? It sounds an interesting study, but I think you are making a lot of assumptions and generalizations at this stage.

The first round ended by creating 5 summaries from participant comments about the various ideas presented in the first round. The summaries are presented and further related to in the following second round. In addition, the participants had asked many questions which I decided to answer collectively to help verify and explain my ideas. The list of questions asked by participants during the first round together with my answers and explanations, as I sent to them are attached in Appendix 4.2 a.

#### 4.4.2 Delphi second round

In the second round of the Delphi process I presented the participants with 5 summaries for their approval which had been created using the first round of results. The 5 summaries are presented in part (a) Then, in part (b), the participants' comments to the summaries are presented as well as their evaluations (1-5) on the content of each one of the summaries

(The full information as was sent to the participants is attached in Appendix 4.2.)

#### a- 5 summaries achieved by participants in the first round and suggested for approval

##### No. 1- Coaching framework

The KCM is a coaching intervention framework for school development. The KCM is based on coaching and aims at facilitating the development of a school coaching culture and make coaching one of the school's basic features. Work throughout all six stages of the model is conducted using coaching skills and values.

The coaching in the KCM is both the means by which processes are facilitated and is also "the end objective" of the process since coaching skills and values are expected to be internalized.

Our coaching enables the coachees (in person or as part of a group) to identify their needs, to plan and create the change they want in their own behaviors, in order to achieve the change they want to create in school.

In addition, while coaching is being used as a tool, the coaching values are infused within the school culture, expand throughout it and are internalized by all members of the learning community. The process starts with the management team that is being coached, successes encourage them to use coaching skills in their work with their department colleagues, students and parents and these members of the learning community start gradually using coaching skills and values with students and parents they come in contact with, transforming the school environment into a coaching culture.

##### No. 2- Second process- Organizational learning

Transforming the learning community into a community of learners - Learning together, constructing new knowledge and managing it, identifying successes, sharing and celebrating it

### No. 3- The meaning and significance of using the 3 core processes

These processes are very general and are tailored for each school according to their vision, bringing their own meanings into the processes, and accordingly, plan specific milestones to monitor their progress along these processes towards their defined goals.

Tracking these processes contributes to the evaluation of coaching effectiveness in the field, informs and supports the coaching itself.

### No. 4- The significance of transfer of skills and knowledge

The transfer of coaching skills and coaching values is valid evidence of coaching effectiveness. Transferring the habit of creating new skills as needed to suit new and different situations is a powerful outcome of both facilitating a coaching culture and of evidence of its existence.

### No. 5- Parallel cycles

As coaching becomes more of a profession and supervision will become part of its professional culture, I believe that the concept of "parallel cycles" as a descriptive of the two facilitative cycles of mutual development experienced by coach and coachee will become more useful. (More information in the question-answer paper attached in Appendix 4.2)

### b- Participants' comments and degree of acceptance to the 5 summaries

The following table includes three participants (D, J, P) comments to the above 5 ideas brought to consensus

**Table 28** Second round Delphi answers

|   | D   | J   | P  |
|---|---|---|--|
| 1 | 4-there is an argument for taking into account the larger social context coaching/mentoring in school environment may be beneficial for students in non- school environments as well  | 4 -My research has also shown that the more people were coaching and being coached the more it transferred into leadership practice.  | This is your definition                        |
| 2 | 4   | 3 -I would add more about the challenge that should be in the community of learners-, the innovation, the risk taking, openness to new ideas  | 4  |
| 3 | 4   | 4- But progress towards defined goals would be the best indicator. How will we know when we got there? If we got there? Perhaps that is what you mean by process                                | 3- OK if it is led by the client               |
| 4 | 5-Yes!! Coaching is about creating knowledge. The coach helps the learner expose and develop new meaning from the knowledge they have.  | 2 -I am really not sure what you mean by transfer the habit of creating new skills. Perhaps habit is the wrong word, and it should be the capability or predisposition, a willing to new skills | 4  |
| 5 | 4 -this is interesting from an academic perspectives study of coaching. coach and coachee can be considered as a dynamic system for parallel thoughts see Belle Rose Ragins on the quality of mentoring relationships the key influence of effectiveness(rather what the mentors do). | 3-Parallel gives the meaning of running along , side each other. not necessarily interfacing. is this the concept you want, or is it more about meta cognition?                                 | 1- it is a complicated and unnecessary concept |

#### **4.4.3 Summary of the Delphi Expert Group findings**

Involving experts in the process of meaning making from the data through the Delphi Expert Group was of great significance to the research. Collecting the information, analyzing and presenting it again to the participants to reach a consensus, helped me crystallize my ideas about the KCM framework and about the early conclusions I had drawn from the coaching intervention. Most importantly, this procedure offered a significant reinforcement to the external validity of the study. Using the participants' wide collective coaching experience and international practices enabled the generalization of my findings to other situations and across populations. The full extent of the contribution of the process will be evident as part of the discussion in Chapter 5.

#### **4.5 Synthesizing the findings**

This part will briefly show how findings from different sources helped test and evaluate the research hypothesis and answer the research questions.

In the following chapter (5), each hypothesis and each question will be discussed critically and at length, broadening this short presentation.

Part 4.5.1 presents each hypothesis and the significant changes measured concerning it, including the decision to either accept it or not.

Part 4.5.2 is a summary of the synthesis created by all the findings. It is therefore a summary of the whole findings chapter.

##### **4.5.1 Hypothesis validation and significant changes measured**

Triangulation, using many research tools combined, provides an important way of ensuring the internal validity. Validation in case studies consists of combining different concepts of triangulation (Johansson, 2003). In this study I used cross referencing quantitative and qualitative data, which helped me rigorously evaluate my findings.

Each hypothesis is hereby described in short, and the significant changes measured, either validating the hypothesis or not. For this purpose I used the results of the DISC

questionnaires (soft data), additional data from school records (hard data, used in some of the hypotheses) and qualitative data to strengthen my decision.

**III hypothesis** stated that school learning outcomes become significantly strengthened by the Katom coaching intervention:

\*This hypothesis was divided into three hypotheses (H11, H12, and H13)

H11- Pedagogical learning outcomes (PLO's) are significantly strengthened by the KCM intervention

Soft data, DISC1 staff questionnaire indicated significant change and improvement. Hard data showed improvement in all measurements taken both in the S- junior high school and the S-high school grades, some of which were statistically significant. Qualitative findings showed improvement in pedagogical LOs as well. The only parameter which did not indicate improvement was the student questionnaire, (DISC2). As this was a consistent result, it will be discussed and understood better in the next chapter (5.3.2.1).

**This hypothesis was accepted.**

H12 – Social-Cultural learning outcomes (SCLO's) are significantly strengthened by the KCM intervention

Soft data (DISC1) showed improvement, though not significant, however, SCLOs were grouped into a large variable LOs (combining PLOs, ALOs and SCLOs). This variable, of which SCLOs was part, did show significant change.

Hard data showed significant improvement in all measurements.

Qualitative findings showed much evidence of socio cultural LOs improvements.

**This hypothesis was not accepted.** Nevertheless, using the hard data from school records strengthened by very strong qualitative findings show definite signs of improvement.

H13 - Administrative learning outcomes (ALO's) are significantly strengthened by the KCM intervention

Soft data (DISC, staff questionnaire) indicated change and improvement although it was found to be a borderline result. Hard data showed significant improvement in measurements taken.

Qualitative findings showed improvement in administrative LOs as well.

**This hypothesis was accepted.** Using the hard data and qualitative data, combined with the DISC1 findings, which were very close to a significant result.

**H2 hypothesis** stated that the KCM coaching intervention significantly strengthened and promoted three core school Processes.

\*This hypothesis was divided into three hypotheses (H21, H22, and H23).

H21 -Vision internalization is significantly strengthened by KCM coaching intervention.

This was strongly and significantly shown by both questionnaires which staff and students filled (DISC1, DISC2). Qualitative information added to the validation.

**This hypothesis was accepted.**

H22 – Organizational learning is significantly strengthened by KCM coaching.

The DISC1 showed a significant rise in the teachers' value of achievement, which was a main focus in improving organizational learning. In other items related to the topic no change was found. Qualitative data showed strong evidence of organizational learning improvement in S-School.

**This hypothesis was not accepted** although qualitative findings indicated that change had widely occurred.



H23 – Personal-professional learning forming a coaching culture in school is significantly strengthened by the KCM.

Coaching culture was mainly to be indicated by the Socio-cultural LOs in the DISC questionnaires and these were not strengthened as mentioned. Nevertheless, main themes found in the qualitative findings provided varied indications of S-School's special characteristics, in which listening, close relations care and dedication were highly stressed, and these are the characteristics of a coaching culture as explained.

**This hypothesis was not accepted.**

H3 hypothesis stated that learning outcomes in school and the three school core processes are in simultaneous progress during KCM coaching intervention.

A significant growth of the percentage of correlations between LOs and indicators of the school core processes were found.

**This hypothesis was accepted.**

#### **4.5.2 A summary**

The quantitative data helped me measure the effect of the coaching intervention, specifically testing the hypothesis. The qualitative findings helped me develop my understanding of the processes involved in the coaching work. By combining, synthesizing and triangulating the data I was able to evaluate the internal validity of my findings.

As a general summary, I created Table 29, which contains all the different sources of information and findings that informed my decisions about whether to accept or reject each hypothesis and how to answer each of the questions.

The order in which the findings are presented in the left column, is the order these findings will be discussed in the Chapter 5 (the Critical Discussion).

**Table 29** sources of information used in each hypothesis and question

Remarks- \*1. DISC questionnaire refers to DISC1 if not otherwise mentioned

2. Delphi process information was based on all other sources.

| The Hypothesis/Question<br>+ Part in discussion |                 |   | DISC<br>Questionnaire*                                 | Qualitative<br>categories | Other                                  |
|---|-----------------|---|--|---------------------------|--|
| <b>H1</b>                                       | Part<br>5.2.1.1 | <b>H11</b><br>PLO improvement                         | Section 3-a,b,c<br>Section 4<br>(4 details)            | I                         | Grades                                 |
|   | Part<br>5.2.1.2 | <b>H12</b><br>SCLO improvement                        | Section 3 part e<br>(7details)                         | I                         | Studiousness<br>and Behavior<br>grades |
|   | Part<br>5.2.1.3 | <b>H13</b><br>ALO improvement                         | Section 3 part f<br>(6 details)                        | I                         | Staff<br>attendance<br>information     |
| <b>Q1</b>                                       | Part<br>5.2.1.4 | School LO progress                                    | Section 3 parts a-f<br>(20 details)                    | I                         | Disc validation<br>process             |
| <b>H2</b>                                       | Part<br>5.2.2.1 | <b>H21</b><br>Vision<br>internalization               | Section 2<br>(6 details)<br>(5 details) DISC2          |                           | Research diary                         |
|   | Part<br>5.2.2.2 | <b>H22</b><br>Organizational<br>learning              | Section 5<br>Section 6<br>r(4 details)                 | I                         |  |
|   | Part<br>5.2.2.3 | <b>H23</b><br>Personal professional<br>learning       | Section 3 part e<br>(5 details)<br>Section 6 -1 detail |                           | Delphi Expert<br>Group process         |
| <b>Q2</b>                                       | Part<br>5.2.2.4 | S-School<br>characteristics after<br>KCM intervention |  | II                        |  |
| <b>H3</b>                                       | Part<br>5.3.1   | <b>H3</b><br>H1 & H2 progress<br>simultaneously       | DISC1  |                           |  |
| <b>Q3</b>                                       | Part<br>5.3.2   | Evaluating KCM and<br>coaching                        |  | III                       | Delphi Expert<br>Group process         |
| <b>Q4</b>                                       | Part<br>5.3.3.1 | <b>Q41</b><br>My professional<br>improvement          |  |                           | Research diary<br>Delphi process       |
|   | Part<br>5.3.3.2 | <b>Q42</b><br>The KCM model<br>improvement            |  |                           | Delphi process                         |

## Chapter 5 – Discussion

The aims of this study, as presented in the first chapter, were on three levels, starting broadly-

*To contribute to the establishment and grounding of the coaching profession, specifically in the field of education, in the academic world.*

This goal was at the base of my decision in the first place: to dedicate time and energy and to study thoroughly the existing documented knowledge and experience of researchers and of practitioners in the field of coaching, specifically, in school - improvement and school coaching areas. Introducing coaching towards improvement. This knowledge was to become the basis for the creation of my own new knowledge, using empirical evidence, which, as mentioned was relatively scarce in the field of coaching, particularly with regard to coaching in schools. The second chapter of this WBP presents the summary of these attempts.

To reach my goal I designed and later executed my research on the topic, with the attempt to fulfill my second and narrowly focused aim-

*To increase understanding and build new knowledge of ways in which coaching in schools, and specifically, the KCM coaching model, may help and improve school performances.*

The plan and description of the research were presented in the third chapter, followed by the findings which were presented in the fourth chapter.

In part 5.2 of my discussion I addressed most of these findings, showing connections and comparing with the professional literature review, I confirmed hypotheses and answered the relevant research questions.

In part 5.3 of my discussion, I attempted to fulfill my last aim –

*To gain further experience and better professional skills in the praxis of coaching,*

Referring to the remaining hypothesis and questions, I spoke of ways I had found and used to evaluate coaching and KCM model. In addition, I described ways which helped me to improve my praxis as coach in the process of helping school staff improve their school's performance. I addressed further improvements needed and ways planned to achieve those as well.

The discussion begins by describing the KCM model as it was planned (5.1) up to the presentation of the model as it evolved throughout the research (5.3.3.2).

The last subchapter (5.4) presents the conclusions reached as well as the recommendations.

## 5.1 KCM –Katom coaching model planned frame of work

This research was based on work in school using KCM1. This model emerged gradually, through extensive review of existing theory and documented practice of others, and of my own experience and insights, including those from my early study of coaching work in school (Beskin, 2005). Creating the DISC questionnaires was also a main source through which the KCM1 was focused.

KCM1 took on its final form and definitions through this study (see 5.3.3.2), but the starting point, which I presented and offered the coaching intervention to S-School, is hereby presented.

KCM1 was planned as a coaching intervention framework for school development. I was to work in collaboration with school management, as an outsider expert coach, using coaching skills and values, in order to help improve levels of performance: To encourage performances of excellence by management, teachers and students. Facilitating excellence in school was to be achieved using six lenses which would help plan, monitor and evaluate the coaching - measuring three school quality variables, the school learning outcomes and tracking three core overall processes as follows-

### **Three school quality variables:**

- Pedagogical learning outcomes- PLOs
- Socio-cultural learning outcomes- SCLOs
- Administrative learning outcomes- ALOs

### **Three core overall processes.**

- I. The internalization by the learning community, of the school's common vision.

- II. The management of organizational learning; acknowledging school successes, celebrating and learning from them; and
- III. The management of personal and professional learning, thus forming a school coaching culture. \*

\* This process was conceptualized only during the early stage of the intervention see 3.9.2 and 5.2.2.3, as part of the improved theory, the KCM2.

Work in the school was planned according to the following developmental stages -

**1. The diagnostic stage –**

Re-articulation of the school's vision.

Diagnostic test using the DISC questionnaires.

Data collected from school records.

Collaborative design of the coaching program to be implemented.

**2. Mile stones –**

A contract; the first milestone indicating what improvements are expected.

A collaborative action plan.

Success criteria for the process are defined and celebration of success is planned.

**3. Coaching -**

Personal and/or group coaching takes place in accordance to contract.

**4. Fine tuning –**

Coaching outcomes and milestones reached are co-operatively evaluated by the leading school management team and by the coaching team.

The coaching action plan is focused and re-focused as needed

**5. More Coaching.**

**6. Summary and maintenance –**

Post diagnostic test (DISC).

Objectives are affirmed.

New objectives are set toward the actualization of its vision .

Planning of ways to maintain and strengthen the achievements realized,

At the starting point, KCM1 could be schematically visualized as presented in Fig 2.

Its 6 stages and 3 core overall processes (three colored arrows blue for vision, green for organizational learning and orange for personal- professional learning).

Fig 2 KCM1 Early Model



KCM as presented, dealt with improving three types of school learning outcomes while monitoring three school processes. In the following part of the discussion, I looked closely at all the findings through these six lenses (LOs and processes).

## 5.2 Coaching effect on School Learning outcomes and Processes

(H1, H2, Q1 & Q2)

Three types of school learning outcomes and three processes were triggered as the base of planning, monitoring and at the end, of evaluating the coaching intervention. In the following part of the discussion, I looked closely at all the findings through these six lenses separately, explaining and confirming research hypotheses. I then discuss connections between them, answering research questions. Findings were connected to the professional literature review, concerning the learning outcomes and school processes which had improved using the KCM coaching intervention in S-School.

To do so, I used both findings collected in quantitative and in qualitative methods. Quantitative data, used to prove the research hypotheses, contained measured facts - hard data from school records and perceptions on the same topics, using soft data from DISC questionnaires. (DISC2 student questionnaire did not add significant information. This will be treated critically when discussing the research design and methods, see 5.3.2.1).

Qualitative data collected from interviews, from documents, created throughout the intervention and from the research diary, was added to strengthen and add the validation of the hypotheses.

Qualitative findings were used to answer the research questions. Symmetrically, the answers were strengthened by using quantitative findings as well.

### **5.2.1 H1. Learning outcomes in school are significantly strengthened by KCM coaching intervention.**

First, each LO was discussed confirming the relevant research hypothesis (H11, H12, H13 in parts 5.2.1.1- 5.2.1.3). Connections between and influences on the LOs were related to while answering the research question Q1 (part 5.2.1.4).

Before these, I would like to explain the term 'school learning outcome' and its connection to coaching in school.

School learning outcomes are tangible evidence of the learning procedures at school in the various fields – pedagogical (PLO), socio-cultural (SCLO) and administrative (ALO). (Kreindler, 1999; Kreindler & Beskin, 2006; 2008).

The concept of an "LO" refers to outcomes which the school as a whole produces. Producers are all people involved in school work, the managers, the teachers and the students. While conducting the Delphi expert group, I was asked-

*"How do the school's learning outcomes relate to coaching?"*  
(Appendix 4.2)

Learning outcomes are what the school management and learning community produce. The quality of these outcomes is an indication of the quality of the learning processes the school's staff manages. Just like widgets are the outcomes of some industrial processes managed by business executives. Therefore, coaching towards excellent performances, which KCM focuses on, must influence better LOs.

5.2.1.1 H11 - Pedagogical learning outcomes (PLO's) were strengthened by the KCM coaching intervention- this hypothesis was proved.

DISC1 questionnaire showed a significant improvement in staff conception concerning school pedagogical outcomes (T-test  $t(69)=2.31$ ,  $p<.05$ ). Analyzing the coaching effect by comparing grades (pre to post intervention) in three main subjects chosen, show all grades means were higher in S- junior high school. In addition, the percentage of failures decreased in the English and Hebrew disciplines. In Mathematics, student achievements show a significant decrease in the number of failures  $\chi^2(4) = 32.20$ .

S-high school students eligible for a baccalaureate diploma after having passed all Matriculation exams successfully, increased by 10.2% -from 39% in 2007, before the intervention, to 43% after it.

'Etgar' class (motivational challenged students) increased their eligibility for a full matriculation diploma from 0% before to 24% after;

The 'Mabar' class (slightly stronger students), increased their eligibility to a full matriculation diploma from 38% before to 48%.

The "impact coaching has on student achievements", is for some "the only research question that matters" (Cornett & Knight, 2008, p.216). Pedagogical learning outcomes are the most common and easily tracked factor of improvement in schools (Wong & Nicotera, 2007; Suporvitz, 2006; Sparks, 2005; DuFour, 2004;

Ofek & Ofek, 2003). Pedagogical achievements can be addressed as the "Direct evidence" of change where as the "Indirect evidence" is, for instance, change in staff practice (Wiggins & McTighe, 2007). On the other hand, PLOs are at times considered "effect variables" which result from "cause variables" such as teaching methods and leadership (Reeves, 2002). These different attitudes to the meaning of PLO improvements influence the objective chosen for an intervention in school. They can be seen as reflecting the question of what the most important factor is which requires improvement in school, the one which will cause the transformation, leading to the improvement of the whole school. This decision is based on personal /organizational values and is also related to the debate focusing on results or processes. Choosing the "effect variable" attitude to PLOs may reflect the conception of preferring process over result oriented work, or may reflect the renunciation of the



ability to measure specific results from coaching in school. In this sense, a coaching intervention in school aiming at whole-school improvement is not different from coaching interventions in non educational organizations- both researchers and practitioners state that improvements are difficult to track specifically, though they should not be so (Leedham,2005,Grant & Cavanagh, 2005, Greif, 2007). This was the case with most researchers discussing coaching in school on a wide -holistic version, as KCM suggests. They did not specifically discuss results of their intervention in terms of better PLOs. Instead, they mainly discussed relations, management behavior and aspects of the organizational climate which were process oriented. (Brown et al., 2005; Brown et al., 2006; Robertson, 2005; Tolhurst, 2006; Suggett, 2006 and others). It was different in cases using coaching in school specifically aimed at improvement of a given area ,such as PLOs using "student achievement coaches" or other expert coaches (as discussed in Neufeld & Roper, 2007; Keller, 2007; Yoon, 2008; Coggins, Stoddart & Cutler, 2003, and others). (More about process verses result in coaching see 5.3.1)

Bearing this in mind, I thought that coaching according to the KCM, should focus, not only on processes but should show specific results as well, in terms of an impact on LOs in general and on PLOs specifically (as discussed in this section). Using PLOs in school according to Greif (2007), should be the natural way, as part of evaluating coaching success. PLOs are easy indicators for measuring change in a 'data driven school' or 'data friendly environment'. They create an interactive and recursive 'management by fact' process. (Suporvitz, 2006; Reeves, 2002; Conyers & Ewy, 2004; Wiggins & McTighe, 2007; Pfeffer & Sutton, 2000).

The first collaborative decision to be made is which PLOs to collect, the next step being the decision on specific targets of improvement, followed by planning, executing and monitoring the plan towards the target. The final point is evaluating success and then, starting again...

An interesting result connected to PLO measuring in S-School during KCM coaching interventions was the following: According to the plan, one of the main issues the management had wanted to address and improve were PLOs of the slower class students (Etgar and Mabbar). Focusing on these classes in terms of measurements created a significant change in their achievements as presented above. These improvements were strong and noticeable also when considering PLO improvements

of S-School in general. But unfortunately, when specifically addressing the strong student classes, which were not in focus during the intervention, achievements were found to be slightly lower when comparing pre to post intervention. This shows the importance of measuring as Wiggins & McTighe (2007) suggested, quoting Peters & Waterman (1982). Things which get measured, they said, get done, because the attention is focused to that area. Conyers & Ewy (2004) added that what is not measured is not valued and might therefore not improve.

Although quantitative data presented proved the Hypothesis, I added qualitative data hereby presented, as cross references, to further strengthen the findings and illustrate them with descriptions.

Considering qualitative data, all stories describing the 'most significant good experience of the year' were connected to learning outcomes (LOs). For example, from the PLO stories-

***B1:** "My 12<sup>th</sup> grade class graduated .Out of 18 kids- 10 achieved eligibility for a full matriculation diploma. 4 had 1 exam missing and 4. more than 1."*

***A2:** "I prepared a class for winter exams during only a month and a half of work because of the strike. Out of 24 students, I let 22 attend the exam and they all passed! " (Appendix 1)*

Six of these 20 stories (30%) were of PLOs. An interesting finding was the fact that only interviewees who chose as most significant a 'PLO story' chose to emphasize, as part of it, the acknowledgment/ thanks/ appreciation they had received in connection with the achievement (no other type of story included such information). This special emphasize was included in most of the PLO 'most significant good experience' stories (4 out of 6, 66.6%). For example-

***B1** continued and said: " They all thanked me for my "drilling into their minds". (Appendix 1)*

I suggest two explanations for this. The first explanation is personal- choosing the most significant success story is strongly connected to personal values. There may be a connection between valuing most and choosing a PLO story as most important and valuing or finding the acknowledgments received important. The second explanation suggested is based on school culture. The acknowledgement connected to the PLO story may originate from school norms of acknowledging and of celebrating pedagogical learning outcomes specifically (and not other types of LOs). An important part of the process of strengthening organizational learning as part of the

KCM, was focused on acknowledging and celebrating success in general, not only concerning pedagogical achievements.

Other LO stories were collected from the interviews, not in answer to specific questions, as part of describing the changes in school. 14 out of 67 (20.8%) were PLOs (see table 25). Surprisingly, a relatively low percentage.

This hypothesis was proved, using quantitative data and adding qualitative data. By integrating the findings with findings from studies done in other places, cultures, using other methods from the literature, an external validation was created, enabling me to make general assumptions and recommendations.

5.2.1.2 H12 - Socio - cultural learning outcomes (SCLO's) are strengthened by the coaching intervention- this hypothesis was not proved

Seven school climate qualities defined the basis from which school socio- cultural learning outcomes (SCLOs) would show evidence of improvement –

Safe atmosphere (lack of violence),

Use of clean language,

Relations of trust and respect,

Mutual aid at school,

Voluntary activity,

Honor system – no cheating and

Care of school equipment and building.

These qualities were defined and chosen during the process of validating the DISC questionnaire, receiving high Alfa of Cronbach value ( $\alpha=0.9$ , see 3.9.3) expressing their significant connection.

Soft data collected from the DISC questionnaires showed an improvement in all SCLOs details, though the grouped variable did not show a significant change nor did any of the 7 mentioned details. SCLOs were grouped into a large variable- LOs, combining PLOs, ALOs and SCLOs. This Variable, of which SCLOs was part, did show significant change receiving in a T-test  $t(71)=2.46$ ,  $p<.05$ .

School grades of 'good behavior' and 'studiousness' were chosen to demonstrate part of the SCLO improvement in school as the hard data. This hard data collected, in contrast, did show significant change. When comparing grades of all students of the 10<sup>th</sup> grade (85 students) to the same group of students the following year, (their 11<sup>th</sup> year) during the coaching intervention, the findings indicated 'good behavior' grades showed a significant rise (  $t(228)=4.16, p<.001$ ). Measurements of the difference in 'studiousness' grades showed a significant rise as well ( $t(228)=4.20, p<.001$  ). The percentage of failures in 'good behavior' decreased from 11% to 0% and for 'studiousness' from 20% to 1%. Using measurement of  $\chi$  for significant change showed, for behavior,  $\chi^2(4)=13.00, p<.05$  and for studiousness -  $\chi^2(4)=35.0, p<.001$ . Qualitative findings showed strong evidence of significant change in SCLOs as well- 11 out of the 20 'significant good experience of the year' stories (55%) were SCLOs. Most of these (7 of 11, 63.6%) concerned personal relations with a students, for example-

*N: "The close relationship formed is the meaningful experience for me.. . I receive love from them (the students-GB). They share their intimate stories with me..."*

*D: "a student, who wouldn't speak, approached me this week for the first time! He had behaved like a shadow for two years, and he suddenly came and told me about himself... This gives me air to breathe... there is a lot of disappointment here...it is as if I had finally passed his exam. I told him I was proud to have been chosen by him to open up to. A little window was opened"(Appendix 1)*

The remaining 'good experience' SCLO stories dealt with socio-cultural activities in school, such as-

*B2: (about ODT activity)" One could see how much the students enjoyed it- I saw big smiles and laughter. .. they didn't run away like they often used to during other social activities." (Appendix 1)*

Qualitative data showed in addition, that 28 of 67 change stories were SCLOs (41.7%). Most of these stories, 16 out of 28 (57.1%), were on level 4 of change (the highest level), indicating transformation (see Table 25).

Level 4 definition: Transformation - the adoption of change was planned and became a personal and professional choice due to change in school culture (see 5.3.2.2). 22 of the stories were on levels 3 or 4(78.5%).

Fullan (2003) declares both academic achievements and personal and social development to be core purposes. However, Fullan (2003) said, the most important

LO, is the SCLO, which enables students to become "successful citizens in a morally based knowledge society" (Fullan, 2003, p.29). Also Linckona & Davidson (2005) spoke of both types of LOs (PLOs and SCLOs) referring to them as the performance character of a school, and moral character of a school- relating to relationships, treating others and oneself with respect, care and justice. Indicators of the moral character in school, according to Linckona & Davidson(2005), are civic engagement, academic honesty, lack of violence or addictive patterns. All indicators are very similar to the SCLOs presented above (the seven school climate qualities) and related to in the DISC questionnaire. The reason for finding that staff perception of SCLOs had risen, but was not considered significant was not quite understood, especially when two other LO types were found significantly higher in the perception questionnaire. It is odd considering other information presented as well. I could suggest that staff perceptions on this topic was very fixed and deeply rooted, they were used to address S-School students as problematic, with many behavioral problems. It needed more than one year to convince them that something had changed. When they were asked directly about 'lack of violence', "use of clean language" etc. in school, they could not state a change had taken place. Nevertheless, when collecting their change stories as presented, the SCLO stories accumulated little by little, and created a meaningful difference.

This hypothesis was not accepted using DISC quantitative data. However, adding the hard data from school records, the grouped LO variable findings and the meaningful qualitative data as cross references, gives a convincing indication allowing general assumptions and recommendations to be given with caution.

5.2.1.3 H13 - Administrative learning outcomes (ALO's) were strengthened by the coaching intervention- this hypothesis was proved.

Six elements defined the basis from which the school administrative learning outcomes (ALOs) were to provide evidence of improvement –  
Student attendance,

Punctuality,

Teacher attendance,

Efficient examination program,

Aesthetics and maintenance of the environment

These qualities were defined and chosen during the process of validating the DISC questionnaire, receiving a high Alfa of Cronbach value ( $\alpha=0.92$ , see 3.9.3).

According to DISC, the perception of staff regarding administrative learning outcomes showed the following T-test result-  $t(68)=1.9$ ,  $p=0.06$ . This is a borderline result, since significant change is defined as  $p\leq 0.05$  (this could have been achieved by one participant slightly changing her/his answer). However, hard ALO data chosen to be measured pre and post intervention, was staff absences, measured in hours.

Findings indicate a significantly lower percentage of absences. Using  $\chi^2$  test-  $\chi^2(2)=212.47$ ,  $p<.001$ .

Hoult & Sutherland (2006) and Lord, Atkinson & Mitchel (2008) spoke about coaching in education, and said that one reason many organizations invest in coaching, is the growing awareness of its role in reducing staff turnover due to its high impact on staff morale. Considering qualitative data, only 3 out of the 20 (15%) 'main significantly good experience of the year' stories were ALOs. The following story is an example. As discussed in the next subchapter, it was often found, that the administrative aspect served as a frame for other LOs-

*RI: "I decided to see to it that all children attended class... I prepared a table and every child who did not miss any lesson that week got a prize. The kids said that prizes should be given to students who had made progress as well. A child who missed 16 lessons and the next week only 7 was told by his friends- their idea – that he had improved, though not enough.. This big paper table was never torn (or burnt) like many other decorations on the wall. It was very important to them. Now they all come to class regularly".(Appendix 1)*

25 of the 67 change stories (37.3%) were ALOs. Considering their change level, 13 of the 25 (52%) were level 3 change (breakthrough) stories and 22 of 25 (88%) presented change on the 3-4 levels of change (out of 4 levels). 16 out of these change stories (64%) represented change which included one or more types of LO.(see Table 25).

Technical aspects which ALOs are based on have a significant influence supporting and ensuring learning. (Hall & Hord, 2006; Senge et al., 2000; Sykes, Rosenfeld & Weiss, 2006; Weiss et. al, 2007). By technical aspects I refer both to physical conditions in school and to organized documentation and quality control systems. These administrative features seem side issues to some, they were by far less often mentioned in the 'significantly good experience of the year' stories. Nevertheless, they were often involved and mentioned as part of a SCLO story of change, (10 out of 25, 40%) and always "high level change" for instance, an example similar to the one presented as one of the 'significantly good experience of the year' -

*A2: " As a result of discussing ideas in the home class teacher's forum, I changed my attitude and work- at the end of every week I hang on the wall the names of all the students who had prepared all their assignments. A student who was listed 4 times got a letter of praise and a prize. Children started running after me asking me to list them... Working this way using positive reinforcement is really effective, though sometimes it is tempting to comment..." (Appendix 1)*

Having high quality ALOs creates a sense of order for students and staff, both externally (a visual point of view) and internally, which seem needed emotionally and practically, enabling and nurturing the creation of high quality PLOs and SCLOs. ALO is referred to as an LO, as it represents a crucial type of outcome. It is based on school knowledge and systematically re-created, while monitoring success and setting new goals, just as is done with PLOs and SCLOs. The interesting point is that improving ALOs is relatively easy-any small improvements are widely noticeable and effective in supporting the improvement of other LOs.

This hypothesis was accepted using quantitative hard data, adding qualitative data as cross references and by acknowledging the borderline soft data result from the DISC questionnaire indicating change which was very close to being accepted as significant. By integrating the findings with findings from studies done in other places, cultures, using other methods from the literature, an external validation was created, enabling me to reach general assumptions and recommendations.

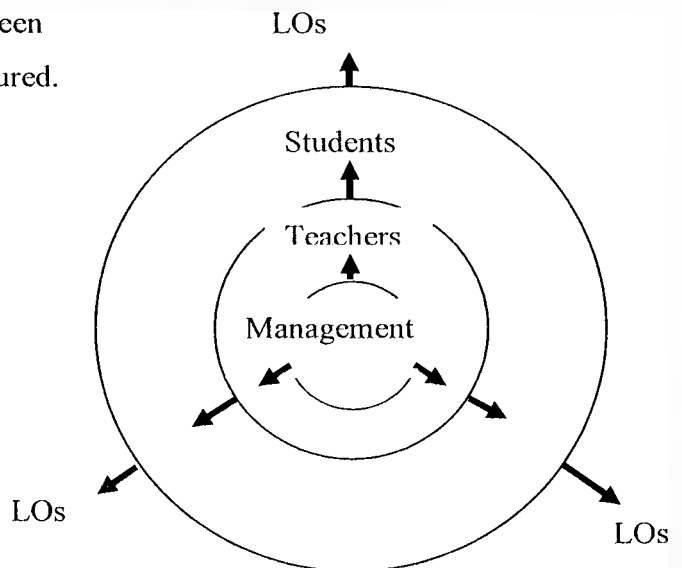
After I had looked separately at each LO achievement, I tried in the next part to relate to the larger picture, looking at school learning outcomes as one whole.

5.2.1.4 Q1- Which learning outcomes had improved during the coaching intervention? In what manner? Were there outcomes not enhanced? Why was that?

To answer this question I compared LO's in terms of importance and level of improvement. Then, I added two more points of interest.

As presented in detail (5.2.1.1-5.2.1.3), each type of LO had improved during the intervention. The grouped variable combining all LOs showed a significant improvement as well using a T-test,  $t(71)=2.46$ ,  $p<.05$ . This was not an obvious result, as the coaching framework in this study included working directly only with school management. (The management team was coached twice a month at the beginning of the process, and once a month later. The principal and both his deputies were coached in person as well, 10-15 meetings each. Other managers had a personal meeting when needed.) The LOs measured were produced by a much wider population, the whole school learning community. This meant that influence of coaching was to affect the management team and be transferred to teachers and through them to students. Fig 3 bellow, emphasizing the 'long distance' between coaching work and coaching results as measured.

**Fig 3** Long distance  
Coaching effect



I was asked by Delphi experts-

*"How was it done working only with the senior team?"* (Appendix 4.2)

This was indeed a long process. Coaching skills and the coaching values acquired during coaching sessions were transferred to other experiential environments (for more see evaluating coaching- 5.3.2). The process was shorter in schools in which our coaching intervention included working with the teachers as well, but this was not part of this case study according to the desire of management and the collaborative



intervention plan. (For more about the coaching framework see 5.3.3.2).

I believe the 'long distance' coaching effect was widely evident in higher quality learning outcomes, due to the fact that coaching process facilitate distributed educational leadership (Kreindler, 2011), which permeates throughout the entire learning community. The collective and collaborative responsibility for student achievements nurtured and helped develop educational leadership skills among teachers and students alike. Teachers managed the process but leadership permeated throughout the system ("long distance effect") and influenced the quality of learning outcomes (Wise & Jacobo, 2010; Seashore et al., 2010; Reeves, 2009; Southworth, 2009).

Separating LOs into three types, PLOs, SCLOs and ALO was somewhat difficult, even artificial at times. 20 out of 67 change stories, all of which were "high level changes", were combinations of LOs (See Table 25). As an example, the following change story represents a socio-cultural achievement (SCLO) based on an administrative platform (ALO) -

*L: "The principal takes care to praise teachers regularly on the "Mashov" computer system...not only for big and important issues...this influences and changes the whole school atmosphere!" (Appendix 1)*

The computer system, "Mashov", feed-back in Hebrew, is software which helps organize documenting and monitoring all items relevant to school work. It also creates an easy way of communicating within the learning community. The computer system was put into use during the research year in S-School as a result of increasing focus on organizational learning. G., a teacher and head of department, commented on the 'Mashov' system-

*G: Through the 'Mashov' computer system you get all information on all school aspects...you are always up to date. It was put into use and was implemented well...I am in close contact with my colleagues, it brings S-School to a new standard of work." (Appendix 1)*

L's example above represents a socio- cultural LO, adopting a norm of acknowledging success and appreciating good work. This SCLO was based on an administrative aspect of LO which enabled the successful implementation of the "Mashov" computer system in S-School.

The following example represents a SCLO combined or influencing a PLO-

*L: (an English teacher)" I have been preparing musicals with the English speaking kids for five years. It's the highlight of the year! This year we did "Fiddler on the roof" and it was fantastic!.. We prepared everything on our own... next year I plan a higher challenge- I want to bring the boarding school students to join as well!" (Appendix 1)*

(Boarding school students are from low achieving classes, many speak very little English or don't speak any.)

A play is a socio cultural LO but this had and will no doubt have a pedagogical effect on the participating students' skills in English; it is therefore a PLO as well.

The DISC findings strengthen this qualitative finding, presenting the connections between LOs. A significant correlation was found post intervention between PLOs and SCLOs ( $r_p=.43$ ,  $p<.05$ ,  $N=31$ ). This is similar to the findings from the wide data containing close to 1000 staff members from 63 different schools (for the process of validating DISC questionnaire see 3.9.3 and Appendix 14). The large data showed a very significant correlation between ALOs and SCLOs as well, which was not found in this case study, other than what was found using qualitative evidence as shown. As presented in the examples above, LOs seem mixed. What then is the point of referring to them as three separate types of LOs?

Qualitative findings showed that changes which indicate 'transformation' in school (level 4 of change, the highest) were often based on more than one LO (20 out of 53 high level changes, 37.7%). Nevertheless, the lower levels of change, 'awareness' or 'good result', always represent one LO type (Table 25).

All LOs are important and affect each other. By improving one type of LO, the two others are improved. The opposite is equally important- if one type of LO is neglected, the other two may soon be weakened. Therefore, the three types should be focused upon, including taking specific measurements to be monitored. Measuring LOs has a significant effect during the coaching process in schools, enhancing collaboration and organizational learning. First, it helps the whole team to focus on an expected target during the planning phase, followed by joint efforts towards achieving them. It is especially important again, when targets are achieved in a clear and visible way, to give space for celebration by the learning community.

Focusing on each of the three LOs was emphasized from the beginning of work in S-School. The school vision, which was audited at the beginning of the intervention, reflects this fact, by addressing each LO specifically –

*"...Enabling the achievement of high quality pedagogical, socio-cultural and administrative LOs..." (Appendix 15).*

### **Comparing LO importance and LO improvements**

In considering the degree of importance of each LO, as shown according to the 'most significant good experience of the year' stories, the order, based on counting the number of people who chose such an LO as most important to them, showed that SCLOs seemed the most important, followed by PLOs and lastly ALOs (11, 6 and 3 stories out of 19 respectively - 57.8%, 31.5%, 15.7%) - First list

Using the number of 'change stories' mentioned, presented a different order (Table 25) Second list- SCLOs were again found to be the most frequent, followed by ALOs and lastly PLOs (28, 25 and 14 stories out of 67 respectively - 41.7%, 37.3%, 20.8%). The different order between PLOs and ALOs may indicate either that more change had occurred within ALO field, or that ALO changes were highly visible, not necessarily that they were considered more important by staff. What seems evident and is shared by both lists, is the importance in staff's perception of SCLOs. The change stories were divided into the four 'change levels' mentioned (see 5.3.2.2). The pedagogical stories were distributed evenly amongst the four levels, whereas the ALO and SCLO change stories were mostly on both high levels 3+4 (22 of 25 and 22 of 28 respectively- Table 25). A higher percentage of stories categorized on higher 'change levels', could indicate a more significant change, this is strengthened by the order of the second list. Change in terms of pedagogical outcomes was the least significant, according to the participants' stories.

A third list is based on the percentage of change in S-School according to DISC findings (pre to post). The highest improvement was found for PLOs then ALOs and lastly for SCLOs. (+9.5%, +6.8% and +4.2% respectively). SCLOs were the only LOs which did not improve significantly. This Third list presents an order unlike the findings presented in the second list, both lists trying to indicate which LOs were improved the most. It seemed that when talking, staff mentioned socio- cultural LOs most of all, but, when asked directly about them, SCLOs were not easily tracked and

not as visible as PLOs or ALOs. This created the need to focus on SCLOs at work - constantly finding ways to disseminate and make SCLO changes show. This was done in S-School using the Mashov computer system and during the home teacher's forum meetings.

### **Two more comments**

1. The most significant good experience of the year' stories, collected through interviews, were all connected to learning outcomes. They were always told on a personal level- what the interviewee found most important in her/his own eyes, and always included a personal connection to the success/achievement. This personal connection to this success could be seen as obvious, and related both to the intimacy of the interview and to the phrasing of the question. Nevertheless, I would have expected that some would choose a story in which they did not play a main role – either another colleague or a success story of the school in general. Such stories could have indicated unity and identification with the organization, meaning the school's success was the speaker's own success as well.

2. One other interesting finding drawn from the DISC information was the level of LOs in school according to staff perceptions. Pre intervention -ALOs were found to be the highest, then SCLOs and lastly PLOs. This order was found constantly in the post intervention findings and in the large data mentioned as well (as a whole and in most of 63 school sub groups of the large data). I suggest that the reason findings indicate that school staff (in general) find their administrative LOs the highest LO, originate from the fact that ALOs are under the staffs immediate control more than other LOs- most ALOs are planned by staff who are then responsible for using them, while students are less involved.

One of the reasons S-School's LOs improved so much could be credited to this last conclusion. Three of the management members took over as their main project, an ALO. Their ALO goal was derived from the school vision and relevant to their role, an administrative frame which as shown, is very noticeable and is a base for significant change.

DO, a Member of the management team had chosen her goal- Creating a learning centre for assisting students with difficulties-

*DO : "The students got much more than we had first expected...the organizational aspect was easier than I had expected, at some point we had to stop the 'flood' of teachers wanting to help..." (Appendix 4.1)*

DO's self evaluation of her success in managing her project was 12 (on a 10 point scale...). Other projects were -Implementing the 'Mashov' software and Creating the home teacher's forum.

In order to evaluate the external validity of the findings from this question I used the triangulation of sources method. The findings of my WBP were supported by the findings of the researches conducting studies in different cultures, using different research tools and working with different participants. The results of the triangulation process indicated strong external validity which permits the generalization of the results and drawing conclusions and recommendations.

LO specific improvements were results planned as goals for the coaching intervention. At the same time and also highly significant were the processes monitored throughout the intervention. The following section focuses on these.

## **5.2.2 H2. The coaching intervention significantly strengthened and promoted the three core overall school Processes.**

In this section I discussed in the first parts (5.2.2.1-5.2.2.3) the three research hypotheses (H21, H22, H23) as related to the following processes, promoted during the KCM intervention -

- I. The internalization of the school learning community's common vision.
- II. The management of organizational learning; acknowledging school successes, celebrating and learning from them; and
- III. The management of personal- professional learning, thus forming a school coaching culture. \*

\* This process was only conceptualized during the early stages of the intervention see 3.9.2.

The last part in this section (5.2.2.4.) answers research question Q2, relating to the third process and S-School's characteristics.

#### 5.2.2.1 H21 -Vision internalization is significantly strengthened by coaching intervention - this hypothesis was proved.

Many Israeli schools have a vision, framed and hanging in the teacher's room. Some in addition, have quotations out of their vision on every written communication the school produces.

A meaningful vision can help remind the learning community of the vision as a process which takes place in school. By Vision- process I refer first to creating the common vision and recreating it when needed (Owings & Kaplan, 2003; Suporvitz, 2006). The collaborative effort of vision - creating unites the school community around its main values and priorities, which are to become the base of everyday work- translating the 'being' into 'doing'. This is the second part of the vision process: vision internalization (Pfeffer & Sutton, 2000; Sparks, 2005; Paterson, 2003). Part of the focus of vision internalization should be directed to implementing the vision as a whole into the school system- posters, logos.

In the following quotation, EB the principal, reflects on the intervention at the end of the year, planning the next steps of implementing the vision as a whole -

*"Next year, from the beginning, I plan to have the vision as a theme in all classes, it will hang in every class ... The visual- cosmetic representation of the vision (the posters) may help harness all people ,adults as well as students, to the essence of the issue in school".(Research diary, Appendix 10, p.55)*

Using DISC data, both parts of the vision process were found to have improved. The beginning of the intervention in S-School started off working on the school vision. There was a vision in school to start with; there usually is some kind of statement in Israeli schools. The work adjusting the vision and up-dating it started with the principal, continued with the management team and then with the whole

staff, (we did not reach the active process of involving the students in the process, this was done the following year, after the study had ended). The item from DISC questionnaire 'Knowledge/ awareness of school vision' became significantly higher when comparing pre to post intervention findings. Both according to staff conceptions (Z test showed 2.57,  $p < .05$ ) and according to students conception (Z test showed 2.86,  $p < .05$ ). This parameter was found to be the only one which showed a significant improvement in student DISC questionnaire. At the starting point, staff mostly answered that - "There is a vision, but I don't remember what it is" (stage 2 in the DISC questionnaire. The DISC can be seen in Appendix 13), and some wrote "There is a vision, but I only remember part of it" (stage 3) gaining a mean of 2.29 of 4. By the end of the intervention, most identified with the stage 3 saying, improving the mean to 2.97 of 4.

Another item related to this part of the vision process according to the DISC questionnaire was the question concerning 'Ownership of school vision' this item improved significantly as well according to staff conception (Z test showed 2.11,  $p < .05$ ). At the beginning, staff identified the vision as belonging to "management alone" (stage 2) or mostly to "the teachers and management" (stage 3) gaining a mean of 2.91 of 4. By the end of the intervention, many wrote that the vision belonged to "The whole learning community" (stage 4) gaining a mean of 3.5 of 4. Students, as mentioned were actually not involved in the vision creating process. These findings therefore could represent the overall feeling of staff's connection and identification with the school vision. They seem to have felt that the vision was an integral part of the school being and theirs as part of school.

Relating to vision implementing, the variable in DISC questionnaire was found to be improved significantly using T-test ( $t(51)=2.01$ ,  $p < .05$ ). This variable included four parameters which indicated the internalization of school vision into the daily work (from DISC questionnaire Appendix 13)-

- "The school vision is known, published and referred to on various occasions"
- "The projects and teaching curricula which the school initiates or undertakes reflect a cohesive conception connected to the vision"
- "The school vision is translated into concrete targets and goals within the team teaching your subject"
- "The cultural, educational and social activities at school reflect a cohesive conception connected to the vision"

Throughout the coaching intervention we focused on these 4 dimensions of vision internalization. The two following quotations from the research diary, regard the first item –

*EB, the principal "was very anxious to decide on ways and actions to further the implementation of the vision at all school levels .It was important, he thought, to show the whole staff the continuation of the process"(Research diary, appendix 10, p.18)*

*"During a whole staff meeting, EB wanted to speak of progress and work towards making the vision known and meaningful .Every member of the management board shared an incident s/he viewed or was part of in the last week, which represented a good example of principal idea presented in the school vision". (Research diary, Appendix 10, p.16)*

Another prominent aspect which is expressed in these quotes is the fact that the principal was most involved and spoke frequently about the school vision as part of the coaching intervention. This is mentioned and stressed as a crucial factor for the success of coaching interventions in schools. (Knight, 2009; Senge et al., 2000). The second and third items were especially related to during coaching sessions with the pedagogical deputy. She transferred the coaching effect to her work with HODs (heads of subject departments), seeing to it that they continued to work in a similar manner with every one of their teachers. The forth factor was dealt with, with the whole management team and at times, with the manager OK1 responsible for cultural and social programs.

The vision Internalization process helped to draw the outlines of the coaching intervention. It was created together at the beginning, and then it helped to plan the work and monitor it later, as the plan was executed. The vision was owned by the whole learning community (manager, teacher, student), and as such every member could, and should have been asking him/herself- was an activity in line with the school vision? Or- what more could s/he do in relation to her/his role to help fulfill school vision.

This hypothesis was accepted, using quantitative data and adding triangulated qualitative data. By integrating the findings with findings from studies done in other places, cultures, using other methods from the literature, an external validation was created, permitting general assumptions and recommendations.



The vision internalization process as shown, was the- 'What do we want in school?'

The two other processes were more of 'How are we going to achieve what we intended to?'

The transformation of the school's learning community into a community of learners creating systematic organizational learning is the next process discussed.

5.2.2.2. H22 – Organizational learning is significantly strengthened by KCM coaching- this hypothesis was not proved.

The DISC findings showed a significant rise in the teachers 'Value of achievement' (Z test showed 2.12,  $p < .05$ ). The 'value of achievement', which was a main focus in improving organizational learning, means striving to get results of excellent quality, either by growing potential or diminishing interferences (Linckona & Davidson, 2005; Schlechty, 2005). Working according to the 'Value of achievement' attitude, was part of a four item variable 'Staff attitude to work' which included in addition: 'Acting with commitment', 'Aiming at and focused on the goals' and 'Working in collaboration'. (Brown et al. 2005).

Although all items improved, there was not a significant change. In the post intervention student's questionnaire findings, the 'Staff attitude to work' variable, was rated as the highest of all variables (3.75 out of 5). This was no surprise to me as I had become almost a part of the S-School, and had noticed the impressive dedication and commitment of the staff (this is further related to in part 5.2.2.4 Concerning S-School coaching culture). Two other items related to organizational learning in the DISC concerned 'school customs of learning' (from successes, by analysis of one's own failure or other) and 'school customs of celebrating'. Both these items showed improvement, but in neither was it significant.

The quantitative findings collected with the DISC questionnaire did not show a significant change. The hypothesis was rejected. In contrast to the quantitative results, the qualitative results did show meaningful change and improvement.

The following quote is from JS's (pedagogical deputy principal) 'Planning and reflection table'(P-R), a reflective tool for documentation used by the management team as part of the coaching process. Her words described the work she was involved in and that she had observed, actively spreading the 'organizational learning' widely in S-School–

*JS: "The school vision is in front of my eyes the whole time, both personally and professionally. I am constantly passing it on to the HOD team (heads of discipline departments) and to the students I work with. I see the HODs working in a similar way with teachers in their own team".('Planning and reflection table', Appendix 3)*

The following, second example, was written by MD the principal deputy in her 'Planning and reflection table', about her work with the home teacher forum. The home teacher forum which she suggested and founded, was one of the most important frameworks created towards improving organizational learning in S-School-

*MD : " The declaration of each of the home teachers' objectives in the presence of all their peers, and their commitment to a certain percentage of success was a challenge to them all, and created a commitment ... Having succeeded in achieving their first goals brought down the barriers and reduced their worries in choosing a new goal and committing to a new and higher percentage of success"('Planning and reflection table', Appendix 3)*

Both quotations show some of the intensive work done in S-School towards systematically strengthening organizational learning and spreading it across the organization. Usually teachers work with their peers teaching the same content and not the same students. The last example shows teacher's working and engaging across content areas, creating study groups. A large amount of the time was dedicated to reflection on classroom experience, sharing materials and methods among teachers, engaging in active learning. These activities were dedicated to improve student learning through improving instructional practice by supporting teachers and creating trust and collaboration amongst them which helped develop collective leadership (Brown et al., 2008; Dopplet et al., 2009; Seashore et al., 2010).Developing educational leadership is influenced by coaching and is a main strategy for continuous success, contributing to the development of learning processes which bring about school improvement and the creation of high quality learning outcomes. (Muijs, 2011; Reeves, 2009; Kreindler, 2011).

Organizational learning spread virally across the rank and file of teachers spurred on by the celebration of success. According to the literature review, the systematic customs of celebrating success in school is very important (Hall & Hord, 2006; Wanger, 2006; Wagner & Masde-Coaps, 2002; Reeves, 2002; Peters & Waterman, 2004). Equally important is organizational learning from success, according to professional writers (Optalka & associates, 2008; Zifroni, 2006; Sykes, 2006).

When trying to understand why the work done towards strengthening the organizational learning in S-School did not show up in the measurements, one simple explanation could be that there was no significant improvement in this aspect. This could be understood taking into account both the relatively short intervention (see 5.3.3.2), and that work with the management team was not transferred as needed (see Fig 3) to the whole staff in order to create a noticeable change.

I believe that this contrast between the quantitative and qualitative data is due to the fact that where processes are concerned, quantitative information from questionnaires are less suitable (Yin, 2006). However, S-School did make progress in the important process of creating systematic organizational learning, as shown by the qualitative findings. Although this hypothesis was not supported by the quantitative data the qualitative findings supported by findings from studies conducted in other countries, cultures, using other methods encouraged me to draw some conclusions and make cautious recommendations.

5.2.2.3 H23 – Personal-professional learning, forming a coaching culture in school is a process significantly strengthened by the KCM coaching intervention- this hypothesis was not proved.

"If a culture of coaching could be introduced into Australian education, we would have taken a major step in supporting all staff ...(and) further consolidating the achievements of all schools"  
(Hoult & Sutherland, 2006, p.6)

Australia is not unique in this aspect, therefore strengthening the personal-professional learning or enhancing the coaching culture was an important process in S-School (Israel) and I had hoped to measure the change and improvement in this aspect during the study. However, I knew that the measurement tool –the DISC questionnaire, was not designed originally to measure this process (as explained in 3.9.2).

A coaching culture in school is based on personal-professional learning according to the definition reached by the Delphi Expert Group (see 5.3.2.2) described. The coaching culture in school could be indicated by the following organizational characteristics: Relations of trust and respect, and an honor system – no cheating, these aspects creating a variable of Mutual trust and respect, which was the first characteristics looked for. The second characteristics consisted of - a safe atmosphere (lack of violence), use of clean language and care of school equipment and building (no vandalism) creating a variable of a Feeling of safety. (About work creating and validating these variables using Rubrics, see Appendix 6). These mentioned characteristics created two variables which were part of the mentioned socio-cultural values, the basis of SCLO's and were said to be significant to a coaching culture (Wong & Nicotera, 2007; Linckona & Davidson, 2005; Sparks, 2005; Fullan, 2003). One more important item, characteristic of a coaching culture and looked for was Collaboration. (Wagner, 2006; Crane, 2007; Fullan, 2003; Wiggins & McTighe, 2007). Pre-intervention DISC1 and DISC2 results showed no suitable Alfa of Cronbach connection or correlations between the elements allowing the creation of the variables described as Mutual trust and respect and Feel of safety. In the post-intervention these connections were found both in DISC1 and DISC2 findings. This did not allow comparing conceptions pre to post intervention.

This left as the only possible option the comparison between single items pre to post intervention. Just as described in detail in part 5.2.1.2 concerning SCLOs, there was no evidence in the DISC findings confirming a significant change found for these items. Most evidence for socio cultural LOs were qualitative findings.

The term Culture of an organization or school, is a concept from the 90s, produced to suit qualitative research methods, in contrast to the earlier climate studies, which were quantitative focused. Culture is unique for each setting and therefore assessing it

requires either observation or in-depth interviews and document analysis. (Hall & Hord, 2006; LaTefy, 2005; Wanger, 2006).

This may add another explanation to the deficiency of the questionnaire - quantitative evidence of change concerning the coaching culture in school, in contrast to the rich qualitative evidence collected using qualitative tools. Consequently, it is difficult to show the validation of this hypothesis, with no other source of information collected other than the DISC's results.

In retrospect, it may have been a mistake to present H23 hypothesis, concerning the process of strengthening the coaching culture. Furthermore, it is possible that where processes in general are concerned, considering quantitative information from questionnaires alone is not suitable (Yin, 2006).

However, using the qualitative findings collected during interviews and analyzing documents, I found many instances indicating that S-School's characteristics matched descriptions of a coaching culture as explained - close family -type relations, listening, care and dedication. I shall therefore relate to these findings in the following part, answering the research question aimed at describing S-School characteristics after having gone through the coaching intervention.

#### 5.2.2.4 Q2 -What are S-school's characteristics after having gone through the KCM coaching intervention?

The Qualitative findings which helped illustrate S-School's characteristics were gathered first by questioning the interviewees directly –

*"What does work in S –School mean to you?" (Appendix 5)*

I also asked them to describe the S-School team. More information was collected from the interviews when related to freely during the session. While analyzing the data gathered, I tried to find main themes and similarities which would help outline S-school's characteristics, as drawn from different people's answers and reactions. I did not deliberately look for anything specific, but I did find many signs indicating that S-School's learning community characteristics resembled a familiar culture described in the literature - a school with a growing coaching culture.

A coaching culture in school could be described as a highly professional organization of closely bonded and committed staff (Hall & Hord, 2006, Roberts & Henderson, 2005).

Close relations amongst all the learning community was the main theme referred to by all interviewees; towards the students, amongst the team members, towards the management and specifically the principal. The word *love* was very often used to describe these relations, first and mostly toward the students-

*As we walked in the school grounds, a student came to R1 and showed her a magic trick- she watched and admired his show- "you should show me a trick every day!" The Child grinned with pride and went off." I love them... that is what they need!" (Appendix 1)*

Education institutions that are focused on relations such as presented, create 'coaching organizations' which are "better suited to meeting the needs of students" (Robertson (2006, p.41); something S-School was known for.

Close relations amongst the team members (9 comments) were found both on personal (first example ahead) and on professional levels (second example)-

*S1: "My son was hurt in a car accident...when I called to ask for help I found that everything had already been taken care of... The day to day work is difficult here, but when one is in need, the caring is endless...this is what ties me to this place. The warmth is S-School's human resource" (Appendix 1)*

*G: "I have worked in many schools. Here, there are relations of respect and honor amongst the teachers. People are considerate, everything I ask for is answered with 'No problem'! There are dynamics of help and brotherhood".(Appendix 1)*

Lord, Atkinson & Mitchel (2008) claimed that principals who had been coached were found to have better relationships and communication skills with their staff.

According to Garvey, Stokes & Meggison (2009), using coaching in the organization is a fundamental way of managing work relations and strengthening trust. Trust and close relations were specifically found describing the communication with the principal and the management team (7 comments). Trust is seen in the concern rather than in a 'spying' attitude; in real interest instead of meddling. It creates a relationship of partnership instead of a boss-to-subordinate one. (Early & Masarech, 2008).

Principals are "climate engineers" (Linley et al., 2009, p.38). If they engage in coaching relationships which are collaborative and democratic, rather than in the traditional boss-directing model, they create a positive effect on the overall climate ,

which permits improvement initiatives in school. (Barnett, Henry & Vann ,2008; Tolhurst, 2006).

Such relations and their effect can be seen in the following example-

*R1: "One day a student saw me crying because I heard my son had been wounded. She told the principal and a few minute later he arrived in class with a glass of water for me .This warmed my heart .I wish my students too, will one day have a manager who finds time for such things"(Appendix 1)*

There is very little research to support the hierarchy of Maslow's need pyramid, as there are many exceptions to its basic idea that insists each need must be met before the next level (Rock & Page, 2009). Nevertheless, it is accepted that all needs mentioned, although independent of each other rather than organized in hierarchy, are necessary and important on a personal and /or an organization level. The need for 'Love and belonging' as seen, seemed well fulfilled for the participants in their work place.

Further strengthening the feeling of belonging described, ten out of sixteen used twelve sayings with the words- 'a family' or 'parents' to the students- when asked to describe the S-School team's attitude to the students-

*S1: "The team is like a father and mother, united, like a home. If they are stable, the kid will grow up feeling loved and secured" (Appendix 1)*

*N: "Here (the S-School team) they are like a warm lap" (opens her hands to a hug). (Appendix 1)*

This attitude was brought by some in contrast to their conception of teams in other schools-

*R2: "In other places schools are 'grade factories'. Here the team is a father and mother-parents to the kids." (Appendix 1)*

*N: "Teams elsewhere are like a pile of snakes, blank as a wall to the students' needs" (Appendix 1)*

Although participants referred to their work in S-School saying-

*"Work in S- School for me is- love, home."(B2) or-  
"Work here for me is a way of life"(M). (Appendix 1)*

Work did not seem easy in S-School, and was considered very demanding, and sayings such as-

*A2: "The team is great and so are the students, although they are not easy.." (Appendix 1)*

made work important in interviewee's eyes. They felt valued and needed.

8 of the 16 described the team as dedicated, caring, and devoted. In addition, 15 more comments stressed these sayings by 10 of the interviewees-

*Y: "Teams in schools are a source of support, this is particularly seen in S-School where the team is dedicated and professional".*

(Appendix 1)

*S1: "The principal knows all the students' names...We don't give in to the students and don't give up on them...people here are extremely caring and sensitive".(Appendix 1)*

'Self efficacy' as called by Bandura, is the emerging belief that 'I can do it' and 'collective efficacy' is the understanding that the group, has the capacity to make a difference. Collective efficacy seemed to be an important theme in S-School and the coaching intervention highlighted and amplified it. This is stressed in the participants comments. Collective efficacy is a key to understanding the change process and is connected to better performance (Passmore, 2007; Sergiovanni, 2005, Marazano, et al., 2005; Seashore et al., 2010). 'Self efficacy' added Robertson (2005) is part of the evidence that a coaching culture is emerging. The more self-efficacious the participants become

"the more likely they are to commit themselves ... to enhance learning and teaching in their institutions (Robertson, 2005, p.185).

This type of description characterizing the S-School staff can be seen as an expression of Maslow's '*Esteem*' need fulfilled - self esteem, confidence, sense of achievement, self respect and respect by others which according to Maslow is the basis of another need - *self actualization* (Rock & Page, 2009).

A great deal of evidence of Maslow's highest level, *self-actualization* was found amongst many of the S-School staff concerning their work at school.

Ten out of sixteen interviewee's answering the question about their personal feeling towards work in S-School, used the term 'satisfaction' or referred to their work as a 'personal challenge' or 'mission', it was certain that these people felt a sense of fulfillment working there-

*N: "Work in S-School is satisfaction itself".(Appendix 1)*

*B1: "Work in S-School is a mission, a challenge; I am here for Zionist reasons. Otherwise I wouldn't have been here. I am often told I am crazy..". (Appendix 1)*



Connected both to the close relations in S-School and to the dedication and caring attitude there, an important characteristic in S-School referred to was listening. 6 of the interviewees stressed the school's listening attitude, one of the most central coaching skills. Obviously, many spoke about listening to the students and their needs as seen in the following example-

*Y: "I personally speak with students. When I see a student with a sulky face, I listen to him, even if he isn't my student. I have seen it done by others as well. This is the policy". (Appendix 1)*

It is interesting to see the same attitude towards the staff as well-

*L: "I was working with a class on a project...It was terrible! Kids were hurting each other. I was hysterical. I wanted to give up. The principal called me, seated me in his room and said- 'L, how can I help you? What do you need to make it succeed?' The nicest sentence possible...This is the attitude here, it is part of the school vision- not can we do it? But instead, what do we need to make it happen?" (Appendix 1)*

Regarding the remaining needs Maslow defined- *Physiological* needs, S-School is situated in a rural area in the north of Israel. The school is part of a youth village; it is extremely green, beautiful and spacious. It is carefully tended and clean, which creates a perfect surrounding in terms of fulfilling relevant *Physiological* Needs. Considering *Safety* needs, the DISC information graded this variable between 3.32 and 3.5 (out of a 5 Likert scale). It is surely not 'excellent', which in the 5 level Rubrics matching the 5 Likert scale variables of DISC questionnaire was defined as (Appendix 6)-

Excellent safety in school- "Personal safety is very high. Physical violence or vandalism is not heard of. Verbal violence is scarce and when it occurs, is treated and taken care of - usually by the students themselves." (Rubrics created during validation see Appendix 6)

Some of S-School students come from difficult backgrounds and that influences their behavior until they become part of the general culture.

I did not interview students, therefore, I had no direct qualitative data describing them as part of the school culture. As earlier described, DISC2 questionnaire, containing student perceptions of change (pre- post intervention), did not add much significant information. Nevertheless, the last quote is a moving story I heard during the interviews. Although it is one incident, it is an authentic way to complete this section.

The more I spent time in S-School, the more I felt this story was representative of this place-

*L: "One stormy night, I took my dog for a walk and passed by the school. A student of Ethiopian origin past by, just as a tree fell due to the strong wind. The kid, who had not seen me, stopped, bent into the mud in the pouring rain, dug the earth and straightened the tree. This is the connections the students have to this place. They care. You see students pick up garbage. They love and honor the school. It is not part of any curriculum. The next day I told the boy I had seen him..." (Appendix 1)*

The coaching culture was described using qualitative data from various sources, and triangulated. By integrating the findings with the literature, using findings of researches who conducted studies in different cultures, using different research tools and working with different participants, an external validation was created, making general assumptions, conclusions and recommendations possible.

### 5.3 Evaluating coaching, my work and the KCM model.

In this part of the discussion I attempted to fulfill my last aim –

***To gain further experience and better professional skills in the praxis of coaching.***

I spoke of ways I had found and used to evaluate coaching and KCM model. In addition, I described ways which helped me improve my praxis as a coach in the process of helping school staff improve their school's performance. I addressed further improvements needed and ways planned to achieve those as well. This part starts by relating to the last Hypothesis H3, which predicted that learning outcomes in school and the three school core processes are in simultaneous progress during the KCM coaching intervention. Proving this hypothesis was to help validate the KCM coaching framework which was focused both on strengthening the core processes and on gaining improved results (5.3.1).

Then I attempted to answer the remaining research questions-Q3 showing the ways in which the coaching intervention was evaluated (5.3.2) and Q4, Finding ways in which my work had improved and what could further be done (5.3.3).

5.3.1 H3- Learning outcomes in school and the three school core processes are in simultaneous progress during coaching intervention- this hypothesis was proved.

The debate between focusing on results and focusing on processes where coaching, is concerned is a crucial issue. It is based on philosophical attitudes and personal values but it has a vital influence on the coaching itself. First, it influences the choice and definition of the goals, and then the focus is on the work during coaching. It is also relevant while monitoring work and when evaluating its effectiveness at the end. For instance, according to the booklet by Creasy & Paterson (2005), which was prepared for school leaders by the National College for School Leadership (NCSL) in the UK, the main purpose for coaching in school was to develop emotional intelligence. This was the focus mentioned by Brown et al.(2005) as well, referring to a prominent program by the Change Leadership Group (CGL) at Harvard graduate school of education which was presented in their large scale research conducted in the US and which produced an overall picture of coaching programs and coaching activities used in education. The attitude of coaching focused on personal growth, contributing to wellbeing, satisfaction and fulfillment, were mentioned by many writers (for instance- Whitmore, 2004; Kassel, 2005; Gilpin, 2005).

On the other hand, others stress the bottom line very explicitly instead. For example, according to Fourniers (2000, p. 96), "Improving performance is actually improving results" an attitude shared by Grant (2006; 2007) and Katz & David (2009) as well. They related to coaching as solution focused and result oriented in terms of professional practice, although Grant (2006; 2007) added personal growth as well. In this study I chose to work on both lines simultaneously, as Holmes (2003) had suggested in his study. Holmes (2003) stated that coaching, which offered the greatest impact in schools, should be both clear about intended results, and use coaching in processes aligned with overall aims and values of the school.

To do so, I used the 'six lens'- three LOs which created results- focused work, and in addition, three organizational overall processes which were systematically enhanced. These overall processes were ones found to help make the results possible (as discussed 5.2.2.1-5.2.2.3).These processes added to the feasibility of the results,

while, each was an important goal in itself, to constantly work on and improve. Covey (1996) suggested effective work to be such which achieved one's desired goals in a manner which enables the further achievement of new and higher goals. The overall core processes are those which help further progress, having reached the results defined. The following example tries to explain more clearly the result-focus combined with focusing on overall processes chosen: A result could be an amount of crops produced, and an overall process, nurturing it, could be sustaining a fruitful earth. Similarly, in the case of work in school, a result could be 'achieving a 10% rise in the average Math grade'. Suitable overall processes could be, as declared according to the KCM:

- I. The creation and internalization of school's common vision.
- II. The management of organizational learning; acknowledging school successes, celebrating and learning from them; and
- III. The management of personal and professional learning, thus forming a school coaching culture.

The 'Planning and reflection tables' (see 5.3.1 and Appendix 3) tool was used by each member of the management team and by myself, to help plan, monitor and reflect on results of the work as part of the coaching. They were designed during work to assist us all to focus on every aspects of work - not to leave aside any aspect unattended to. Each person was to fill her/his table relating to the school processes, keeping her/his main personal planned project in mind, translated into specific LO goals. To help coachees understand the importance of process improvement, I used the 'jigsaw puzzle metaphor' (see in research diary, Appendix 10). The 'Planning and reflecting table' was used as a systematic thinking/planning organizer helping the focus to stay on the important issues, the identified processes and defined results, and not to be distracted by urgent school issues as they arose (Covey, 1996;1998).

My hypothesis was that the three types of learning outcomes in school and the three school overall core processes would progress simultaneously during the coaching intervention. I believed, that focusing on enhancing the processes would influence better LO results, and that focusing on improving results, would influence and enhance the three processes as described separately above, each of which was found to be a source of creating development and prosperity in organizations/in schools.

To prove this hypothesis, I compared correlations between variables in the DISC questionnaire pre to post intervention, specifically the three separate variables of LOs and a combined LO variable, with the variables indicating the three processes.

When comparing the significant correlations I found that their number had grown. In the pre coaching intervention DISC1 questionnaire, 18%, 10 out of the 52 correlations were strong and significant. In the post intervention questionnaire, 34%, 29 out of the 82 correlations were strong and significant.

Using a Z-Test showed a significant improvement,  $Z=2$ ,  $p \leq .05$ . This was a one tailed test, relating to the hypothesis with direction, Using a two tailed Z-test produced a borderline result-  $Z=2$ ,  $p = .06$ , but as I assumed that the number of correlations would grow, therefore, I found the one tailed test appropriate.

Some variables planned and defined during the DISC validation process could be grouped only in the post questionnaire, due to low correlations or alpha Cronbach values. These variables could therefore not be compared. Nevertheless, the fact that they became statistically bonded and could be grouped after the intervention shows in itself, that through the intervention the coaching terminology or language started to take root in school.

Considering the Vision process, 5 of the new strong and significant correlations showed the growing effect of the vision process in S- School during the coaching intervention. The high correlations were found between Vision variables and PLOs, SCLOs and LOs in general. The correlation between PLOs to "Ownership of school vision" was the strongest correlation found ( $r = .65$ ,  $p < .001$ ).

The organizational learning process variables, were found correlated to ALOs, SCLOs and LOs in general.

Quantitative data concerning the Personal-professional learning (forming a coaching culture) process, were less specific, as seen in 5.2.2.3. There was a correlation found between PLOs and LOs in general to SCLOs, which, as explained were to represent part of the coaching culture process. (More details in Table 23).

This hypothesis was proved by statistics which provided evidence showing the reciprocal influence between school LOs and school processes.

By integrating the findings with findings from studies conducted in other research fields and using other research methods, the external validity was assessed and the

construction of a field theory was possible as were the drawing of conclusions and the recommendations.

The following research question (Q3), provided the framework for the critical discussion of ways in which the KCM coaching intervention, and coaching in general could be evaluated.

### **5.3.2 Q3 - In what ways can the coaching intervention be evaluated?**

One of the main issues discussed concerning coaching, deals with finding validated procedures for coaching evaluation. In this case, evaluating the coaching intervention was combined with evaluating my research findings. This involved methodological issues as well. In this research question, I will therefore speak of ways I evaluated the KCM coaching intervention as part of the research and show these methods to be useful in evaluating coaching not only using the KCM framework presented.

My own experience of dissatisfaction with the evaluation of coaching results in my previous study (Beskin, 2005) as discussed, led me to change the methods of evaluating coaching from an exclusively qualitative methodology, to a mixed design of qualitative and quantitative measures (see 3.1.2). This mixed method was found most suitable for the coaching field in general and especially for coaching in schools, as it enabled researchers to look at both the implementation and at the impact the model created. (Brown et. al., 2006; Yin, 2006; Teddlie & Tashakkori, 2006; Hall & Hord, 2006; Miller & Lieberman, cited in Newman, 1998).

The quantitative evaluation of coaching outcomes followed a predetermined path. It was planned in advance while creating the DISC questionnaire (although, as explained in 3.9.2, some changes followed). In contrast, the qualitative evaluation was more fluid. I knew I would use the findings from documents and interviews, the evaluating procedure using this data emerged while conducting research and during the analysis of the findings gathered.

The evaluating methods planned in advance - The DISC questionnaires, the coaching contract and longitudinal evaluation, are presented first (5.3.2.1).

The methods which were developed during the qualitative data analysis are presented next- Change Levels and The transfer of Skills and Knowledge (5.3.2.2).

#### 5.3.2.1. The evaluating methods planned in advance

The methods planned in advance were the DISC questionnaires (a), the use of the coaching contract (b) and a longitudinal questionnaire (c).

**a. Using the DISC questionnaire-** The coaching intervention used, as explained, six lenses and focused the work accordingly – the development of three overall school processes and improvement of three learning outcomes.

These six lenses were reflected in the DISC questions which enabled the gathering of information, creating a picture of the current status of the organizational culture in school.

The first time the questionnaire was used, before the intervention, helped create a data-base from which a collaborative plan for the coaching framework in school was built. The coaching plan was tailored to suit the school's needs, as they were expressed in the questionnaire. Use of the questionnaire for the second time, at the end of the intervention, served as a quantitative measurement of the progress in the various parameters. The DISC was planned in two versions (Appendix 13) for staff (DISC1) and for students and their parents (DISC2). Methods for diagnosing school culture, such as planned for this study, were mentioned by other researchers. Plans towards the change wanted, they said, should involve collecting information from the students, their parents and from the teachers (Ofek & Ofek, 2003; Wiggings & McTighe, 2007; Crane, 2007). In this study, DISC2 was used with student representatives from the high grades only, but the data did not contribute much to the evaluation process. Choosing only the older students was based on the fact that younger ones did not know S-School as well and were not familiar with the DISC terminology. The findings show that the older students were no more familiar with the terminology (while validating the DISC questionnaires there were many changes put into the DISC2's wording following student and parent pilots). DISC2 questionnaire's findings showed change concerning 'knowledge of the vision' only. This could be

related to the fact that there was no change according to the students' perception, which could be the case taking into account the 'Long distance coaching' effect (see Fig 3), and the fact that I worked exclusively with the management team. My own feeling on this subject is that this was mainly due to using representatives and not all the students. The representatives were a small number (10% of the students) and only 20 filled in the questionnaire both times. Moreover, the students chosen were probably not a representative group, although I had tried to create one. When using KCM later in a different school, we used DISC2 with all students, and this was most enriching and useful. It gave an authentic, interesting and full picture of student conceptions on the various topics, and served as a forerunner for the school change planned. Students looked forward to it and staff felt commitment, having shared their plans with the students about new and improved work. Parents, in this study were not available, since S-School was 50% a boarding school. Many parents spoke very little Hebrew and we therefore decided not to involve any parents.

**b. The coaching contract** was established as part of the coaching plan, and it defined measurable goals-school achievements (which were collected as hard data from school records). These goals were agreed upon between management and coaching teams to be the measures of coaching outcomes.

\*Measurements of items described in (a) and (b) were taken before, and immediately after the intervention analyzed statistically and compared.

**c. Longitudinal evaluation** - In addition, there was a longitudinal evaluation (six months after the coaching process had ended) as well. This was done using a written questionnaire filled in by the school principal and his two deputies (EB, JS, MD, see Appendix 2), who were coached in person during the intervention. This is an important perspective and was used for the study needs. It is not always possible as part of work done using KCM.

As shown earlier in this discussion, these methods were used to collect and evaluate evidence of achieving success in the coaching process.



However, while conducting the coaching process, and as I collected qualitative data, two additional important ways crystallized to help evaluate the coaching progress. These are next presented-

#### 5.3.2.2 Evaluating methods developed during qualitative data analysis

The first qualitative method 'Levels of change' emerged while trying to find evidence for Transformational change (a). The second involved my growing attention to evidence of Transferring coaching knowledge gained from the coaching process to other experiential fields (b).

##### a. Levels of change

Coaching is expected to bring about change, which many refer to by using the word "Transformation". De Haan & Blass (2007) used Aristotle's definitions from his third book of physics, to distinguish between types of change. Change as a movement from a to b he said, is called 'progress' or a 'journey'. When change is in substance, it is called 'transformation'.

While analyzing the qualitative data, I realized that very many "change stories" were included. This was natural, as the questions during the interview were focused on identifying change in KCM intervention participants.

I wanted to learn more about the change achieved, to categorize it in a way which would help me evaluate the coaching process. I Categorized change into the four levels, and presented them to the Delphi group of experts asking them to recall whether they-

*"Identify similar levels of change throughout the organization, during coaching".(Appendix 4.2)*

The change levels as presented to the group, (see early version in appendix no.4.1), did not achieve consensus. Following their reaction, I changed the focus of the change levels in the new version - from focusing on the people joining the change effort, to focusing on the change itself taking root in school.

The version hereby presented, was found useful and showed similar results to those which were obtained using other methods, as will be explained following the change level definitions-

The new categories of the change levels were based on Dotlich & Cairo's (1999) action coaching levels of goals. Using those categories, I divided all change stories into the four level changes, which I defined as follows-

**Awareness** - Awareness crystallizes regarding the need to change and /or of first steps doing new things that may bring about change.

**Good results** - A new and better way of doing things was found, which created a different and at times unexpected good result.

**Breakthrough**- A new and better way of doing is deliberately tried out leading to a breakthrough result.

**Transformation**- The adoption of change is planned and is a personal and professional choice due to a change in school culture.

By dividing all change stories into the different change levels according to the three LOs, and then summing up the number of stories on each level, I could get more information about the change on each LO (see Table 25). This method of analyzing was used while discussing some of the hypotheses and research questions (for instance -5.2.1.1, 5.2.1.4) and mostly showed proof similar to that which was obtained using other methods, such as the questionnaire results. Furthermore, I suggest that this method may be used as part of self evaluation and reflection on praxis by coachees in person or in teams. The process of collecting "change stories" and categorizing them, can create an uplifting activity, and may suit areas and subjects of change in which measurable achievements are not as visible or not easy to define. Socio-cultural learning outcomes in this study were such. As shown, both the number of change stories presenting SCLOs and their diffusion amongst the four levels (57% SCLO stories were categorized on the highest-'transformation' level) was significant evidence of the change achieved.

## b. Transferring skills and knowledge

While collecting and analyzing the qualitative data, I realized there was interesting evidence of transferring skills and knowledge obtained during coaching sessions, into other experiential fields.

The consensus amongst the Delphi group participants about transfer as evidence of success in coaching was unanimous. They all agreed, that transfer

*"could be seen as evidence of coaching effectiveness"*(Appendix 4.1 c).

The coaching process creates knowledge and facilitates the use of learning skills.

Coaching should enable coachees to transfer these skills between experiential fields as needed.

Transfer was defined by Broad (1997, cited in Merriam & Leahy, 2005) as the continuing application of knowledge and skills gained in learning activities, by the learners into their performance, to another individual or to the organization. Coaching is a learning activity, an authentic learning, which is closely linked to actual practice, which is what Billet (2002) explained as necessary for transfer to occur.

Qualitative findings collected, showed evidence of transfer of skills and knowledge through coaching, as defined by Broad-

1. Transfer into the learner's performance, from one learning environment to the next within the school- MD., the principal deputy described preparing a lesson in the same attitude using similar stages as she had acquired and used while coaching, when dealing with her managerial matters. (She was asked about transferring skills and knowledge from her coaching experience)-

*MD: "a good example is the way I prepare the home teacher's lessons. First, I choose and define my goal then, the topic. I look for relevant material, write the lesson plan, and see that it suits my goals ...then, after the lesson is over, I try to reflect on it"*

(Longitude reflection on coaching L-R, Appendix 2).

The transferability of skills to other aspects of school work was found as a major benefit by Lord, Atkinson & Mitchel (2008) as well, in their study which reviewed 13 empirical practice based evidence studies between 2003-2005 and a large scale survey in England.

2. To another individual, between peers (laterally) within the school -

*R2: "The fact that I insisted that my students take the matriculation exam in Hebrew grammar, spurred other teacher to do the same this year ...I fought for the success of those children"*(Appendix 1).

3. To another individual, (vertically) within the school, because of its wide effect it could be regarded as Transfer into the organization-

This example showed the transfer of coaching between JS, the pedagogical manager (head of all department heads, HODs) and her deputies. Then from the HODs to their teachers. (Appendix 4.1, b) -

*At the first coaching meetings with JS it was obvious she was experiencing problems as a manager. She said*

*"Some of the time I feel very weak in front of strong department heads. I try to avoid confrontations and therefore do most of the work myself".*

*She worked hard, was very dedicated and open to ideas during the coaching process. She struggled to find her own strengths, amplify them during her coaching sessions and use them better when role-coaching her team of department heads. Change was evident by the end of the year.*

*JS herself summarized the coaching she had undergone -*

*"I did not believe there would be such a success! ... Real independence by all heads of department – they have become managers of their department (subject) in our school! "*

*The work she had done during coaching, discovering her strengths, celebrating her discoveries and working on the amplification of her skill, contributed to her becoming the manager she wanted to be. Her ability to transfer the skills she had discovered and amplified during coaching into her managerial environment, made the difference. These skills helped her manage, and the coaching culture helped her do similar work with her colleagues, the department heads, who in their turn coached the teachers on their own teams. The echo of this process was clearly heard in the words of the teacher interviewed -*

*O1: "There was a real upgrade in the work of the pedagogical manager this year. Her work is sacred work"*

4. This next example is of transferring knowledge to experiential fields outside of the organization. Transferring the knowledge from the school learning environment to the community (Home) learning environment-

*JS:-"Both when determining personal goals and as a mother or wife. I am constantly thinking long term, what is it that I want and what should I do to achieve it?" (Longitude reflection on coaching L-R, Appendix 2)*

Although Broad's definition (cited in Merriam & Leahy, 2005) did not mention such transfer, I found evidence of it, and thought it important and relevant, strengthened by one Delphi expert's comment-

*"There is an argument for taking into account the larger social context-coaching/mentoring in school environment may be beneficial for non- school environments as well"(Appendix 4.1 c).*

The transfer of coaching skills and coaching values is valid evidence of coaching success transferring the habit of creating new skills as needed to suit new and different situations is a powerful outcome of both facilitating a coaching culture and giving evidence of its existence.

The transfer of skills and knowledge from one learning environment to another, and between learners, is a major outcome of the coaching process and informs the coaching evaluation process. When knowledge and skills are transferred from coaching sessions to other experiential fields, the effectiveness of the transfer is an indicator of the development of a robust organizational coaching culture that supports the transfer. The importance of the cultural effect, enabling the transfer and encouraging it, was mentioned by Merriam & Leahy (2005) in their review of studies concerning transfer in adult training. The transfer indicates that organizational cultural values are supporting openness, team work, a need for achievement, courage to make decisions, educational leadership and critical thinking at a rate enabling transfer. Coaching effectiveness in creating transfer to learning was described by Knight (2009), who described a five year study in California conducted by Bush (1984,cited in Knight, 2009), on the ways to create better transferring of professional development into the teacher's praxis at the classroom level. He found that reading alone enabled only a 10% transfer. Using practice modeling and feedback in each training session added 3-4% to the knowledge/skill transferred. When using coaching, he said, 95% of the learned knowledge was transferred.

Identifying instances of transfer could stand as an indication of change and of internalization of learning, and therefore, for evaluating coaching.

Deliberate encouragement of transfer, creating opportunities to do so and stressing it once it occurs, may help the implementation of change. All participants of the Delphi Exert Group declared that they personally did try to create and facilitate transfer when coaching their clients.

The evaluating methods for coaching as presented, showing triangulation between research tools (Delphi Expert Group findings interviews and document analysis) show a strong internal validity of the findings. Cross referencing the study findings with other studies from various cultures using other tools shows a strong external validity as well enabling me to reach conclusions and offer recommendations.

The last research question, investigated ways to improve my praxis.

My coaching and the KCM model were examined, attempting to point out improvements during my work and ways in which I could stimulate processes that would lead to personal and professional growth in the future.

### **5.3.3 Q4 - In what ways had my work improved? What else may be done?**

This part of the discussion relates both to my professional work as a coach and to the KCM model.

The first part 5.3.3.1 will describe my professional work, answering Q41-

In what ways had my work as a coach improved? What else may be done to further improve my coaching?

The second part 5.3.3.2 will present the KCM as it emerged during the study and reached its final definition, answering Q42- In what ways had the KCM model improved? What else may be done to further improve the model?

#### **5.3.3.1 Q41- In what ways had my professional work as a coach improved? What else may be done to further improve my coaching?**

In this part I reflected on my professional work as a coach-what helped me do my best, and the lessons learnt doing so. First, the supervision I went through and the Parallel Cycle concept which emerged during the supervision process. (a). Then I discussed the coach-coachee relationships (b).

##### **a. Supervision and Parallel Cycles concept**

The coaching of school management teams is a lonely role although the work requires close collaboration with many school staff members. Self reflection was useful, but

"reaching out to others within, and outside the school community, to engage their perspectives on the role ...(and on how I could) play it more effectively" (Allan et al., 2007, p. 7)

proved to be crucial during work.

Every coaching session with a person or group ended with a call for feedback, both for my practical use and as a manner of modeling the openness I believed was a necessary value for the building of a coaching culture.

I found the supervision by my partner to be most important. It enabled both sharing, discussing and widening my repertoire of coaching methods and, it also helped me realize the strength of working with what we came to call Parallel cycles.

Day et al. (2008) studied 'critical moments' in coaching, by collecting and analyzing 51 self reports of coaches who used supervision. Supervision, they found,

"appeared to provide a form of parallel 'containment' for the coach, in helping her/him to process a client's anxieties and emotions"( Day et al., 2008, p.215).

But what I had experienced and came to use, was more than parallel 'containment'.

During my coaching work, both in life coaching and in executive coaching, I had noticed that at certain points during the coaching process, similar 'stucknesses' affected me and my coachees. These perceptions were validated during peer meetings where other coaches with whom I discussed this idea, reported having had similar experiences. (Appendix 4.1)

During supervision, when I brought a case where the processes being facilitated seemed to be hopelessly bogged down, I was encouraged to look for parallel experiences within myself – in my work or life, and work out ways to facilitate my own processes. It appeared that as soon as I was 'unstuck' in my own personal and professional experience, growth was renewed, and the coachee started to move forward in her/his own processes as well. An example from work in S-School using Parallel cycles is the following (Kreindler & Beskin, 2008 and Appendix 4.1, b)

*"For quite a while I was stuck, experiencing a lack of progress in coaching the school's leading management team translate the school's vision into concrete working plans within the areas of their responsibility. No advance in the definition of mile stones or in the identification of resources to reach them was achieved. After several dissatisfying coaching meetings with the school's leading management team, the process seemed "stuck" and I decided to use the parallel cycle principle.*

*I accepted responsibility for what I believed was my own lack of clarity and was determined to harmonize it. I used an organizing table to plan and review my own mile stones for the coaching process for both the team work and the individuals that made up that leading management team. When I felt myself clear, I "reframed" the table "Assessment and reflection Table" and showed the members of the team how I used it in planning my coaching sessions.*

*The school principal (EB) explained to himself and later to the team  
"This is not an assignment to be done, it is a working tool  
designed to help us in our every day work, and to self-  
monitor and adjust our work once in a while."  
Within two weeks the whole team was using the tables, plans were set and they  
were on their way, breakthrough was immediate!"*

Some managers decided to use the tool for other needs at work as well. In this, I could see the transfer of knowledge and skills into the organization, as discussed before (5.3.2.2), mentioned as strong evidence of coaching success.

The work I did during supervision influenced the work I was doing with my coachees, and after a while, I started using it routinely through reflection on my work, and using it with my coachees as they related to their deputies in a session.

The third example of transfer given (5.3.2) is an example of the effectiveness of the parallel cycles with a coachee. In the example JS, the pedagogical manager had found her deputies not functioning as managers of their teams of teachers. She managed to solve the problem by working on her own role as manageress. "Parallel cycles" became part of the language I used in schools I worked in.

For instance, an example given to the Delphi Expert Group (Appendix 4.2 a) -

*I have heard a manager, at a coaching session say to her colleagues –  
"We are acting in 'parallel cycle' to that of our teachers".  
She explained that they spoke about their teachers, saying they were  
incapable of doing things, in the same way those teachers spoke about their  
students... This same manager realized then, that the management team  
should change the way in which problems were being conceptualized by  
management if they wanted teacher's 'stuckness' in the classroom to be  
resolved.*

Presenting these finding to the Delphi Expert Group had surprising results: most participants felt that it was *"an unhelpful concept"* I was told-

*"Parallel gives the meaning of running alongside each other. Not  
necessarily interfacing"* (Appendix 4.1 c)

which they thought important in coach-coachee work. Nevertheless, one participant said he had

*"found real value in exploring this in greater depth"* (Appendix 4.1 c)

The parallel cycle's concept did not reach consensus during the Delphi process.

Despite that, "case studies", according to Cohen, Manion & Morrison (2011, p.292),"are a step to action...their insights may be directly interpreted and put to use"



which I did and found evidence of good use in my own work. In addition, I found references to similar concepts in the literature. The concept belongs to supervision relationships where a therapist draws on his own experience in order to be better prepared to facilitate patient development. Searles (1955) was the first to describe parallel processes in the field of psychology, between supervisor and therapist, which reflected the relations between the therapist and patient. Doehrman (1976) spoke about the importance of examining these parallel processes. Only when resolving the parallel process, he found, did the client progress. The added value that the parallel cycle concept brings to the coaching practice is that it provides a way to resolve the coachee's 'stuckness' by deliberately looking for and finding a parallel issue concerning the coach her/himself, and solving it.

As coaching becomes more of a profession and supervision becomes part of its professional culture, the concept of "parallel cycles" as a description of the two facilitative cycles of mutual development experienced by coach and coachee may become more useful.

#### b. Coaching relationships

Coach-coachee relationships during the process were not deliberately focused on, as some suggest (Passmore & Gibbs, 2007; Duckworth & de Haan, 2009). By focused on, I mean spoken about as part of coaching, or defining the 'coach- coachee relationship' as a formal process to improve and strengthen. One participant of the Delphi expert group suggested when asked whether there were missing processes in the presented model -

*"You may want to consider the process of relationship review somewhere in the middle." (Appendix 4.1 a)*

This suggestion did not seem an option at the time. Now, considering the findings presented by Duckworth & De Haan (2009) such an orientation might have been valuable, and the collection of such data could have illuminated this process.

Duckworth & De Haan (2009) used quantitative data to confirm what qualitative data had shown before. A high and significant correlation was found between the quality of the relationship according to perceptions of the coachee, and the quality of coaching outcomes.

Even though I did not focus my work on coach- coachee relations, and therefore, did not collect data concerning it, I became aware that relationships between myself and the clients I coached became close over time. I felt trust and openness between myself and the coachees grow, mainly by the three participants I coached in person (EB, JS & MD). This trust and openness created was reciprocal, an outcome of the continuous intensive and close relations over time. It was based on early success, proving that it was worth investing time and resources in coaching, even in a very busy workplace. The following example from the research diary shows trust and openness. It relates to sharing information with me of an unpleasant event in S-School-

*"JS spoke of the Friday incident. She realized I knew about it, and said that this fact showed that there was a process going on... She wasn't sure I would be told, and was happy I had been, as it was an indication, according to her, that things were being treated and not covered- up or ignored". (Research diary, Appendix 10, p.23).*

The relationship found must have been one of the main components contributing to school success as described.

Relating to this question, the triangulation between research tools (as presented to the Delphi Expert Group) helped me show a strong internal validity of the findings. Cross referencing the study findings with other studies from various cultures using other tools shows a strong external validity enabling me to reach conclusions and offer recommendations

#### 5.3.3.2 The KCM model

Q42- In what ways can the KCM model improve?

In the beginning of my discussion (part 5.1), I presenting the original coaching (KCM1) model as it was conceptualized prior to the S-School intervention. That original model evolved into its final form as evidence collected about the coaching process was analyzed (qualitative and quantitative), as presented throughout this discussion.

In this final part of the discussion, I present the current version of the model, the ways in which it was improved through this study and what may be done to further improve it.

To help validate this emerging reconfiguration of the model I used, as the fourth phase of the research, the advice and ideas of a Delphi Expert Group from the field of organizational coaching and of school coaching and development. The final version which will hereby be presented was validated through the Delphi process, in which leading experts in the field reached consensus around the model's components and configuration.

KCM2 coaching model is a framework meant to assist school teams in their progress towards creating higher levels of performance, striving towards performances of excellence.

KCM2 enables the coachees (in person or as part of a group) to identify their needs, to plan and create the change they want in their own behaviors, in order to achieve the change they want to create in the school they work in.

Coaching using the KCM2 is both the means by which processes are facilitated and is also "the end objective" of the process, since coaching skills and values are expected to be internalized. Coaching is used as a tool with which coaching values are infused within the school culture, expanding throughout it. They are then internalized by all members of the learning community. The process starts with the management team that is coached. Successes encourage them to use coaching skills in their work with their department colleagues, students and parents. Then, these members of the learning community start using coaching skills and values with students and parents they come in contact with. Gradually, the school environment is transformed into a coaching culture.

KCM2 is a dynamic model, it is a frame of work, but the actual work is always tailored for each and every school.

Promoting excellence in school is done using six lenses which help plan, monitor and evaluate the coaching process- measuring three school quality variables, the school learning outcomes and tracking three overall core school processes

The coaching focus is therefore both result oriented but at the same time, focused on defined processes as well. Each of these processes add to the feasibility of the results, while being an important goal in itself, to be constantly worked and improved on.

Three school quality variables measured:

- Pedagogical learning outcomes- PLOs
- Socio-cultural learning outcomes- SCLOs
- Administrative learning outcomes- ALOs

The three overall core school processes:

The formation in my mind of the processes to be enhanced during work at school turned out to be a long process in itself. I started off working in S-School with the DISC, newly created, without the definitions of the processes as will be presented. (This was related to as one of the research difficulties in part 3.9.2).

The 'Vision' process was obvious and so was the 'Managing organizational learning' process. Both leadership vision and organizational learning are considered to be key issues in school improvement (Kurland et al., 2010).

What helped me define the missing needed process were both the ideas of Mezirow (2000) on learning and those of Clutterbuck & Megginson's (2006) about the coaching culture.

Mezirow (2000) spoke of two important types of learning;

Instrumental-focused on improving performance; and

Communicative- understanding what others mean by their ways of communicating.

These two types differ in purpose, criteria of rationality and modes of validation.

These two types of learning became the basis of the two learning processes (II and III):

**Organizational learning** - focused on creating improved organizational performance (instrumental).

**Personal- professional learning** –focused on creating a coaching culture (communicative).

The communicative learning was compatible with what I had learnt from the work of Clutterbuck & Megginson (2006) in relation to the organizational coaching culture. Clutterbuck & Megginson (2006) stressed, that a clear link was found through

research results, between employee communication and their performance. Therefore, the enhancement of the Personal- professional learning process would help achieve higher levels of performance, the goal focused on using KCM.

Mesirow (2000) explained that the separation into two learning types as mentioned is somewhat artificial and therefore difficult, because most learning situations involve elements of both types. This created a similar situation concerning both learning processes. Nevertheless, they were presented this way honoring "the importance of individual and organizational learning for school change" (Wong & Nicotera, 2007, p.183) and school improvement.

The final definitions of the school's overall processes are hereinafter presented. These definitions were discussed and a consensus was reached with the Delphi Expert Group. These processes were ones which the Delphi group participants identified as processes that

*"My own coaching framework or other coaching frameworks I am familiar with track similar processes" (Appendix 4.1) -*

### **I. The internalization of the school's learning community's common vision.**

The process begins with a collaborative and close examination of the school vision, updating it as needed. Having reached a clear and informed consensus by the entire school's learning community: management, teachers, students and community, a process of putting the school vision into operation and the design of goals and milestones to be reached on the way to actualizing the school's common vision begins. The written vision becomes the starting point for all planned school activities, from lesson plans, to the design of curricula and the evaluation of learning outcomes, as well as informal education activities.

### **II. The management of organizational learning**

The systematic creation of organizational knowledge, its management, its dissemination and celebration contribute to the shaping of the school's learning community into a community of learners. All members of the school's learning community are focused on learning together, constructing new knowledge and managing it, identifying successes, sharing and celebrating them.

These successes become internal benchmarks of quality, guiding school best practice.

### **III. The management of personal and professional learning, thus forming a school coaching culture.**

All school members deepen their personal and professional knowledge, gradually discovering their strengths by adopting reflective skills and developing a critical professional praxis. Students and faculty become both learners and teachers and assume full responsibility for the learning processes.

There was some degree of misunderstanding or disagreement concerning the declaration of KCM's coaching actively as working towards the improvement of these specific processes. I was told by one of the Delphi participants-

*"Coaching is all about helping the client improve their processes of reflection" (Appendix 4.1)*

or that the process which should be dealt with was

*"Whichever the client chooses" (Appendix 4.1)*

Using the progress of the three processes as part of the evaluation was not easily accepted by the experts of the Delphi Expert Group. Consensus amongst the Delphi Expert Group was achieved only after I explained that - (Appendix 4.2 b)

*"These processes are very general and are tailored for each school according to their vision, bringing their own meanings into the processes, and accordingly, planning specific milestones to monitor their progress along these processes towards their defined goal"*

Tracking these processes contributed to the evaluation of coaching in the field, in addition, it informed and supported the coaching process itself.

However, from the findings it seemed that using the DISC questionnaire may not have been sensitive enough to show the degree of change and progress achieved. The qualitative data was better suited for this task. Yin (2006) noted that questionnaires are less effective in evaluating or documenting processes and therefore in future I plan to collect more qualitative data to document the development of processes during the stages of the KCM intervention.

KCM2 intervention is conducted, moving through six developmental stages, a process which is negotiated with the client prior to the onset of the coaching intervention.

The KCM2 six developmental stages

**1. The diagnostic stage** – During this stage, meetings were held with the school's head teacher and the leading school management team in order to learn and understand needs and strengths, clarify the school management's educational identity, its vision and its perceived mission. In addition, the school's culture and various learning environments and the school resources were evaluated. This stage often includes the re-articulation of the school's vision.

When the school vision is satisfactorily defined, a diagnostic test is conducted using the DISC 1+2 questionnaires which are completed by the members of the school's learning community, teachers and students (parents and members of the community as well when needed). The data collected with the help of the DISC 1+2 questionnaires as well as additional school information (grades, behavior evaluations, attendance etc.) are used to construct a realistic rendering of the school's organizational culture, the structure and relative power of the school's field forces and the major processes at work in the field. These findings inform the collaborative design (by coaching team and school leading management team) of the coaching program to be implemented.

**2. Mile stones** - The first milestone of the coaching program is a Contract that indicates exactly what improvements are wanted and expected and what resources need to be mobilized in order to start the coaching program. The contract would spell out how the coaching is to be carried out, who the coachees are to be, the program's additional mile stones and the duration of the coaching program. The contract translates into action the milestones of the program. A collaborative action plan emerges and slowly spreads through the learning community gaining participants and facilitating engagement. Success criteria for the process are defined and the celebration of success is planned. Small examples of successes according to the specified criteria are collected throughout the process in order to demonstrate feasibility, and are celebrated.

**3. Coaching sessions** – During this stage the programmed coaching sessions with the head teacher and/or other members of the school management team are carried out. Personal and/or group coaching takes place in accordance with the negotiated contract. During the coaching sessions the three KCM processes are tracked, managed and amplified.

4. **Fine tuning** – During this stage the coaching outcomes and milestones reached are co-operatively evaluated by the leading school management team and by the coaching team. The coaching plan of action is focused and re-focused as needed and future milestones are re-calibrated. Successes are identified, amplified and celebrated. Organizational knowledge is being produced, collected and managed.
5. **More Coaching** – During this stage the coaching is primarily directed at the amplification of the three KCM processes, the creation and management of organizational knowledge and the collaborative setting of good practice benchmarks.
6. **Summary and maintenance** – This stage includes a second diagnostic test (DISC 1+2) of the school's organizational culture. Data sources that were used at the beginning of the coaching process (grades, behavior evaluations, attendance etc.) are examined again, in order to test the effect of the interventions by comparing data values collected at the beginning of the coaching process with data values collected at the end of the coaching process, to measure change. The evidence of the school management team's development is closely examined, objectives are affirmed, at times adjusted and new objectives are set. The examination of this comparative data allows the drawing of conclusions about the coaching process, the school's progress toward the actualization of its vision and the planning of ways to maintain and strengthen the achievements realized.

The KCM six stages of work were found to be similar to other coaching frameworks by Delphi group participants. However, one professional commented as follows-

*"It is a problem for me calling all this coaching. I would call your work organizational development". (Appendix 4.1 c).*

The KCM is a model that predicts that if the coaching intervention facilitates an increase in certain coaching culture values, personal and organizational growth will be stimulated and outcomes will improve in quality and quantity. That is to say that KCM does have a wide range organizational focus for improvement. Nevertheless, just as Neufeld & Roper (2003) explained,

*"the term, 'coaching' includes activities related to developing the organizational capacity of whole schools"*  
(Neufeld & Roper, 2003, p.5).



Findings in this study showed that participants were aware of their growth and were therefore able to manage and self regulate these processes and therefore their personal and organizational development.

The overall frame of work was discussed and agreed upon with the management team and tailored as a collaborate effort. Work took place with the team using group coaching and with the principal and both his deputies in person as well (see 3.9.1).

This was chosen as best suited to the needs of the school despite the known difficulty of influencing the whole school when working with the management team only. Kets de Vries (2008) spoke about the importance of coaching on micro and macro levels for achieving success in a change process. By micro he referred to personal professional growth contributing to the individual and by macro, to transforming organizational culture in a systematic orientation. By ignoring either, he added, the process may fail. This I found very sensible information, which I took into account when deciding on the overall work. Nevertheless,

"organizations need to be different on the macro before they can be different on the micro"(Carnahan et al., 2004, p.40).

Working on the management level was a decision based on Carnahan's(2004) work, and focused on the macro change from the beginning. Working first with seniors so they become "champions of change", (Kets de Vries, 2008, p.22), and coaching can then

"cascade throughout the organization and become part of the organization's fabric"(Kets de Vries, 2008, p.22).

The coaching processes which took place during the intervention did cascade throughout the school, permeated educational leadership skills throughout the entire learning community (Kreindler, 2011), helping strengthen teacher management. Teacher management means, according to Southworth (2009), that teachers lead processes within their class rooms and outside of classes, contributing to the development of learning processes and influencing their peers and students to improve their work. Evidence for improved work at the S-School was found abundantly in both qualitative and quantitative data.

During the Delphi process the participating experts observed-

*"One year is too short for definite outcome improvements. How is this attributed to the coaching? Have you got evidence of this?" (Appendix 4.1 c)*

Change processes in general and specifically in schools, are known to occur over several years (Hall & Hord, 2006; Brown et al., 2006). Bearing this in mind, goals were determined accordingly and mostly achieved (see 5.2, 5.3). In addition, as part of the sixth intervention stage, a plan for sustaining achievements and for further specific improvements was put in place in order to maintain the coaching skills and culture created. As part of it, the school decided on continuing with a monthly coaching meeting with the principle.

Conducting the intervention over one year only was based on two reasons, the first technical, the second a professional choice. First, the educational frameworks in Israel and in other countries, in contrast to business frameworks, are under strict budgetary pressure and must cope with economical limitations (Neufeld & Roper, 2003; Ofek & Ofek, 2003). Sadly, staff professional development is one point in which this is very evident. Frequent changes of government in Israel influence changes in the priorities of the national and local education system thus creating an unstable framework for long term planning. These technical aspects must not be over looked and must be taken into account when planning an intervention. One year is in this aspect, a relevant period of time.

The second reason for conducting the intervention over one year only, was based on a professional choice, not a reaction to given circumstances.

As an outsider expert coach, who soon became an 'insider-outsider' one (Allen et al, 2008), I felt the importance of focusing work towards making myself unnecessary as soon as possible. Coaches I believe, should "work themselves out of a job" (Allen et al., 2008, p.134), letting internal forces take full charge of the school improvement cycle as soon as possible. (By saying so, I am not inferring that the coach is in charge of any of school work in any time while coaching, even though a significant coach becomes an important figure in school for a while.) The coach, from the point of view of humanistic philosophy, helps the coachees believe in their own strength, their professional knowledge and their experience, which is the most relevant for their school improvement.

By the end of the year, after ending the period of work with the external coach, the school managers should be encouraged to proceed with the process of improvement mainly on their own.

The KCM frame of work as presented, using triangulation between research tools (as were presented to the Delphi Expert Group participants) show a strong internal validity of the findings. Cross referencing the study findings with other studies from various cultures using other tools shows a strong external validity as well, enabling me to reach conclusions and offer recommendations.

In this chapter I addressed all the hypotheses and research questions. I did my best to organize the knowledge obtained during and through this study and present it in detail, using examples from the findings and showing connections to professional literature and to various previous studies. The following part presents the conclusions reached and the relevant recommendations as well.

## 5.4 Conclusions and Recommendations

This part contains conclusions reached (5.4.1), based on the findings of the study and recommendations (5.4.2) based on the conclusions of the study. Drawing conclusions and making recommendations was made possible due to the high internal and external validity of the findings.

The conclusions and recommendations hereby presented, may interest four groups of potential readers -

### Internal groups

- (1) Managers of education networks, school principals and management teams.
- (2) Educational authorities and decision makers.

### External groups

- (3) Researchers and scholars

- (4) Coaches, mentors, personal and professional development coordinators.

#### 5.4.1 Conclusions

Coaching has much in common with learning and teaching. Coaching has much in common with managing as well. School is therefore a natural place in which to carry out a coaching intervention.

A 'whole school coaching intervention' was developed using the KCM model to create change in a whole school. Chosen aspects were planned to be upgraded and significantly improved throughout the school.

In this study, evidence was found to verify improved levels of school performance by the end of the KCM intervention:

Learning outcomes of higher quality were measured and described. In addition, significant improvements in overall school core processes were evident. One of the core processes focused on during the intervention was the creation and enhancement of a coaching culture in school. Coaching was therefore an end as well as a means for this intervention.

The conclusions hereby presented consist of the main ideas which crystallized in the field and from the analysis of findings.

1. Whole school coaching interventions following the Katom Coaching Model bring about transformative changes.

Significant improvements in school work were measured and many members of the leading team reported meaningful changes in their personal and professional praxis as well. Teachers reported similar changes indicating a development of teacher leadership throughout the school. The adoption of change was planned and was a personal and professional choice aligned with the developing school culture which reflected the school common vision.

2. Whole school coaching interventions following the Katom Coaching Model are effective in improving the school's learning community's pedagogical, socio-cultural and administrative learning outcomes.

All learning outcomes are important and affect each other. By improving one type of learning outcome, the two others are improved.

3. Whole school coaching interventions following the Katom Coaching Model are effective in improving the following core school processes:

- I. The adoption and integration of the school's vision into school praxis
- II. The management of organizational learning and knowledge formation,
- III. The management of personal and professional learning, thus forming a school coaching culture.

4. Focusing on processes and results

- The three core overall processes, amplified by the coaching process facilitated better quality learning outcomes.
- The work of the school learning community towards achieving higher quality learning outcomes amplified the three core school processes.

The model's focus on both processes and results helps create a spiral- like dynamic that amplifies core school processes to produce yet higher quality learning outcomes and so on.

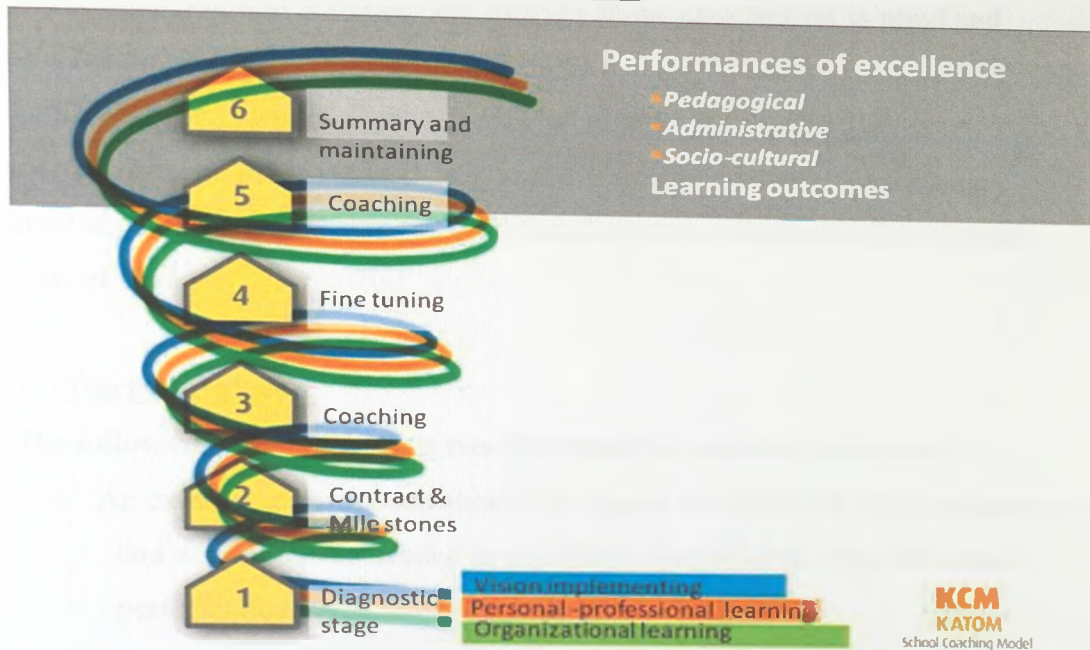
Summing up these conclusions schematically

During the KCM coaching intervention I realized that the work was not linear as illustrated in my early schema (Fig 2). The coaching produced a rapidly, exponentially evolving and growing effect.

I found that the three core school processes influenced one another and added to the intensive momentum of school work and to the quality of school learning outcomes.

The new following schema for the KCM expresses these ideas.

Fig 4 KCM2 Model



5. The coaching methodology should be a mixed methodology. Using mixed methods to evidence the effect of coaching is best suited for documenting and evaluating coaching interventions and for research on coaching. Induction and deduction are the two faces of meaning- making of the coaching coin.

6. The DISC questionnaire proved to be a useful tool for planning the intervention and for measuring its effect.

7. The transfer of skills and knowledge through coaching.

- The coaching process facilitated the transfer of skills and knowledge between experiential fields, from one learning environment to another, helping create a coaching culture in school.
- Transfer of skills and knowledge obtained through coaching sessions was found to be significant evidence of successful coaching.

8. Professional supervision and /or peer supervision are essential for coaching success. Reciprocal feedback between coach and coachee is just as important.

### 5.4.2 Recommendations

The recommendations are made keeping the above conclusions in mind and are presented in the same order.

The first two recommendations are relevant mainly to the education professionals, the internal group of readers. The next recommendations are aimed at professional coaches, and are therefore more relevant to the external group of readers.

#### 1. The frame of work

The following frame of work is recommended for coaching in schools:

- An external expert coach should be chosen to work with the management team and with others as needed in a collaborative effort to upgrade school performance.
- The coaching work demands that the coach act as an "external-internal" part of the team. The term "external" suggest an outside objective observer and coordinator. The term "internal" suggest close involvement with the coachees during the process.
- The coach should have knowledge and experience with school processes of all kinds: teaching, professional development and management, in order that his/her work become meaningful to the school team. Most particularly, the coach should have coaching knowledge and skills and, above all, should be true to the values essential for the creation of a coaching culture.
- The intervention should last for at least one school year.
- The end result of this intervention should be the school's ability to continue growing, using the school's own strengths and resources, both personal and general. The plan of the coaching intervention should enable the community of learners in the school to maintain the momentum of achievement, the organizational knowledge management and the school's coaching culture.

2. All learning outcomes; pedagogical, socio-cultural and administrative, should focus on clearly defined and specific improvement targets. Administrative changes are relatively easy to produce- new regulations for instance. These changes are highly visible and relatively quick to show effect. This creates a sense of "winds

of change" in the school (the organization). It encourages other members to join in and creates the basis for further improvements. Further improvements in school could be pedagogical and /or socio-cultural learning outcomes.

### 3. Coaching oriented results and processes

Coaching has been known to emphasize the achievement of results specifically defined as coaching goals. The KCM model emphasizes core process coaching. The core school processes developed and focused on during the coaching intervention should be chosen to facilitate the achievement of the coaching goals and their maintenance by the school coaching culture. I recommend that the coaching of the management team be process oriented.

### 4. Measuring and documenting the coaching

Most results are best monitored with quantitative or measuring tools. Processes are usually better monitored by qualitative-descriptive tools.

- Documenting and evaluating progress during the coaching intervention enables the coach to give feedback supported by field evidence. Documenting the coaching can be achieved by using a variety of tools both quantitative and qualitative measuring tools.
- Measuring has significant effects while coaching in schools (organizations). It enhances collaboration and organizational learning firstly by helping the whole team focus on expected targets during the planning phase and then by joining efforts towards achieving them. The coaching process is amplified when targets are achieved in a clear and visible way and the stage is set for the learning community's celebration of success.  
All variables should be measured, both those which seem satisfying and those which are to be improved.
- Documenting the overall processes enhanced is important as well. Questionnaires may not be sensitive enough during the first steps of the coaching process. Therefore, other methods of documenting the onset of change are recommended: narratives, longitudinal interviews and observations.



Both recommendations, 3 and 4, are relevant, not only for schools but for other organizations as well. Furthermore, I would dare say, these ideas are relevant to coaching processes in whatever context chosen.

5. Using a questionnaire completed by all school members; teaching staff, students and parents as well at the beginning of a coaching intervention, produces valid and interesting information about the starting point. The questions should cover topics which clearly demonstrate to the school community what main points of interest and importance would be focused on during the intervention and forms a new common language accordingly. The results of the survey create expectations and commitment to the work as declared. Using the same questionnaire again at the end of the intervention, helps evaluate the achievements and points out successes to be celebrated.

6. Deliberately encouraging the transfer of coaching skills and knowledge learned, from one experiential environment to another within the school (organization), or to the community, is recommended as part of coaching. It may be done by systematically looking for and identifying incidents of transfer as part of the coaching. This is a way of enhancing situations in which transfer occurs. Doing so is actively helpful to the implementation of change throughout (school) the organization.

#### 7. Feedback and Supervision as help for the coach

- Coaching should emphasize collaborative meaning-making with coachees all along the coaching process. Reciprocal feedback is both practical and serves as a model for openness to coachees, one of the main values of the desired coaching culture.
- Professional supervision and /or peer supervision help identify and separate personal perceptions from those of the clients.
- Parallel cycles  
two parallel cycles of development are found to oscillate in harmony:
  - ✓ The developmental cycle of the coach
  - ✓ The developmental cycle of the coachee.

When developmental processes in the client are "stuck", developmental processes in the coach are symmetrically "stuck". Restoring the developmental cycle of the coach restores the harmonic movement of the client's developmental cycle.

Using this method of modeling inner change by the coach is an effective way of helping create change in the coachee. It is an authentic example for the coachee as it requires the coach to take personal responsibility for her/his own need for change. This restorative work is usually done during supervision. Using the parallel cycle concept is effective during supervision and just as useful for the adjustment of the work of a (school) manager and his/her deputies. It is also useful when interpreting teacher's difficulties in their work with their students.

A true coaching culture would guide the teacher who finds her/himself "stuck" to inquire what s/he might do differently in order to "unstuck" her/himself without focusing on the student's weaknesses.

Having presented the knowledge created during this study, I move onto describing the dissemination of it. This is the subject related to in the next chapter.

## Chapter 6 – Dissemination: Making the change become visible

The wide and intensive dissemination of the results of this research and of the work using Katom coaching model may help the change described throughout the previous chapters become evident.

This chapter is focused on presenting the dissemination efforts which have already been made and on further plans on how "to disseminate research to a wide variety of audiences" (Hughes, 2003, p.4).

The educational team in the school which took part in the research, as well as teams in other schools, who went through the Katom coaching intervention, have definitely identified the strengths and recognized the better learning outcomes achieved.

Nevertheless, that alone will not be enough in order to create change on the scale desired. In order to achieve the fullest effect possible- an upgraded, excellent schooling system for Israeli youth, the knowledge must be disseminated and become known.

"Making research available and useful" (Blaxter, 2003, p.93) is important and should be done in a way, that the "transformative potential is available" (Davies, 2003, p.117) to diverse readers, across disciplines, and both to practitioners and readers from the academia.

The first section, 6.1 will explain which were the audiences targeted as suitable for the dissemination. Then, in 6.2 the choice of methods will be discussed. Section 6.3 will discuss reflectively the dissemination that has taken place and the further dissemination planned. Section 6.4 will present ethical issues concerning dissemination, followed by the summary.

### 6.1 Targeted audience for my dissemination

Dissemination is the turning point between producing knowledge and bringing it into use. "Dissemination is an active concept" (Snowsill cited in Saywell & Cotton, 1999, p.5), one in which the information flows from the source and is targeted at the intended audience.

Which is the target audience suitable and desired in this case, and why is that so?

I identified four groups of audiences to disseminate to, and these were divided into two major types- (a) internal and (b) external groups.

a. Internal groups

(1) Managers of education networks, School principles and management teams.

(2) Educational authorities and decision makers.

The priority audience for research results according to Blaxter (2003), should be practitioners, rather than international academics. These are the members of the 'internal groups'. Despite much research evidence available, only a relatively small part is disseminated and becomes part of practice (Waddel, 2002). While dealing with work in the field of education, the knowledge should reach those who have a direct effect on the work done in schools. Reaching the field transfers the knowledge from producer to user (love, 1985, cited in Hughes, 2003) or creates the 'movement' and adoption of knowledge between places and specific circumstances (Hagreaves, 1999, cited in Hughes, 2003).

By reaching people belonging to these two groups, the new knowledge may become of use. Using the knowledge may help my research goal, as mentioned in the introduction:

***Understanding ways in which the coaching model can improve school performance.***

The second type of audience-

b. External groups

(3) New researchers, academic audience.

(4) Peer professionals- coaches, mentors, development coordinators.

Having these groups of audiences up to date and aware of the achievements, may help provide, in addition to the goal mentioned, an answer to the two remaining goals I stated in the introduction (first chapter) :

***Adding to the establishment of the coaching profession, specifically in education, in the academic world***

mainly by group (3), and

***Adding to professional skills in the praxis of coaching***

which is a personal goal for me but may suit the audience of group (4) too.

"Dissemination is one instrument in achieving goals - a means not an end". (Saywell & Cotton, 1999, p.29).

By choosing these targeted audiences for my dissertation, I have actively proceeded towards fulfilling my research goals.

## 6.2 Choosing methods for disseminating

The main point in disseminating is achieving awareness. People should be aware of activity carried out and outcomes attained (Harmsworth & Turpin, 2000).

Nevertheless, what is disseminated is not less important than how it is done. When considering the how, it is difficult to separate the impact of the method, the dissemination pathway, from the importance of the findings themselves (Hughes, 2003; Saywell & Cotton, 1999).

The following points are the ones I took into account while planning my dissemination strategy-

1. One single channel for disseminating rarely meets all audiences and it is therefore necessary to use a variety of media, multiple channels, in order to maximize the exposure of the information (Saywell & Cotton, 1999; Kirst, 2000). Policymakers and researchers, for instance, need a different attitude of dissemination as they understand and use "different languages", and react to different professional rewards (Kirst, 2000, p. 379). Policymakers want a form which is very efficient and presents practical information, whereas researchers may value in-depth descriptions and many examples.
2. The tendency of qualitative research to small scale researches in which small samples are used from which general conclusions are drawn makes the qualitative evidence less convincing in some people's eyes. These refer to qualitative information as 'second rate' evidence (Hughes, 2003). Many people holding such opinions do so, due to little knowledge about qualitative research. They understand disseminating of findings, as summaries with statistics (Mann, 2003). The most appropriate solution for reaching and influencing these people according to Hughes (2003), is to present quantitative information with in-depth case studies.

3. Another characteristic phenomena, is that concepts and theoretical perspectives "creep into the ... process" (Kirst, 2000, p.380) and shape the way people think about educational issues. The 'creeping' way of adapting new information, means that it takes several reports in order to capture attention.

Taking these points into account means it is necessary to tailor the information for the four audience groups in a way they

"Might best use it; at the time they need it, in a format they can use and with findings that are comprehensible and adaptable to local circumstances" (Saywell & Cotton, 1999, p. 43).

### 6.3 Dissemination used and planed

"Unless dissemination is built in from the beginning, it does not happen" (Harmsworth, & Turpin, 2000, p.10).

Bearing this, and the information presented in the last section in mind, I have planned my dissemination as an evolving and constantly developing process, so that the research will become one of value and influence.

I decided to write different articles for the different types of audience, both in Hebrew and in English, to open a web-site in Hebrew (later on in English as well) and to send newsletters from it. I planned on making presentations in conferences both for coaches and for educators, and to write a book in Hebrew.

The following table presents the plan according to time, audience and method of dissemination. The '✓' on white background, represents parts of the plan which have already been carried out. The '✓' on grey background represents parts of the plan which is yet to be done. The + represents a dissemination method used, which was not part of the original plan.

**Table 30** Dissemination plan

| When & How Disseminate?<br><br>Audience Groups                             | While conducting the research and writing the thesis |                      |                       | After completing the writing |                |                 |
|--|--|----------------------|-----------------------|------------------------------|----------------|-----------------|
|  | Article Hebrew                                       | A web site In Hebrew | Newsletters In Hebrew | Workshop at a Conference     | Book In Hebrew | Article English |
| (1) Managers of education networks, School principles and management teams | ✓  | ✓                    | ✓                     | ✓                            | ✓              |                 |
| (2) Educational authorities and decision makers                            | ✓  | ✓                    | ✓                     | ✓                            | ✓              |                 |
| (3) New researchers, academic audience                                     |  |                      |                       | ✓                            |                | ✓               |
| (4) Peer professionals-coaches, mentors, development coordinators          | +  |                      |                       | ✓                            |                | ✓               |

As presented in the table, and will hereby be described in detail, my dissemination has been going according to plan so far. In addition, I have taken advantage of opportunities which occurred, not according to the original plan. This made it possible to carry some parts earlier than had been intended. Nevertheless, there is still much to be done!

A first article in Hebrew was written in the early stages of work. It was not targeted, as planned, to education leaders –principals or decision makers. It was published after I was personally invited to write in a professional Israeli coaching e-journal, which devoted an issue to education in Israel.(Kreindler & Beskin, 2006).Another dissemination strategy which followed, was presenting a poster at the European Mentoring and Coaching Council (EMCC) conference in Koln, November 2006 (see Appendix 7). I attended the conference in an early stage of my work on this research and therefore presented findings from the M.Ed. thesis, which became a basis for the

current research. The editor of the well established European coaching journal "*Coaching at work*" who attended the conference, wrote a short column about the research presented in the poster following an interview with me (Appendix 8). The same editor asked me to write a 300 word piece about coaching in Israel, mentioning The Katom work, for the journal and this was published (Kreindler & Beskin, 2007). Another interesting experience, not at all part of the original disseminating plan at that stage, was a workshop conducted at the EMCC conference in Prague (December, 2008). This workshop, presented The Katom model and findings from the research to European coaching colleagues. They were interested in the development of coaching practice in education (Kreindler & Beskin, 2008).

During the workshop I had intended to collect professionals' comments about the work and research results presented (as mentioned in 3.5.4) an effort which had not succeed. As a result I decided to conduct a Delphi group instead. Having done so, I consider the Delphi process (see appendix 4) as a dissemination effort as well. Sending papers on my work to some of the most influential professionals worldwide, and corresponding with them must have helped my 'making the change visible' (Denzin, 2000, cited in Voithofer, 2005, p.3) efforts.

One other source of satisfactory dissemination, this time not actively produced by myself but focused on the right audience, was press articles describing the results of my successful work in schools. Several short articles were published in the Israeli newspapers during the last year, which I used as part of my advertizing efforts. I have recently, towards the end of the writing process, increased my efforts, returning to my original plan of dissemination. I have opened a web site in Hebrew, offering Israeli educators information about 'the winning combination of coaching and education ([www.katomcoaching.co.il](http://www.katomcoaching.co.il) ). The site includes both theoretical and practical information about coaching and specifically coaching in schools. It presents all the articles I have published so far and articles written about my work by others. Most important, it offers readers a registration for my e-letters, in which I share my knowledge and ideas about coaching in school, based on my work and research. The importance of these letters is to give an answer to the "creeping" nature of new concepts slowly infusing into systems.



I have published an article in Hebrew, in the high school teacher organization journal called "Coaching for high levels of performance in school-A doctorate research" (Beskin, 2010a). This article was directed to my potential clients for work as a school coach, but even more, to help my ideas spread and influence various schools for the benefit of the Israeli education system. Another article in Hebrew was published in the Israeli coaching e-journal, about the "Parallel cycles in coaching" (Beskin, 2010b), a concept which I had earlier learnt, from Kreindler (Kreindler & Beskin, 2008), adopted and put into use. This article is professional-oriented and is meant to share ideas with my colleagues, the Israeli coaching community and to position myself professionally amongst them.

My plans for continuing my dissemination, focusing on the missing aspects of the original plan, are to write academically for coaches and for researchers in English. I am planning to write a book for Israeli educators, for which my e-letters may serve as a good base from which to start.

I plan to present my research findings at the AREA (American Educational Research Association) conference which is one of the most important conferences in the world in the field of education. This is the best place to reach out to a mass of research experts in education from around the world, to share my experience and my insights and to gain awareness and acceptance for my findings and ideas.

## 6.4 Ethical points concerning dissemination

The dissemination is an ethical and political process according to Hughes (2003) taking into account whose voices are heard, what is chosen to be emphasized and how the knowledge is presented. "While truth is good, respect for human dignity is better" said Bulmer (2001, cited in Dench, Iphofen & Hues, 2004, p.4) as a conception that should lead to decisions concerning publication. Research, and the dissemination as a part of it, should benefit society and at the same time minimize social harm (Dench, Iphofen & Hues, 2004). These double and at times contradicting demands, call for reporting in a responsible manner, disseminating widely, making information available in suitable formats, even if unpalatable. Disseminating with integrity and objectivity, reporting things as faithfully as possible, regardless of the fact that the

findings and publication could affect future work (Denscombe, 2002). Seeing to strict accuracy, avoiding falsification, fabrication or misinterpretation of data. (Dench, Iphofen & Hues, 2004).

Odena (2004) spoke of the possibility to disseminate different versions of information according to audience. In the dissemination strategy described it was planned to use the information in various types of presentation. The same information in two articles or two conferences, presenting several versions in different papers .Odena (2004) said that if openly acknowledged, and done to suit the audience, it should be possible, as a means of taking into account the different audiences' professional practice and changing emphasis.

By reaching the right people, and offering them the right information in the most suitable ways, I hope to manage to create the change planned.

The researcher and the academic world is seen as having a role of service to the world (Huberman cited in Hughes, 2003). This idea drove me to research on the first place, and later to publish. More so, I agree and feel as described by Dench, Iphofen & Hues (2004), that the right to publish is entailed by the duty to report.

By doing so in my case, I believe I am contributing to Israeli youth.

...And finally.

Having dreamt, planned and executed my WBP plan, having measured, collected, analyzed, presented, discussed and started to disseminate, all along doing my best to develop my coaching practice;

Now is the time for summing up this study.

## Chapter 7- Summary

Coaching was at the heart of this study. "Effective coaching focuses on changing performance" (Reeves, 2009, p. 75), linking learning with individual performance. Coaching was designed to help increase performances of excellence by the school's learning community; the school management, the teachers and by the students. Throughout this WBP, coaching based on the KCM was shown to facilitate the improvement of school performance as planned. In addition, coaching became one of the school's basic features, part of everyday talk and work. It was adopted as daily practice, not as an event scheduled after work (Earley & Masarech, 2008). Furthermore, coaching became a state of mind, a way of being in school-

"Being in coaching is being in action- investigating, choosing, focusing and while doing so, being in contact with the future, the present, relationships, beliefs, feelings, strengths and resources...Being in coaching means taking risks, taking a journey to unknown places, broadening the safety of known borders and celebrating successful achievements." (Keet, 2009, p.26)

In part 7.1 of my summary I will sum up and reflect on the study.

Part 7.2 will highlight the main findings from the research and its contribution to coaching theory and specifically to coaching in school.

The last part, 7.3 will suggest points for further research.

### 7.1 Summing up and reflecting on the study

This study was carried out as a case study which took place in an Israeli school, serving both boarding and non boarding students. It was conducted over one school year, using a mixed methodology. This case study was designed

*To increase understanding and build new knowledge of ways in which coaching in schools, and specifically The KCM coaching model, may help and improve school performances.*

Pasmore & Gibbs (2007) recommended a case study, as excellent for research on coaching. They presented guidelines for the 'good coaching case study', which I used as the headlines for summing up my work and reflecting on it.

### **Description of the school management's issue**

This study was based on work done with one school as a whole unit and involving work with many participants and coachees personally and as a group.

S-School's staff members were experiencing difficulty and frustration, which were shared by their students. There were boarding students on the one hand, who came mostly from difficult socio -cultural backgrounds and were having to cope with a range of deprivations, and on the other hand external students, some of whom had come specially to join an excellent-student class program.

A holistic work as KCM offered, seemed a possible way to help the school realize and start to use its own natural resources and strengths, finding better ways to meet students' needs and re-create the school as they intended it to be.

The diagnostic stage, at the start of the intervention, provided rich and varied information which led us to pinpoint the issues chosen to be focused on, in terms of improving specific learning outcomes and strengthening three school overall processes.

*This work done* at the beginning of the intervention, the time spent talking and understanding the people and their needs, was valuable not only for the sake of collecting the information but even more so for creating the basis for connections and trust needed both personally and professionally, as a prelude to the good work to come.

### **Objectives agreed on by the coach and school management**

Following the diagnostic stage of collecting information on the school's starting point, the school vision was updated as well, to suit the school's new focus as chosen (see 5.2.1). The renewed vision was the starting point from which goals were derived and defined. School goals were agreed upon according to the information gathered. These objectives were school results, goals in terms of achievements, and goals which were derived from the school overall processes, all of which are related to as the six lenses. In addition, personal goals were sought by each member of the management team, connected to both the school vision and to their role in school.

*The work done* up to this point, strengthened by the research findings, showed the significance of vision creating and implementing as a core process in school. The school vision united the whole learning community and served as a catalyst to all good work.

### **Selection of approach**

The plan for work was defined as a collaborative effort, by me as the coach and the management team. The approach chosen was both process and result focused.

By processes I do not refer to the trail of mile stone achievements which were the direct result of the plan created by each coachee in order to reach his/her goal. An overall process is one which stands on its own, and which, besides being a wide goal in itself, enhances and nurtures the right environment, allowing the results chosen to be reached. The overall process creates feasibility for achieving the result.

*This work done* in S-School helped me realize the great importance of focusing on both the processes and the results for the success of coaching in school, or in other coaching frameworks. This dual approach brings about the full effectiveness of coaching; obtaining precise results followed by the possibility of sustaining the achievements gained for continuing progress.

### **Description of the coaching relationships**

I discussed this topic in part 5.3.2.1. Although coach-coachee relationships were not deliberately focused on during the intervention, my relationships with the coachees became close. I became much like an insider, a part of S-School team; I was involved and invited to different activities which were not directly related to our work together. I knew most of the teachers by name. Today, well over a year since I ended the work in S-School, I receive occasional e-mails and phone calls from some of the S-School personnel.

*This work done*, creating close coach-coachee relationships may have been significant for the coaching success, as described. Coach- coachee relationships may be a relevant focus at work, an overall process worth defining and focusing on, as explained above.

## **Coaching outcomes and how they were measured**

I referred to this topic at length in part 5.2 while verifying the hypotheses, and in 5.3.1, in relation to methods of evaluating KCM intervention specifically, and coaching in general.

Documenting the process in varied methods by many of the school learning community is a way to keep the whole school in the coaching activity. All members are focused on the "what", as they need to document it. Then, they all become involved in discussing the "how", which leads the improvements. The documenters (staff, maybe students in the future?) and the documented (mostly students) all become responsible and accountable for the work.

*This work done* measuring and documenting the coaching process may seem a technical matter, but it is of major importance during coaching intervention periods as well as later, as a way of sustaining achievements and improving them when the intervention ends.

## **Reflections on lessons learnt by the coach**

I started the journey of this WBP hoping to create 'profound change' (Senge, 1999) in the schools I coached. I am glad to say that the findings presented and discussed throughout this WBP have fulfilled my hopes.

I had hoped to create, in a parallel manner, a 'profound change' in my own praxis as well during this study according to the goal I had defined-

*To gain further experience and better professional skills in the praxis of coaching*

Considering the lessons learnt as presented up to now in this section (7.1), change has occurred, which makes me very proud of and thankful!

Another important lesson for me was the Parallel Cycle concept (presented in 5.3.3.1) which provides coaches with a tool or technique for better work. Furthermore the main lesson related to this concept was the strengthened understanding I gained regarding the crucial necessity of supervision and of peer debriefing for the coach. It led me to re-acknowledge the everlasting work inward which must be an integral part of the work done by any person attempting to coach others. The basic idea behind the concept of Parallel Cycles is that the only person I can change is myself (the coach),

but my own changing or readjusting is likely to influence and result in change for the coachee.

*The work done*, reflecting on one's own work and actions is at the heart of coaching. It is the only way to sustain improvement as a professional coach and in a parallel way to help the coachee create the habit of reflecting, adopting reflection into every day work and into everyday life. This is the only way to sustain the coachee's growth. Reflection is the most significant and powerful present coaching can offer.

## 7.2 Main findings and the contribution of the study

This WBP's widest aim as presented at the beginning, was-

*To contribute to the establishment and academic grounding of the coaching profession in the field of education.*

Concerning this goal and the ways in which it was achieved, I need to address the main findings of the study and as a result, the practical and theoretical value achieved by the study

### **The study's Main findings-**

Coaching has much in common with learning and teaching. Coaching has much in common with managing as well. School is therefore a natural place in which to carry out a coaching intervention.

A 'whole school coaching intervention' was developed using the KCM model to create change in a whole school. Chosen aspects were planned to be upgraded and significantly improved throughout the school.

In this study, evidence was found to verify improved levels of school performance by the end of the KCM intervention:

Learning outcomes of higher quality were measured and described. In addition, significant improvements in overall school core processes were evident. One of the core processes focused on during the intervention was the creation and enhancement of a coaching culture in school. Coaching was therefore an end as well as a means for this intervention.

The conclusions hereby presented consist of the main ideas which crystallized in the field and from the analysis of findings.

1. Whole school coaching interventions following the Katom Coaching Model bring about transformative changes.

Significant improvements in school work were measured and many members of the leading team reported meaningful changes in their personal and professional praxis as well. Teachers reported similar changes indicating a development of teacher leadership throughout the school. The adoption of change was planned and was a personal and professional choice aligned with the developing school culture which reflected the school common vision.

2. Whole school coaching interventions following the Katom Coaching Model are effective in improving the school's learning community's pedagogical, socio-cultural and administrative learning outcomes.

All learning outcomes are important and affect each other. By improving one type of learning outcome, the two others are improved.

3. Whole school coaching interventions following the Katom Coaching Model are effective in improving the following core school processes:

- I. The adoption and integration of the school's vision into school praxis
- II. The management of organizational learning and knowledge formation,
- III. The management of personal and professional learning, thus forming a school coaching culture.

4. Focusing on processes and results

- The three core overall processes, amplified by the coaching process facilitated better quality learning outcomes.
- The work of the school learning community towards achieving higher quality learning outcomes amplified the three core school processes.

The model's focus on both processes and results helps create a spiral- like dynamic that amplifies core school processes to produce yet higher quality learning outcomes and so on.



5. The coaching methodology should be a mixed methodology. Using mixed methods to evidence the effect of coaching is best suited for documenting and evaluating coaching interventions and for research on coaching. Induction and deduction are the two faces of meaning- making of the coaching coin.

6. The DISC questionnaire proved to be a useful tool for planning the intervention and for measuring its effect.

7. The transfer of skills and knowledge through coaching.

- The coaching process facilitated the transfer of skills and knowledge between experiential fields, from one learning environment to another, helping create a coaching culture in school.
- Transfer of skills and knowledge obtained through coaching sessions was found to be significant evidence of successful coaching.

8. Professional supervision and /or peer supervision are essential for coaching success. Reciprocal feedback between coach and coachee is just as important.

The main findings of the study, as presented, were of practical and theoretical value

### **The practical contribution of the study**

The model as presented and the effectiveness of coaching in school as described and discussed are relevant for all educators. Managers of education networks, school principals and management teams, educational authorities and decision makers. Hopefully, all these educators will realize the need and the availability of coaching and use it widely in schools. Research conclusions and recommendations are relevant for coaches in the field of education and may be interesting for coaches in other organizational frameworks, outside the field of education as well. All coaching practitioners may benefit from the documented intervention, the frame of work described, the tools and techniques mentioned and mainly from the conclusions and recommendations.

### **The theoretical contribution of the study**

Researchers studying coaching can benefit from the methodological approach described and use the findings as part of the growing evidence based research documented, of the ways in which coaching supported, improved and increased the levels of performance in executing vision and missions.

Researchers studying implementing change in schools or organizations may use the coaching framework described for creating change in other aspects according to their needs.

Acknowledging the transfer of knowledge and skills gained through coaching as a method of evaluating coaching success, is an important contribution to coaching theory.

### **7.3 Further research**

Although the work done was a case study on a large scale, it was one case study. Therefore, limitations must be declared concerning findings, conclusions and recommendations. Bearing these in mind, further recommended research is hereby suggested.

#### **Study limitation**

This study, although involving many participants, was conducted over one year, in one school, using one coach- myself, self - documenting the process.

The research procedure was designed to cope with these limitations. The evidence produced was valid, was significant and allowed reaching of conclusions and creating a theory. Nevertheless, these are the first points taken into account when I consider further research directions:

#### **Further research suggested**

- First, as explained, each limitation calls for more and wider research.

Since the S-School intervention was completed, I used this model again using the conclusions reached during the study. Again, findings showed the model's effectiveness.

- A second direction recommended, would be to use the model in other organizations, non educational. Most coaching developments were produced for and used in the business world and organizations. Like many other concepts, such as TQM for instance, coaching was later transferred and adopted into the education field as well. I believe that the non educational world may benefit in return from the KCM as described and used in this study.
- Thirdly, the Parallel Cycle concept presented in 5.3.3.1 would be an interesting topic for research in different coaching and supervision frameworks.
- The forth plan is a research which would focus specifically on the creation of a Coaching Culture in schools. This would call for creating a better method of documenting the process and evaluating the progress of the growing coaching culture.
- A fifth further research could focus on teacher leadership in a school with a coaching culture.

**At this point** I looked back at words I had written over 4 years ago, as the closing passage of my M.Ed. thesis (Beskin, 2005), words which served as a personal sign post pointing towards this study, urging myself to continue my personal-professional development :

"Coaching is as much a science as it is art" (Dolitch & Cairo, 1999, p. 32).

I hoped then, that the work I did at the time would serve as a starting point for

More scientific study of coaching, and for

More professionalization in the art of coaching.

Looking back at my wishes, I find that both have been fulfilled.

On a personal level, This WBP evidenced my personal and professional progress.

When looking around at the current professional field of coaching, it seems to

"influence results and excellence in organizations around our globe" (Kee, 2009, p.2).

More specifically, amongst scholars and practitioners in the field of coaching in

education, of which I am a part, it has become certain that coaching helps cultivate shared leadership and is a catalyst for school transformation (Wise & Jacobo, 2010).

"Coaching has dramatically impacted the field of education with the potential of reconnecting schools to the positive belief in the potential of all students and educators" (Kee, 2009, p.2).

Having completed this study, I hope to continue both coaching and researching the topic.

I hope to make coaching significant in Israeli schools, as it is beginning to be in other countries.

I also hope coaching skills will be used widely to help improve school learning outcomes.

Lastly, I hope the coaching culture will help improve schools.

Having spent time and energy, working and studying coaching in schools, I am certain, as are other researchers and educators (Lord, Atkinson, & Mitchell, 2008), that over time, a coaching culture in school will impact young people and their learning. Furthermore, I believe the impact of the coaching culture in school has the potential of becoming one of the most important aids to education; this is a subject yet to be appreciated.

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## Appendixes

### Appendix 1

#### Staff Interviews

16 staff interviews are hereby presented in alphabetical order (Part of each interview).

**A1.** Female. 8 years in Israel worked as a scientist in medicine research. 4 years in S-school, an English teacher...

**Good experience-** This is the first year I have some time. It is my fourth year in S-School and I am not as busy preparing papers and am free to focus on personal relations. I say to a student- 'come sit with me, what is happening with you these days?'... They were kids who were problematic last year and now learn! Things are happening, much is invested in them- a lot of attention, the new learning centre.

**Trust and respect-**...I know that whenever I have a problem I have who to talk to...It is important to belong to a place you feel good in, you love it and feel loved

**Pedagogical outcomes-** that is always happening...

**Socio-culture LOs-**This year there is attention to help the staff team weld. Many new ideas and useful tools were presented to us, which we could use in class as well

**Administrative Los-**The new transportation system for the students is a good change. Until recently they all waited near the gate, very dangerously. Now it is organized and we get to have longer lessons at the end of the day.

The Mashov computer system is very friendly. There still are problems, but if one puts in all the information on time it is very useful...

**S-School for me-**I feel good here. Natural...I can be myself

**Teams in most -schools** are big and not family like

**The team here** - are the student's family

**A2.** 5 years in S-School a Hebrew teacher, home class teacher for Mofet (new comers) 8<sup>th</sup> grade. Thirteen years of teaching experience.

**Main good experience-**I prepared a class to winter exam after only a month and a half of work because of the strike. Out of 24, I let 22 attend the exam and they all



past! But for me it was not a good year because of the strike. It was hard as a teacher and for the students.

**Learning outcomes-**At first I did not participate in the room- teachers forum. I thought they were just talking...Eventually, having persisted with my goal- I saw "0" in the computer system for students not preparing their homework (which meant they all had prepared all their assignments!)I realized it worked. All homeroom teachers gave ideas helping each other. It was very productive. ...

**Administrative Los-** Until last year each student had one day work at a time. Now it is a whole week which is much more sensible and easy to cope with.....

As a result of discussing ideas in the home class teacher's forum, I changed my attitude and work- at the end of every week I hang up on the wall the names of all the students who received 0 in home work preparing , which meant they had prepared all their assignments. A student who was 4 times listed got a praising letter and a prize. Children started running after me asking me to list them ...It is really effective working this way using positive reinforcement though sometimes it is tempting to comment ....The management team shows willingness to change and improve

**Work in S-School for me-** is the best I can have...I feel others are happy to have me here...The team is great and so are the students although they are not easy...

The relations between teacher to student are deferent here from other places.

I know each student personally...A student who knows he is not just a number in the diary is a king! ..I chase them, ring. .I don't have to!.. eventually they understand it is all from real care."

**Teams in school** -have a joint interest. Here, both the whole team and the discipline group are friends, a union....

**The team here-** is like a supporting net. Every student chooses his hiding place"

**B1. About me and my job-** male, does all things others don't want to do in school. Responsible for excursions, exams (I am trying to 'sell' it to someone else...), safety. 12 years at work following an army career.

**Main good experience this year in school-** last year, my 12<sup>th</sup> grade class graduated. 18 kids- 10 accomplished passed all the matriculations, 4 had 1 exam missing and 4

more than 1. They all thanked me for my "drilling in their minds". This year I am responsible for a 10<sup>th</sup> grade. It is still the beginning....

**Why was it meaningful?** It makes the kids love our country. After that, they will join fighting units in the army. With the students from the boarding school, it is different. I have less contact with them.

\*\*\*\*

**Trust and respect-** students- they want to gain respect they apologize when they are wrong. Some do not care. There are successes I speak with them and believe I will succeed. When they fail (in an exam) I promise to help. Assure them they can make it. It is important to tell the truth if you lie you lose everything. "I didn't come because I overslept..."- they know I will catch them. (and I do. In dining room)..

I get on fine with the whole team, I respect each teacher, when I join excursions I am the escort s/he is in charge although I prepared everything. They are the managers and can consult with me

**Outcomes-** there is no proportion between pedagogical work and achievements.

Mora- some sit all breaks with the kids and the results are evident....

**Work in S-school is** a mission, challenge, I am here for Zionist reasons. Otherwise I wouldn't have been here. I am often told I am crazy.

**Usually Teams in school are** dedicated and professional/

**Usually Teams in school are** like parents to the students,

**In S-school they are like** a mother and father

I-In my class all the boys went to fighting units, we went on a visit to the court and they behaved perfectly; this is due to the trust we have and because of my "drilling" into their minds...

**B2-** male. House master. Has lived in the village from the age of 14 (his mother works here too) second year at work. Responsible for the upkeep of the buildings and equipment.

**Positive experience-** I know the boarding school students better. From watching and helping, The ODT activity seemed great- it is a routine braking activity, very welding...

. It is the beginning of communication between the two groups- the boarding school students and the external ones. The contact is not very good at present. The external students were brought to raise the level of studies here. It is better than last year , since the 11<sup>th</sup> grade students went to Poland as a joint delegation, last year they didn't.. More must be done to connect the two camps...

**Trust and respect-** it is not even, there are kids who don't speak nicely, or don't pay any attention. there are teaches who give their heart and soul. they buy stuff for the kids, they come to visit them in their rooms, watch their performances and their rehearsals. others don't care and say "I came to teach". The former represents attention and respect...the kids in the boarding school are difficult...in my team I asked the teachers when it is needed- "give him another chance, let him in the classroom". I tell the student –"sit and do your work, I gave the teacher my word". My team consists of a group of volunteer .students. They learn to deal with illumination and amplification for performances or ceremonies and help me in my work .Some of the kids hardly study. Working on the team is a lot of hard work and most good students do not want to be part of the team because they miss lessons. There are teachers who invalidate these kids- "you never come to class"....

In this place the students are away from home, they need more attention. A piece of chocolate means a lot to the boarding school students; not to the external students..

**Work in S-school** for me is- love, home, life...I love kids and my work of up keeping the place.

**Team in S-school** is homelike, warm, because it is small, everyone knows each other. It is a closed but large and wide space; good conditions very well cared for.

I would like to see more connection between the camps. During brakes, the boarding school kids are outside and the external stay in the building.

There is no physical violence or vandalism... There is verbal violence, but less and less. The externals may act in a snobbish way and say-"it is your job ", or-" the cleaner should do it".

**D . About myself** –math teacher 5 years of which the last 2 were in S-school. She is homeroom teacher of an Etgar class.

**Good experience-** a student who wouldn't speak. Sat like a plant ...has approached me this week for the first time. He behaved like a shadow for two years, and he suddenly came and told me about himself.. This gives me air to breathe... there is a lot of disappointment here...it is as if I have finally passed his exam. I told him I was proud to be chosen by him to open up to. A little window was opened...he has a difficult story...

.- we try everything to advance the students. We discuss my class with the principal and the counselor, and think of different things which could help my class. Encourage significant success.. never give up....

. Teachers come to the boarding school to see the students performances they take pictures...to encourage them. I found out one student plays the drum. I photographed him and showed it in class. He was so proud, even though he doesn't know any math...

I am always thinking -what else can I do? How else can I make a difference? Never to forget a student . creative solutions.

**Trust-** because I am attached to them, and come so often in the afternoons and evenings to the boarding school, they never play hooky in my class. They know I love them they like coming to class..

The management team is outstanding! So attentive I get anything I need. They are always willing to listen, before school or after school time.

**Learning outcomes-** they all want to succeed but there is no regular work .they don't manage to persevere for long.

They prepared "mishloah manot" for Sderot children because "they were suffering". They were so dedicated to the preparations...they didn't take any sweets or make any mess. .I was so proud of their behavior so I gave them sweets too...

Once a week we have a party for all the well behaved kids. It is like a birthday party. We emphasize the successful students. ..

The green around is calming. There is no pressure we talk with them.

**School teams** -support students.

**G.** Male Bible teacher and head of department. 24 years teaching, 6 in S-School.

**Positive experience-**The aim is to help them succeed in all the matriculation exams. I had one student who did not want to learn or to attend to the exam. I decided I will not give up... On Sunday he is going to write the exam!

EB calls me the 'Bible magician' ... Because of my work this kid managed in the exam.... I like seeing the students run after me, I invite them home as well...

**Celebrating success-**They all know in school that I will get the students to matriculations successfully... The kids invite me to their homes, tell me their personal problems, about a boyfriend, about their parents....

**Trust and respect-** I worked in many schools. Here, there are relations of respect and honor amongst the teachers. People are considerate, everything I ask for- No problem! There is a dynamic of help and brotherhood,

**Trust and respect-** amongst the students it is difficult to say.. there are quarrels they bring a sac of problems to class and throw it on each other...but they look after each other as well...

**Learning outcomes-**I don't know about other disciplines, but in mine, as a HOD I have a site from which teachers take stuff...

**Administrative Los-** Through the 'Mashov' computer system you get all information on all school aspects...you are always up to date. It was put into use and was implemented well...I am in close contact with my colleagues, it brings S-School to a new degree of work....

**Usually teams are** an upgrading power for the school

**The S-School team** are like parents to the students. If a student does not arrive to the lesson, some teachers come and pull them out of bed

It is interesting, Recently, I heard at least of three families who are planning to come to Israel and are interested in S-School...It is a result of having the 'Mofet' program here. It is a fantastic program and it upgraded the school....

One of the reasons for my being here is that I grew up in poverty. I feel a great attachment to these difficult youngsters I am a model for them-' Are you really a Dr.? I tell them about myself, where I came from, I give them hope that success is possible. Each achievement should be stressed. It is not obvious...(Tells of conversations with students:" I am connected to you. I am G not Dr. S. I love and care for you...

**L.** About your role and experience-Lives in s-school 19 years. 17 years teaches English, 12 out of them head of English department.

My team and I have success with a certain type of students and I am looking for new challenges. ..We have a 90% success with them and the challenge is to teach them on a higher level...It is the fifth year I have been preparing musicals with the English speaking kids in S-Junior High school. This year the show was the highlight of the year! We did "Fiddler on the roof" and it was fantastic!...we prepared everything on our own- light, music...it was a lifetime experience... next year I plan a higher

**Vision-** I have a vision myself. The schools secret is the fact it has a vision...

We do anything legal and moral to make them succeed. That's why it works!

...I remember working with a class on a project...It was terrible! Kids were hurting each other. I was hysterical. I wanted to give up. The principal called me, seated me in his room and said- 'L, how can I help you? What do you need to make it succeed?'

The nicest sentence possible...This is the attitude here, it is part of the school vision- not can we do it, but instead, what do we need to make it happen!

My son moved to study here. He is so happy for it... Change must accrue. A teacher in my team told me about a story she taught in class which reminded her of our situation. She was teaching about the Aborigines in Australia. There is a frog that collects water reserves in its pouch. The Aborigines drink this water, though take care never to drink all of it, because then, the frog will die...

**Trust and respect-**..." If we as teachers don't give the student a reason to believe they can succeed, we did not do our job. Every child, even the weakest, wants at the first day of school...sometimes, by the second day he is forced to believe he cannot.. This is our duty. We must earn it from each child, it is not obvious...

One stormy night, I took my dog for a walk and passed by the school. An Ethiopian student was there and saw a tree hat had fallen from the wind. The kid, who did not see me, stopped, bent in the rain and straitened the tree. This is the connections the students have to the place. They care. You see students pick up garbage. They love and honor the school.It is not part of any coriculum. The next day I told him I saw him...

Confronting with reality. Catch the kid being good...most of the teachers focus on the bad...as a HOD I try to act a Role model

**Teams are usually-** supportive. The team acts as a mediator between the student and himself, the student and the discipline, the student and school. A reality check to messier where they are.

**Work in S-school is for me-** An opportunity to change and be changed ...that's why I am a teacher. I am lucky to be here..

I do not believe in democracy with kids. As much as I hug them, I am not their friend.

**M.** Social worker of village. 14 years in s-school first place of work.

**Good experience-** this year there started a process of communicating with school counseling. Meetings with external help... this is meaningful because work with youth with so many lacks we were working according to their codes of communication. The school-boarding school staff were like differences between mother -father and this is like an extolling circle, infecting.

Respect and honor- the school staff is very dedicated and trusting. Committed to work the management team not as much. What should be done? Work on communication. The human touch is easy to lose. Managers should go on teaching in class, it keeps them connected to the field-forums of sharing and speaking should be held once a month to hear it...

e. Today many of the staff work with the externals, much of the energy is channeled to these students and therefore the expertise and professional work with the low achievers from the boarding school is lessened though the tools are here, the mental strength and the motivation .there maybe some benefits of this situation. The difficult youth hasn't changed. Though the different social groups effect the students themselves, the contrast it is part of their experience, not being the normative society. Nevertheless it is a nature reserve.

..Physical violence is very low. There is more of it in the school than in the boarding school. In the boarding school there are very strict roles and discipline which influence the school too. Everything there is very well defined the difficult dynamics between school and boarding school make it frustrating borders and limits are not certain.. Students use it...verbal violence there is more of.

..The children do not believe in themselves do not believe anything good can come out of them. A small fry criminal at the most. As larger the difference between the

words and the work needed to be done with the children on their basic needs from the pyramid of needs, the words are beautiful and moral but –where are the fruits and where are we? It seems not relevant. Tomorrow at the 12<sup>th</sup>

grade graduation ceremony, all kids will wear white, a long empowerment process was done but they are still at the beginning of their way ... we should be aware of the ones who didn't manage as well as the ones who left. It is a development process not a functioning one.

**Work here** for me is a way of life. Staff is usually tolerant to students

**N**-female. 4 years teacher of biology and agriculture, home class teacher to 12<sup>th</sup> grade of new comers (Naale class, third year). 8 years teaching in Israel.

**Good experience-** I am very close to the students with whom I have been working with for the last 3 years, preparing them for life. The close relationship formed is the meaningful experience for me. 18 students of low academic level... S-school is known for treating these students well. I receive love from them. They share their intimate stories. They tell me about their relations with their boy or girl friends they are confident that what they tell me will be confidential. Most of them feel confident as I work on establishing relations with them on a personal level. ... All teachers tell me-"you are not their mother!" or when I speak of them as my children they say "they are not!" ....

**Vision-** School tries to work and progress according to the vision. There are ODT trainings, changes in conducting work here, like having pedagogical meetings with all the staff, different manager's responsibilities are better understood- who does what? We used to ask them all about everything. Now we know to whom every problem should be addressed. The mashovit is an excellent aid. I stopped running after teachers as all the information is within. The pressure lessened.

(Read vision)- I hope, actually I am sure we are on the way to become the leading school of our area. The academic level is rising. It is not an elitist place though not everyone is accepted... There is a separation between the groups but it is lessening. Student progressing- many extra hours to help students. We didn't give up on any student and we tried to help.



**Trust and respect-** In the teachers room there is a warm and friendly family like atmosphere. A great team! I can always ask for anything. People celebrate personal occasions together...very close to one another...

**Coaching culture-** there is openness towards the students they get the feeling that they are being taken care of, nobody "falls between chairs". There is transparency.- "Mashovit"- open to the students as well, it is part of trust.

**Work in S-school** is satisfaction itself.

Teams elsewhere are like a pile of snakes, a wall to the students' needs. Whereas here, they are like a warm lap (opens her hands to a hug).

**O1.** 10 years in S-School home class teacher of 10<sup>th</sup> grade Mofet (new comers).

Teaches Biology. Taught in 3 schools before

**Good experience-**I went on an excursion with my class to Jerusalem...The atmosphere was so pleasant...I got them young and problematic and suddenly they have all grown into young men...they were like cats and mice to one another till not long ago.....

**Trust and respect-**Now there is more attention to no cheating in the exams. The success percentage is not as important as honesty....

There is a good atmosphere in the teacher's room

**Organizational Learning-** A new thing this year- EB puts in print mails from parents in the computer system ("Mashovit") for all the community to see. I was embarrassed at the beginning because all the teachers mentioned it- parents had praised your dedication...Now I have got used to it as others are praised as well

I Love the place and feel that any problem I have I will be listened to....

The pedagogical work was highly improved this year. The pedagogical HOD is excellent her work is ... I sat with the pedagogical manager JS and planed.. All my ideas and suggestions were taken into consideration. This is a pedagogical and administrative change.

**Work in S-School for me-** It is not work, it life to me."

**The team in S-School-** Most of us are very containing...special ed. We fight for the success of each student

**Something you would like to add-**S-School has risen because of 'Mofet' classes. It is now prestigious to say I teach here .

**O2-Home matron** 3 years in the S-School boarding school works with 12<sup>th</sup> grade students. .

**Main good experience-** The delegation to Poland, external students together with boarding school students, for the first time.... It was a special experience for me to see to girls from different backgrounds getting friendly. Or An Ethiopian student from a low achieving class with a student from the 'Mofet' special program class hugging each other...

The fact that EB, as the principal took part in the event and saw the outcomes- the importance and added value of the students' delegation to Poland, was an opportunity for him to realize the importance of connecting the boarding school students with the day students ....

The Etgar class was not predicted to take part in the agriculture matriculation exam. Now they will attend the highest level of this exam!

Work in S-School is my way of life **Work in S-School for me-**

**Team here is-**The team is like a traffic sign for the student's success.

**Something you would like to add?** Because I was here with this group for three years, I have seen things others could not have seen with the group. I saw a process and I am glad I could see it.

**R1. About me and my job.** Female. Hebrew Grammar teacher in charge of many projects. Homeroom teacher to a 9<sup>th</sup> grade of mostly low achievers from the boarding school. Has taught 26 years in S-school, 27 in all.

- A student comes to her and shows a magical trick- she watches and admires his show- you should show me a trick every day! The Child grins with pride and goes off. "I love them... that is what they need".

**Good experience** - in charge of a new project for 7-9<sup>th</sup> grade students.(Ogen)

Teachers volunteer to personally help a student. They all need it, mostly ones from the boarding school. I don't have enough teachers. I almost lost a student because I was too practical. I thought of teaching her I should have listened instead... Sit with her and drink a cup of coffee. Focus on the child not on grades, the child not the content. I started to spend time with her. She showed me songs she had written...

I decided to see to it that all children would attend class. There was a lot of invisible drop out. I prepared a table and every child that did not miss any lesson that week got a prize. The kids said that prizes should be given to students who have made progress as well. A child who missed 16 lessons and the next week only 7, was told by his friends- their idea – that he has improved, though not enough.. This big paper table was never torn (or put on fire) like many other decorations on the wall. It was very important to them. Now they all come to class regularly but they still wait to be praised at the end of the week and get prizes. It is a ceremony. **Did this affect other classes?** All teachers who were involved in my class knew and cooperated.

I miss having a meeting once a month with all the class staff...when we sat with Michal in the homeroom teachers' forum , Nehama 'bought' the idea. She asked me where I found the special treat they liked as a prize? ....I enjoyed it when Ruth was enthusiastic with my stories .....

The teachers' goal is not to give up. The very best teachers were given to my class. Last year I had to run after the students in math lessons. Now the vice principal teaches. It is now the management's emphasis on this class's learning....

**Trust and respect-** ... I have been strengthened by the great management team here.

**Learning outcomes-Pedagogical-** this year we worked differently, with folders. So all had learning outcomes to show every lesson. It worked well. When they had all the lessons in front of them they realized how important a copybook is, especially with hierarchic subjects. I gave them a mark on this copybook and students managed better, though maybe the ones who had the copybook would have managed anyway?!

.... We are focused on learning we should concentrate more on the child's good nature .I should have mentioned the good work the teachers did in my project... One day a student saw me cry because I heard my son was wounded. She told the principal and a few minute later he arrived in class with a glass of water for me.

This warmed my heart .I wish my students too, will one day have a manager who finds time for such things...

**School teams** are like a Family. Here they are home.

**R2 About me and my job-Home teacher to the 12<sup>th</sup> Etgar class.** Teaches Hebrew. 3 years in S-school. 6 years experience....

I love the kids they are fantastic. Because they never got guidance, they are willing to accept everything. Both about life- how to act in various cases and in learning skills.

**Main good experience-** A full matriculation exam for 12 out of 25 of my 'Etgar' students?! Even the ones who will have less exams are working in the village and some are planning to go on studding after the army...

My speech at the end of the year's celebration. I was so excited because of their achievements...like when I got a prize for excellence in the university

**Learning outcomes-** The whole group is now polite, gentle, when they came here I was thinking- 'who are these hooligans?' now they help everybody...

. I will never forget, when I was sick they rang up to look for me in hospital. They were worried....

The fact I made my students attend the matriculation exam in Hebrew grammar, spurred other teacher to do the same this year...I fought for the success of those children" ...

The principal gives moral support...when I cried he comforted me. He is like the 'Wailing wall' ...encouraging.."

**Administrative Los-**The system is fixed minded on helping strong classes and not the weaker ones. I think I was chose to be responsible for the weak classes to change that...

The management team members all took responsibility on certain subjects. Now I know to whom to present every problem .

He is a great manager, always caring, helping. Very honest ... Actually that is true about all managers in S-School

**Trust and respect-** Respect is something you cannot demand. Respect you get, you earn it. I worked hard to earn their respect by respecting them- I never spoke rudely to a student, never condescendingly. I listened, believed...There is an openness

environment. On the one hand there is no distance between the team and the students. There is sensitivity,

Amongst my discipline group we are very close professional relations but also personal. I get and give any help from them all... On the school level, there are friendships but also some tense feelings. Teachers feel my class gets more attention...

**Coaching culture-....**I learn from the way the management team and the boarding-school team act as I am part of the monthly meetings. When you are in a process of learning you are empowered... I am constantly trying to improve, I am not perfect...

**"Work in s-school for me-**On the whole work is fun here.

**Teams in schools are-**In other places schools are grade factories.

**S-School team-**here the team is a father and mother-parents to the kids."

**Something you would like to add?** I really love the principal! (Write it down!)" He is such a man! I was offered work close to home but I will not leave EB. The whole management team is excellent- That is why I am so satisfied here. It is important to work with such people.

**S1-** Female. History teacher 5 years in S-School.

....when a student spoke in a way which was not suitable, I used to punish him. Today it is different, I tell them what my borders are, I have a dialog ...Even if I don't agree with them, it is easier for them, because I listen.

They are given my phone number...I am here for them as much as needed But they should take responsibility for their part!

In 5 years of work, it never happened I could not let my students attend the matriculations. This time it was so. My success with R alone was fantastic. Still, I hope she will come to the exam...

What helped R succeed, was her joining in that enabled my own joining. A teacher has to contain all the hope and power for the students. That is what I need to be there for, and then I need to gradually give her the responsibility, not leave it all with myself

**Main good experience-**Something which touched my heart-

My son was hurt in a car accident. There was a whole joining to help me...when I called to ask for help I found that everything was already cared for..The day to day work is difficult here but when one needs, the caring is endless...this is what binds me to this place. The warmth is S-School's human mineral

There isn't much formality here. The principal knows all the students' names...We don't give in to the students and don't give up on them...people here are caring and sensitive

**Trust and respect**-There is much respect for the students. They get endless chances...We don't give in to the students and don't give up on them either.....

The principal is such a wonderful person...I can come at 7 in the morning to speak with him..."

**Work for me in S-School**- first of all it is my livelihood.

**Teams are usually**-Educational teams are usually caring and supportive

**The team in S-School**- team is like a father and mother, united, like a home. If the are stable, the kid will grow up feeling loved and secured

**S2**- Female, head of Agriculture and of Biology studies. 25 years a teacher and 2 years in S-school.

I was a school principal before and like managing...I come gladly to work here, not like others after 25 years of teaching...

**Main good experience**-My students wrote the matriculation exam here for the first time . I heard some say- you have still not proven yourself... Now I have done! All my students new well at the exam!"

It was difficult with their final assessments...eventually with hard and intensive work they managed! 15 kids completed their agriculture papers...they feel geniuses!"...

**Socio cultural LO** -The students who came back from the Poland delegation told me all the kids were very nice. They had no connections with other class students and now, even the 'Elite ' girls' are friendly with the boarding school students. ...

**Trust and respect**...I was told when I got here that the atmosphere was great...Now it makes me laugh. It is only on the surface...But it is normal I take it in proportion. Still it looked beautiful"....

While I was interviewing S2 A student rang her to ask about a question she had just been asked in the matriculation exam. S2 spoke enthusiastically: " Great Sweetie, you will get all the points for this! I love you."

**Work for me in S-school-**I like the work here. It is fun

**Teams in schools are-**Teams are educational figures

**The teams in S-Schools is-** Mainly to the boarding school students, teachers here replace parents.

**Y. male.** Chemistry teacher 2 years in s-school, 14 years teaching following many years of work as an engineer.

**Good experience-** my main experiences are to do with helping the weaker students. The strong ones don't need me. The weaker students who manage to pass the exams. I have quite a lot of such experiences. Not enough. Some start off saying "I can't..." and it turns out they can!, it suddenly dawns on them and they manage to get good grades. ....

**Vision-** I certainly know and have heard it discussed.. I remember that people should be diligent and moral not only professional in their discipline. This is the main message....

**Coaching culture-** I personally speak with students. I see a student with a sulky face, listen, even if he isn't my student. I have seen it done by others as well. This is the policy. Both students and staff can also enter all the managers' rooms, an 'open door ' attitude, very different from other places I know. ..

**Trust and respect-** usually exists. I don't know the boarding school students. Amongst the team it is very obvious. One can turn to anyone about anything. If there is a problem it is dealt with .It is very rare to hear of a teacher shouting at a student or insulting him, like is common in many schools. Cheating in exams I hardly come across. if I do I invalidate immediately. They know it.

**Learning outcomes-** I feel progress. Last year I worked with the younger grade only. This year my first students took the matriculations.

....**Administrative outcomes-** the "Mashovit" - it is very useful for most of the teachers

**Teams in school** are a source of support, specifically in S-school.

Teachers are like parents to the students. Sometimes because they are neglected at home.

## Appendix 2

### Longitude Management team questionnaire (L-R)

The coaching process in time perspective- A questionnaire presented to management team members who were coached in person, (six months after the end of the S-School intervention)

1. A first association- what do you most remember from the coaching process? (What was it like? What feeling does this memory from the experience bring?)
2. What do you mostly remember from your process? Why do you think those are the ideas you remember?
3. Were there things/ideas/ you used in work since the end of the process? Which? In what way (It may be an adaptation of an idea as well)
4. Were there things you thought about at work and chose not to use? What were there? What was the context you thought about them? Why did you not use them?
5. Are there things you took from the coaching process which you use in other places (not in work) since the end of the process?
6. Were there things you thought about not at work and chose not to use? What were there? What was the context you thought about them? Why did you not use them?
7. Are there things from the process you passed to others or that others learnt from you? If they were - which things? In what framework were they passed on?



## Appendix 3

### The planning and reflecting table (P-R)

This table was gradually created, throughout the S-School intervention. It was used once a month usually, by each of the management team members and by me as part of the group coaching sessions. It helped the team plan, monitor and reflect on their work. It helped the team share and discusses their plans and actions and collaborate their efforts towards progress and change in school. The table was sent and used via computer, so that its size was adapted to each member's needs. I would communicate by mail with each member, coaching their way through their planning-monitoring-reflecting phases using the table.

The table columns are presented followed by some quotations out of it.

#### A planning and reflecting table

The project \_\_\_\_\_ Name of person responsible \_\_\_\_\_

Goals to achieve between Start date - End date

\*The first 5 columns are to be filled before start date. The last three, after the end date.

| Goal/Process | Actions planned<br>for this period<br>of time | When will be<br>accomplished? | Who's<br>responsible? | Signs or evidence<br>which may<br>indicate success |
|--------------|---|-------------------------------|-----------------------|--|
|--------------|---|-------------------------------|-----------------------|--|

| Achieved/not<br>achieved | Ways for indicating and for<br>celebrating the success | Reflection |
|--------------------------|--|------------|
|--------------------------|--|------------|

Some quotations from the team's P-R tables-

EB:

"We took too many missions some of which were new for us. On the whole, examining the first results we can see that in a short time we have achieved many and varied outcomes"...

"It is important to pay attention to our successful achievements. In day to day work we deal with problems and difficulties and fail to see these small successes on the way."

"We must be aware that the new improved working patterns in the management team are not fully implemented yet. It is necessary to continue and improve the team work, have the meetings as planned and act in them with awareness to the importance of teamwork and great sensitivity to the friends in the team. To keep the schedules, the procedures, and the good communication skills we acquired".

JS:

"In the boarding school classes work is still needed in order to improve pedagogical achievements.

"There is a real learning community here, learning out of the experience of work in school. HODs are treated professionally and are coached when needed."

MD:

"My stubbornness and dedication to my object didn't let me move from my goal' and in the end it carried everyone of us along...The process engaged R1 –a first year home teacher, now she makes a point of sending regular e-mails and talking to me whenever she has a new idea. O too feels a greater sense of commitment to her work."

"The declaration of each of the home teachers' objectives in the presence of all their peers, and their commitment to a percentage of success was a challenge to them all, and created a commitment" ...

"Having succeeded in achieving their first goals brought down the barriers and reduced their worries in choosing a new goal and committing to a new and higher percentage of success"...

## **Appendix 4**

### **Delphi Expert Group correspondence and data**

This appendix presents in appendix 4.1, documents and data from the first round and in part 4.2 documents and data from the second round.

#### **Appendix 4.1- Delphi First round**

- a. Background letter.
- b. Attached files I & II (Part of these),

c. Data from participants.

a. A brief background

*Context and Overview:* I have been in the field of education for 25 years, first as a high school Math teacher and later as a school consultant. I worked closely, with principals, management teams, and groups of teachers, with whom I took my first coaching steps, 9 years ago, using cognitive coaching.

In my current position I coach executives in the field of education, head-teachers, deputy heads and heads of departments, in person or in a group setting, using the Katom Coaching Model (KCM), the effectiveness of which was evaluated in this research.

*Rationale:* The rationale for conducting this research was grounded in my coaching practice and was driven by my desire to make a significant effort towards changing, improving and thereby contributing to a better educational system in Israel.

Researchers have started to produce evidence of coaching effectiveness in organizations and specifically in schools (Costa & Gramston, 1999, Creasy & Paterson, 2005, Robertson, 2005, Brown et. al, 2006, Clutterbuck & Megginson, 2006). Nevertheless, defining the effectiveness and having done that, evaluating it, is still being discussed and debated at this time, thus identifying it, as a main issue to investigate (Hobson, 2003, Grant & Cavanagh, 2004, Leadham, 2005).

.....

b. Attached files

Attached are two files, both include information and relevant questions.

**File I** – The KCM model and its main processes. **File II** - Qualitative data used to inform the evaluation of the coaching effectiveness

**File I- KCM- Katom School Coaching Model**

The KCM model was developed following an extensive review of existing theory and good practice benchmarks developed in my practice. The coaching process guided by the KCM model is outlined bellow, step by step, providing an insight into the scope of

our work. The actual work is tailored for each and every school, aimed at facilitating performances of excellence by management, teachers and students.

The KCM, the Katom School Coaching Model, is a dynamic model which facilitates excellence in school outcomes

Three school quality variables are measured:

Pedagogical learning outcomes

Cultural (norms and values) learning outcomes

Administrative learning outcomes

.....

## **File II -Using qualitative data to evaluate coaching effectiveness**

The quantitative data showed that the coaching intervention had facilitated a significant improvement in the quality of the school's learning outcomes, on most of the indicators of quality measured and according to plan.

My intention was to find ways to improve the coaching model and my work. I wanted to learn more about the nature of the processes that the coaching intervention facilitated, and in doing so, to get an idea of what could stand for evidence of effectiveness and could be found in the field during work. I also wanted to know about the ways in which this knowledge and understanding could be used to amplify these field processes. For the purpose of illuminating field processes and for the purpose of finding corroborating evidence for the evident effectiveness of the coaching process, qualitative data was collected and was analyzed in its own right and in order to cross verify the quantitative data.

### ***The qualitative data led me to the following ideas:***

I. Change implementation      *This is the early version of change levels*

Change is a process that starts out in small steps, new technology is adopted, new procedures are designed, new ways of thinking develop. It is a harmonious process, a natural process. Sometimes change is spontaneous and sometimes it is a result of planned action. The experience of change can be a threatening experience when it's harmonious flow is disrupted. Coaching is a process that facilitates change and restores the harmony inherent in change processes.

Interrogating interview data and documents written by staff, I found evidence of change during the coaching process in their narratives and thoughts. I identified many threads of change, that the management had wanted to promote, and that were dealt with during coaching sessions. Four typologies of change emerged from the data: (To help the reader navigate the appendices efficiently relevant quotations were numbered-see appendix)

1. *Thought Leaders* - Awareness crystallizes about new ways of doing things that may bring about different results<sup>1</sup>

2. *Early Adopters* - A new and better way of doing things is tried creating a different and unexpected good result. The gains realized from the new ways tried serve as incentives for maintaining the new way<sup>2</sup>

3. *Breakthrough Performers* - A new and better way of doing is deliberately tried out leading to a breakthrough result. Teachers in significant numbers hear about it when success is celebrated and adopt this change<sup>3</sup>

4. *Ennobled Champions of the Process* - The adoption of change is planned and is a personal and professional choice due to a change in school culture. Those who join the process and engage with it become ennobled, and thus they become champions of the process.<sup>4</sup>

## II. Transfer of Skills and Knowledge

The transfer of skills and knowledge from one learning environment to another and between learners is a major outcome of the coaching process and informs the coaching evaluation process. When knowledge and skills are transferred from coaching sessions outwards, the effectiveness of the transfer is an indicator of the development of a robust organizational coaching culture that supports the transfer. The transfer indicates that organizational cultural values are supporting openness, team work and a need for achievement, courage to make decisions and educational leadership, and critical thinking at a rate enabling transfer.

Qualitative data presented indications of knowledge and skills transferred from coaching sessions. In some cases, transfer was natural and spontaneous, and in others, it was planned and done deliberately.

Identifying these events could stand for an indication of change and of internalization of learning, and therefore, for evaluating coaching effectiveness. Deliberate encouraging of transfer and creating opportunities to do so, may help the implementation of change.

Four types of transferring skills and knowledge were found-

1. From one learning environment to the next- laterally and vertically within the school<sup>5</sup>
2. Between peers – laterally within the school<sup>6</sup>
3. Laterally from the school learning environment to the community (Home) learning environment<sup>7</sup>
4. Between manager and his subordinates – vertically by using coaching methods and skills<sup>8</sup>

### III . Parallel Cycles

Coachees and coaches work in parallel cycles. When a coachee is stuck in a cycle that is the subject of his work, a similar stuckness can be observed in the coach's parallel cycle. A coach's work on his own cycle and his ability to unstuck his own cycle will facilitate the unstucking of the coachee's cycle.

A unit of work on the coach's cycle, can be either spontaneous work, or the result of professional supervision.<sup>9</sup>

### Qualitative data- examples (some of them)



7-JS:" Coaching influenced the way I treat personal matters as a mother and wife. I am constantly reviewing and planning my goals in these areas and planning ways to achieve them" (JS reflecting on her coaching process, five months after her last session).

EB:"I now define home activities using a time table for family matters as well just as I learned to use for work matters" (EB reflecting on his coaching process five months after his last session).

### 8 - JS's coaching process

At the first coaching meetings with JS, the pedagogical manager (head of all department heads) it was obvious she was experiencing problems as a manager.

She said (research diary)-

"Some of the time I feel very weak in front of strong department heads. I try to avoid confrontations and therefore do most of the work on my own".

She worked hard, was very dedicated and open during the coaching process. She struggled to find her own strengths, amplify them during her coaching sessions and better use them in her role- coaching her team, of department heads. Change was evident by the end of the year.

JS herself summarized the coaching she went through -

"I did not believe there would be such a success!... real independence by all heads of department – they have become **managers** of their department (subject) in our school!".

The work she had done discovering her strengths, celebrating her discoveries and work on the amplification of her skills during coaching, contributed to her becoming the manager she wanted to be. Her ability to transfer the skills she discovered and amplified during coaching, into her managerial environment, made the difference. These skills helped her manage, and the coaching climate helped her do similar work with her colleagues, the department heads, who in their turn coached the teachers on their own teams. The echo of this process was clearly heard in the words of the teacher we interviewed (O1) -

"There was a real upgrade with the work of the pedagogical manager this year. Her work is sacred work"

#### 9 - Parallel cycles

For quite a while, I was stuck, experiencing a lack of progress in coaching the school's leading management team translate the school's vision into concrete working plans within the areas of their responsibility. No advancement in the definition of mile stones or in the identification of resources to reach them was achieved. After several dissatisfying coaching meetings with the school's leading management team, the process seemed "stuck" and I decided to use the parallel cycle principle.

I accepted responsibility for what I believed was my own lack of clarity and was determined to harmonize it. I used an organizing table to plan and review my own mile stones for the coaching process for both the team work and the individuals that made up that leading management team. When I felt myself clear I "reframed" the

table "Supervision and Assessment Table" and showed the members of the team how I used it in planning my coaching sessions.

The school principal (EB) explained to himself and later to the team-

"This is not an assignment to be done, it is a working tool designed to help us in our every day work, and to self monitor and adjust our work once in a while" (from research diary).

Within two weeks the whole team was using the tables, plans were set and they were on their way ... some decided to use the tool for other needs at work as well -Transfer Breakthrough was immediate!

### c. Delphi participant answers

1. My own coaching framework, or other coaching frameworks I know have similar stages of work-

D: 4 You may want to look at the framework in my book coaching the team – this is a similar situation.

P: 4

L: 4

J: 2 I would view the establishing of the contract as part of the coaching program

2. My own coaching framework or other coaching frameworks I am familiar with track similar processes

D: Same question?

P: 4

L: 4

J: 3

3. I think there are one or more processes missing. If so, please explain which

D: You may want to consider the process of relationship review somewhere in the middle.

P: No

L: 1



J: Were there any qualitative interviews with students? Were there individual student's attendance and progress monitored?

4. When coaching, I have actively tried to influence and improve specific processes. (If so, please explain which, and in what ways?)

D: Coaching is all about helping the client improve their processes of reflection

P: Whichever process the client selects

L: 5 Competencies that needed to be strengthened. For instance vision making, goal role clarification, etc,

J: 5 I use a reflective action learning approach to my coaching where the participants become part of the action research methodology

5. I agree with the definition of the Vision Internalization Process (I)

D: Yes

P: 5

L: 4

J: It tends to assume that there was no development of shared vision before this. How was the process vision developed? I do believe that goals are important and that people are trying to achieve the same goals.

6. I agree with the definition of the transformative process (II) a learning community becomes a community of learners.

D: Yes

P: 5

L: 5

J: 2 My definition of a learning community is a community of learners learning together, sharing and constructing knowledge.

7. I agree with the definition of the Developing Coaching Culture process (III)

D: Yes

P: 5

L: 5

J: 5 Does this extend to the relationships between teachers and students? How do you do this when working with the senior team?

8. Some other general remark, recommendation etc. I would like to add-

L: It is fruitful to use creative methods for developing organizational culture and opening up. It is important for the leaders to lead.

J: The timeframe of one year only seems very short to be able to get definite outcome improvements. How can these be attributed to the coaching? What evidence do you have of this?

9. I identify similar levels of change throughout the organization, during coaching

D: Change is a word that has many meanings according to context. I am not sure.

P: 3 Sometimes

L: 4 I agree but have not observed it

J: 3 It is hard to know without seeing the data

10. I use this information, about change levels in my work. (If so, please explain in what ways)

D: No answer.

P: 3 Sometimes

L: 2

J: You did not use the term change in paper I

11. I have seen evidence of transfer of coaching skills and knowledge in similar ways in my work as well

D: Yes

P: 5

L: 5

J: 4

12. I have also seen some additional ways to transfer coaching skills and knowledge

D: Not enough information to comment

P: 5

L: 5

J: 4

13. I agree, that the transfer of skills and knowledge could be seen as evidence of coaching effectiveness

D: Yes in part, but the creation of new skills and knowledge is important too.

P: 5

L: 5

J: 5

14. I try to facilitate the transfer of knowledge and skills. (If so, please explain in what ways).

D: Self coaching skills are part of the mix

P: 5 Using coachable moments

L: 5

J: 5 Through using meta cognition of the learning process with participants

15. I have been aware to the common parallel situation of stuckness between coach and coachee, as explained by "parallel cycles".

D: This is an interesting area. What external evidence do you have for this? I can see real value in exploring this in more depth. Do you have references?

P: 1 An unhelpful concept

L: 5

J: 1

16. I have deliberately used the parallel cycles' idea as explained, to help coaching processes when needed.

D: I work with moments of discontent Eric De Hann. Look at critical incidents in coaching

P: 1 As above

L: 2

J: 1

17. Some other general remark, recommendation etc. I would like to add-

L: there is for me a problem calling all this coaching. I would call it organizational work or organizational development. Stuckness in a situation like this is more often discussed among coach and managers and with a supper coach, a professional colleague or on a continuous follow-up.

J: Did you do narrative analysis? Was there any observations in your data gathering? It sounds an interesting study, but I think you are making a lot of assumptions and generalizations at this stage.

#### **Appendix 4.2 - Delphi second round-**

a. Questions I was asked and my answers to them as were sent to the participants, b.

The consensus achieved in the first round as sent to participants,

c. Participants reactions.

### a. Questions and answers

The following table, which was sent to participants included all questions asked during the first Delphi round.

Questions and answers about the research

| # | Question   | Answer   |
|---|--|--|
| 1 | What were you trying to validate through this Delphi process – your model – or your research findings? | First, I wanted to validate the model. In addition, I wanted to improve my work. Following the qualitative paradigm (mixed method used), I wanted to make sense of what I had found. I shared my interpretations of the data collected with you, asking if evidence your work supplied, lead you to similar ideas, or if you thought my ideas made sense when revisiting your experience.  |
| 2 | Who was coaching?  | I was the coach during the intervention  |
| 3 | Do the coaches working have professional development?  | The coach is an experienced certified expert coach. The coach has the benefit of supervision from a senior experienced certified coach.  |
| 4 | Who was being coached?   | In this case, the school principal, his two deputies and the school management as a team   |
| 5 | For what purpose?  | The overall purpose of the coaching was improving the quality of the school's learning outcomes.   |
| 6 | How was the coaching carried out?  | Individually every two weeks and Group coaching once a month.  |
| 7 | Where was the coaching conducted?  | In the school.   |
| 8 | How do you determine effectiveness of coaching?  | We used the following indicators of effectiveness-<br>The coaching contract establishes measurable goals; achievement of the goals (hard data) is agreed to be a measure of effectiveness.<br>The coaching intervention focused on the development of three processes that were followed throughout the coaching intervention and facilitated.<br>Measurements of items described in (a) and (b) are taken before, and immediately after and compared.<br>For the study there was a longitudinally (months following the coaching process) as well. Results were analyzed statistically. Quantitative data was triangulated with qualitative data. |
| 9 | How do the school's learning outcomes relate to coaching?  | Learning outcomes is what the school management and learning community produce. The quality of these outcomes is an indication of the quality of the learning processes the school's staff manage. Just like widgets are the outcome of some industrial processes managed by business executives.  |

|    |  |  |
|----|--|--|
| 0  | How was the vision developed   | There was a vision in school to start with. There usually is some kind of statement in Israeli schools. The work adjusting the vision and up-dating it, started with the principal, continued with the management team and then with the whole staff, (we did not reach the active process of involving the students in the process, this was done the following year, after the study had ended).   |
| 11 | Were there any qualitative interviews with students?<br>Were individual students' attendance and progress monitored?<br>Was there narrative analysis? Were there any observations? | No interviews with students. Attendance of students (and of staff members) was monitored, though not individually as I had hoped. Findings showed significant improvement..<br>No narratives were produced or analyzed, nor were there observations.   |
| 12 | Does coaching culture extend to relationships between teachers and students ?  | School community includes students, they too are part of the organization and take part in creating school learning outcomes. Therefore, creating a coaching culture in school must involve students as well. The coaching culture permeates all school relationships including teacher student relations.   |
| 13 | How is it done working only with the senior team?  | This is a long process, especially when working only with the management team as was done in the case study presented in the research. Coaching skills and the coaching values acquired during coaching sessions are transferred to other school environments throughout the school. The process is shorter in schools where our coaching intervention included working with the teachers as well, but this was not part of this case study. |
| 14 | One year is short for definite outcome improvements. How is this attributed to the coaching? have you got evidence of this?  | That is true. Goals were determined accordingly and achieved. A plan for sustaining achievements and for further specific improvements was put in place in order to maintain the coaching skills and culture created. As part of it, the school decided on continuing with a monthly coaching meeting with the principle.  |
| 15 | Parallel cycles- What external evidence do you have for this? Do you have references?  | The concept belongs to supervision relationships where a coach works on his own experience in order to be better prepared to facilitate coachee development.   |

### Some more about parallel cycles:

During my coaching work, both in life coaching and in executive coaching, I have noticed that at certain points during the coaching process, similar 'stucknesses'

affected me and my coachees. Other coaches I spoke with about this idea, reported having had similar experiences.

During supervision, when I brought a case where the processes being facilitated seemed to be hopelessly bogged down, I was encouraged to look for parallel experiences within myself – in my work or life, and work out ways to facilitate progress. As soon as I was able to “unstuck” my own processes I noticed that the coachee now started to move forward in his own processes.

This was a parallel situation to the one my coachee was experiencing. The work I did in supervision influenced the work I was doing with my coachees, and after a while, I started using it routinely, through reflection on my work.

"Parallel cycles" became part of the language we use in schools we work in. For instance, I have heard a manager, at a coaching session say to her colleagues - "We are acting in 'parallel cycle' to that of our teachers". She explained, that they spoke about their teachers, saying they were incapable of doing things, in the same way those teachers spoke about their students... This same manager realized then, that the management team, should change the way problems are being conceptualized by management if they wanted teacher's stuckness in the classroom to be resolved.

I agree, that this is an interesting point. I have therefore looked for additional evidence for this process and found ample examples of it in other coaching interventions we carried out.

We have now moved to include this process in the training of coaches in certificate and diploma courses and in the training of coaching supervisors.

#### b. Summary of first round of Delphi Expert Group - Creating consensus

### **Delphi Expert Group - Creating consensus around the answers given from first round**

This summary was created on the basis of the information collected from the Delphi participants. The number in brackets indicates the average value found (between 1-5).

5 summaries , in frames are presented, numbered 1-5. Frames with no color present consensus achieved and slightly changed according to information gathered. Frames with grey background present a second try, where no consensus was found. These summaries will be asked about at the end.

### 1. Coaching framework

The stages of work, were found similar to other coaching frameworks by most participants (4). One participant thought that the 'diagnostic stage' should be considered an active coaching stage and therefore incorporated in the KCM Model. As it is, the intervention plan created, is the outcome of this stage of sessions with the principle or/and the school management team. Another participant commented on the data as follows "It is a problem for me calling all this coaching. I would call your work organizational development".

Taking these comments into account I conclude

The KCM is a coaching intervention framework for school development. KCM is based on coaching and aims at facilitating the development of a school coaching culture and make coaching one of school's basic features. Work throughout all six stages of the model, is conducted using coaching skills and values.

The coaching accordingly, serves both as means and as an end.

Our coaching enables the coachees (in person or as a group) to identify their needs, to plan and create the change they want in their own behaviors, in order to achieve the change they want to create in school.

In addition, while coaching is being used as a tool, the coaching values are infused within the school culture, expand throughout it and are internalized by all members of the learning community. The process starts with the management team that is being coached, successes encourage them to use coaching skills in their work with their department colleagues, students and parents and these members of the learning community start gradually using coaching skills and values with students and parents they come in contact with, transforming the school environment into a coaching culture. 1

### 2. Evaluating coaching effectiveness

Three of the concepts were presented as an attempt to find and define ways to evaluate coaching effectiveness using them. The first was **change levels- a**, the second, **the three processes – b** , and the third **transfer of skills and knowledge - c**

**a- Change levels**

There was low agreement on the change levels proposed (3). One participant commented that it was hard to answer without seeing the data. No consensus was found on how to use levels of change information.

#### **b -The three processes suggested**

I divide my conclusions about the processes into two: the definitions (I) and the concept of tracing the processes (II).

I. An overall agreement was found concerning the definitions given to the processes the KCM model facilitates:

**Developing a coaching culture** –The personal and professional learning - all agreed (5),

**Internalization of the school vision** - (4+),

**Transforming the learning community into a community of learners**- The organizational learning- all but one agreed (5). The disagreement stemmed from a change in emphasis on some of the elements of organizational learning: **from** "identifying success, celebrating and learning from it", **to a more general** - "learning together, sharing and constructing knowledge." The consensus reached could therefore be-

Transforming the learning community into a community of learners- Learning together, constructing new knowledge and managing it, identifying successes, sharing and celebrating it. 2

II. Participants mentioned these processes as specifically enhanced during their work, obviously, "whichever the client selects". One optional missing process was suggested – "Relationship review".

In addition, I was told "Coaching is about helping the clients improve their process of reflection".

Reviewing these answers and the answer to the question-"My own coaching framework... tracks similar processes" which was vague, not understood by all participants, and achieved low agreement.

These processes are very general and are tailored into each school according to their vision, bringing their own meaning into the processes, and accordingly, plan specific milestones to monitor their progress along these processes towards their defined goals

Tracking these processes contributes to the evaluation of coaching effectiveness in the field, informs and supports the coaching process itself. 3



### c-Transfer

Evidence of transfer was found by all participants (5). It was also agreed that transfer "could be seen as evidence of coaching effectiveness" (5) with the comment, that " the creation of new skills and knowledge is important too".

All participants suggested ways of facilitating transfer by using "coachable moments", using "self coaching skills" and through "meta cognition in the learning process".

From these answers I conclude:

The transfer of coaching skills and coaching values is valid evidence of coaching effectiveness. Transferring the habit of creating new skills as needed to suit new and different situations is a powerful outcome of both facilitating a coaching culture and of evidence of its existence. 4

### 3. Parallel cycles

This finding had the most varied of results: 2 participants felt that it was "an unhelpful concept". But others graded it 5 or "found real value in exploring this in more depth". No one had been using this specific idea.

As coaching becomes more of a profession and supervision will become part of it's professional culture, we believe that the concept of "parallel cycles" as a descriptive of the two facilitative cycles of mutual development experienced by coach and cohee will become more useful.(more information in the question-answer paper attached.) 5

### c. Participant's answers

| Participant P. | 1 - 5 perfectly agree disagree | Remarks, suggestions, explanations....                         |
|----------------|--------------------------------|--|
| 1              | 1 2 3 4 5                      | This is your definition – so fine.                             |
| 2              | 1 2 3 4 5                      | 4  |
| 3              | 1 2 3 4 5                      | 3 Ok if it's led by the client, otherwise not                  |
| 4              | 1 2 3 4 5                      | 4  |
| 5              | 1 2 3 4 5                      | 1 – it's a complicated, theoretical and unnecessary construct. |

| Participant D. | - 5 perfectly agree<br>1 disagree | Remarks, suggestions, explanations....   |
|----------------|-----------------------------------|--|
| 1              | 1 2 3 4 5                         | There is an argument here for taking into account the larger social context. Coaching/ mentoring in the school environment may be beneficial for students in non-school environments as well   |
| 2              | 1 2 3 4 5                         |  |
| 3              | 1 2 3 4 5                         |  |
| 4              | 1 2 3 4 5                         | Yes! I have some concerns about the notion of TRANSFER of knowledge. Coaching is often more about the CREATION of knowledge i.e. the coach helps the learner expose and develop new meaning from the knowledge they have. Eexpressed as it is, this seems a very directive approach              |
| 5              | 1 2 3 4 5                         | This is interesting from a perspective of academic study of coaching. The coach and coachee can be considered as a dynamic system. For parallel thoughts see Belle Rose Ragins on the quality of mentoring relationships as they key influencers of effectiveness (rather than what mentors do.) |

| Participant J | - 5 perfectly agree 1 disagree | Remarks, suggestions, explanations...   |
|---------------|--------------------------------|---|
| 1             | 1 2 3 (4) 5                    | My research has also shown that the more people are coaching and being coached, the more it transfers into their own leadership practice.                         |
| 2             | 1 2 (3) 4 5                    | I would add more about the 'challenge' there should be in a community of learners – the risk taking, the innovation, the openness to new ideas                    |
| 3             | 1 2 3 (4) 5                    | But progress towards defined goals would be the best indicator. How will we know when we have got there?? Perhaps that is what you are meaning by processes.      |
| 4             | 1 (2) 3 4 5                    | I am really not sure what you mean by transferring the habit of creating new skills. Perhaps it is capability or predisposition – a willingness to try new skills |
| 5             | 1 2 (3) 4 5                    | “parallel” gives the meaning of running alongside each other, not necessarily interfacing. Is this the concept you want, or is it more about metacognition?       |

## Appendix 5

### Interview questions / points for discussion with S-School staff

The interview was semi- structured.

Hereby are the points of interest I talked and asked about with each interviewee.

1. A short description of role and experience
2. What was your most significant positive experience of your school work in the past year? Why was it significant? Was it recognized/mentioned? In what ways? What were the effects the recognition?
3. What do you remember from the school vision? (let the interviewee read the school vision)-Give examples for vision implementation in school from this year. What do you hope to further achieve in this aspect during next year? What will you/ may you contribute to help it happen?
4. Focusing on goals- give examples on personal and team level.
5. Examples for trust and respect amongst the staff and with students.
6. Examples of different LO progress this year (pedagogical, administrative, and socio-cultural).
7. Examples of staff commitment to work,
8. Collaboration- examples.
9. Discussing the ways in which organizational learning was conducted this year.  
Specifically about systematic ways of acknowledging celebrating success.
10. Discussing school coaching culture- examples and suggestions.
11. Complete the following sentences-
  - Work in S-School is...for me
  - Teams in schools are usually\_\_\_\_
  - Teams in schools are usually.....for the students.
  - The team in S-School is\_\_\_\_ for the students.
12. Some other point you would like to mention?

## Appendix 6

### DISC Rubrics (part of the document).

The DISC Rubrics describe five levels for each one of the chosen school culture parameters monitored during KCM (1- being the lowest level, 5- the excellent and highest level).

The levels were designed to suite KCM's five Lichart levels in the DISC questionnaire.

First the 'Safety' and the 'Trust and respect' Rubrics will be presented. Then some quotations of participants who used the Rubrics and The DISC itself as part of the DISC validation process.

#### Safety

1. The school deals daily with student's personal safety and often with staff safety as well. Vandalism, physical violence and verbal violence are common and often outside help is necessary, such as the police, the education ministry or welfare.
2. Students do not feel safe. Every week there is a serious case of verbal violence, physical violence or vandalism (graffiti, a broken window, scratched table..). Home class teachers, counselors and managers are intensely busy finding solutions and taking care of these cases.
3. School safety is satisfying. Once in two weeks at the most there is a vandalism or verbal violence case. Other violence is rare. These incidents are taken care either by the teacher, the home class teacher or the head of the grade. If necessary a counselor is involved.
4. Personal safety is high. Reports about violence of any kind is rare, at the most once a month. These cases are taken care of by the teacher in charge.
5. Personal safety is very high. Physical violence or vandalism is not heard of. Verbal violence is scarce and when accurse, treated and taken care of usually by the students themselves.

## Trust and respect

1. A very low level of trust and respect amongst staff, between staff and management and also towards students and their parents. There is no real listening to needs and difficulties which creates frustration and does not enable finding solutions. Many teachers offend students and do not treat them with respect. This influences the students' behavior amongst themselves and their attitude towards the staff as well. Cheating in exams or assignments is common in high percentages. Many exams are invalidated by the school or by the ministry of education (in cases of matriculation exams).
2. The level of trust and respect amongst the staff, specially within the discipline team is satisfying. The management is usually isolated from the staff and does not treat them with respect. The student's parents, in contrast, are treated respectfully and are usually satisfied by the attitude towards them. Students are not always treated fairly and complaints about insulting students are often heard. This has influence on the student's behavior amongst themselves. Cheating in exams or assignments is common.
3. Teachers treat their colleagues with trust and respect. The management tries to attend to staff's needs, not always managing to give a feeling of understanding and support. Parents do get full attention to any need. Students are treated by most teachers with respect, but amongst themselves, lack of trust and respect is often seen. In some classes and with certain teachers, cheating in exams or assignments is regular.
4. All school staff act with trust and respect amongst themselves. The educational team works with parents in a fully collaborating and trusting manner. The students usually trust the team, who treats them with respect. Students act with respect towards one another. Most students keep purity of exams and their assignments.
5. The whole school community treats one another with trust and respect- the team amongst themselves, towards the students and their parents, between students and

between students and staff. There is full attention and listening to each request or need and a sincere willingness to treat the needs and solve problems.

15 students reported their data using both tools (The DISC and the Rubrics). Their reports to me were by e-mail in Hebrew. Two of the reports were as follows-

*M: "I want to note, that an impressive consistence was found between the level measured by the DISC in the various issues, the relevant description given in the Rubrics and the reality in our school. The descriptions give a perfect picture of the current situation in our school in every one of the aspects discussed".*

*H: "Concerning the degree of 'trust and respect', I tend to agree with the 3ed level description. In regard to the last sentence though, speaking of honesty in tests, I would say that most students are honest in their tests and assignments"*

## **Appendix 7**

Poster Papers from EMCC 13<sup>th</sup> Conference (parts out of the poster)

### **Examining the Effectiveness of Coaching Head Teachers with a View to Improve Praxis.**

...

#### **Research's goals:**

To better understand the demands the coaching process puts on the core of professional skills that support our coaching praxis and to construct an executive coaching model focused on the management of quality and excellence in schools.

#### **Participants:**

Six (6) principals who underwent a coaching procedure with the researcher  
Eight (8) principals who had done so within a different framework

Sixteen (16) principals who expressed in writing their interest in using a coach in the future either for themselves or for subordinate executives.

Six (6) interviewees whose field of expertise is coaching and/or training executives and principals.

### **Research Paradigm:**

An applied qualitative paradigm was selected in order to achieve the study's objectives and construct a praxis model that can best answer the research questions.

### **Research tools:**

Semi-structured interviews, document analysis, a reflective research journal and metaphors generated by the study's participants were employed to collect the data needed.

## Major Findings and Conclusions

1. Different conceptions and definitions of coaching generated a variety of coaching practices and values :

Non interfering facilitative style

Active, leading style

*"One must remember- not I but the head teacher is in the centre... I'll go wherever he wants me to".*

*"I saw many people defining goals which were obviously unsuitable for them. If I'd help them achieve those, I'd Be causing damage".*

**The definition** that emerged from the findings views coaches as -

*professional facilitators of learning, someone who works with the "coachee" to bring out what is latent but is not being effectively used to achieve his/her vision. The coaching framework is collaborative. In Personal Coaching the learning facilitation is a process powered by the dyadic relationship between coach and coachee and by the personal learning the coach is willing to undertake within the dyadic relationship formed. The coach , by declaring his own vision of personal and professional growth, helps start the dialog toward the foundation of a common, dyadic vision. Coach and coachee can then collaborate on, creating the coaching framework that can support the fine tuning of major school processes.*

4. Head teachers reported that Coaching contributed mostly to their personal development . There was little evidence of a robust benefit to the organization.

*"I felt I made a brake through!"* reported one head teacher. *"Coaching was a privilege. The biggest present I got since I became a principal"* reported another.

Some evidence was found regarding the achievement of better administrative learning outcomes such as: reports of *"improvement of team work* or *"higher efficiency"* in the performing of specific tasks. These reports were vague and unspecific

No evidence of pedagogical and/or value oriented learning outcomes was found.

## Appendix 8

From "Coaching at work" an e-journal for subscribers only.

The article was published on the 20/11/06. The journal site-

<http://www.cipd.co.uk/coachingatwork/presales.htm?redir=unsubs>

### **Schooling for success/ Liz Hall**

Describes a study on coaching head teachers in Israel

Coaching can help head teachers translate their knowledge about education into practical skills, says research in Israel.

Coaching, as opposed to mentoring, is the ideal way to help head teachers to develop the management skills they lack, says the study of 30 head teachers in Israel.

"Head teachers of educational organizations reported feelings of isolation...they are in need of management skills, the kind they didn't acquire during their early training days as teachers. Coaching offers a solution for the translation of knowledge to practical skills," says the report.

The research was carried out in Israel by Gilli Beskin, a doctoral student at the University of Derby's Faculty of Education and senior coach with the KATOM Institute. She said the quality of learning outcomes had dropped over the last decade



in Israel and Ministry of Education attempts to address this with mentoring programs had failed.

“None have been worth celebrating or have produced good practice worth mentioning. The slide in learning outcomes quality has steadily continued in spite of the fact that Israeli students study more "school days" than their European and American counterparts.”

“We feel and the study's results indicate that the solution is coaching, not mentoring. Coaching practice requires different skills than mentoring practice,” said Beskin.

Commenting on the research, Shaun Lincoln, programme director, coaching and action learning at the Centre for Excellence in Leadership, which works closely with a number of further education institutions in the UK, agreed that coaching can be a huge addition in education.

He said: “The people management side of things often gets neglected by head teachers and coaching is a way to return to listening to people. It can help them formalize all the excellent stuff which they often leave behind in the classroom.”

“Coaching reminds people of things they use in different situations. It’s actionable awareness,” he said.

Beskin’s report identified the need to define a common clear vision from which to define goals and objectives, along with the need to improve managerial skills such as time management and team leading.

Beskin carried out the research under the supervision of Professor Michael Kreindler, part of the University of Derby’s Faculty of Education and founder of Karmiel College, a post graduate training facility in Israel.

Last year, Beskin and Professor Kreindler co-founded the KATOM Institute, which works with schools desiring to improve performance.

Of the 30 head teachers who participated in the research, 14 had undergone coaching and 16 of were interested in using coaching in the future, either for themselves or for other employees.

The definition of coaches that emerged was: “professional facilitators of learning, someone who works with the “coachee” to bring out what is latent but not being effectively used to achieve his or her vision.”

## Appendix 9

### Categorizing data

The qualitative data was collected in order to strengthen quantitative data- to add vivid stories to the figures arrived at. For instance, H1 hypothesis dealt with improvement of learning outcomes. The first category captured narratives illustrating the LO improvements as an answer to Q1 question -Which learning outcomes had improved during the coaching intervention and in what manner?

In addition, qualitative data was intended to help me improve on the current work; both the model and my coaching. For instance, Q4 question- In what ways had my work improved?

The qualitative data helped me create new knowledge, not part of my early assumptions as expressed in my hypotheses. Question Q3 is an example of that- In what ways can the KCM coaching intervention be evaluated?

Categorizing took time, it evolved as the study progressed. The 'new knowledge' emerged gradually while analyzing the data and finding similar and repeated themes from various origins (different participants and/or documents).

The three categories are graphically illustrated in sections- 4.2.1- 4.2.3.

The following full interview with R1 is hereby presented with colors to show the work done towards categorizing the information as was done with all raw qualitative data.

1. Most of the headers with bold letters are the planned questions according to hypotheses.
2. I realized that the theme **of love**, close relations and so on was very frequent.
3. I tried looking for self- **reflective** comments but there were not many and these were not used.
4. I found evidences **of transfer** of the skills and knowledge obtained through coaching to other experiential fields.
5. Administrative **LOs**
6. Socio-cultural **LOs**

**About me and my job – R1.** Female. Hebrew grammar teacher, in charge of many projects. Homeroom teacher to a 9<sup>th</sup> grade of mostly low achievers from boarding school. Has been teaching 26 years in S-School, 27 in all.

- A student comes to her and shows a magical trick- she watches and admires his show- you should show me a trick every day! The Child grins with pride and goes off.  
"I love them... it is what they need!"

**Good experience** - in charge of a new project for 7-9<sup>th</sup> grade students.(Ogen)

Teachers volunteer to personally help a student. They all need it, mostly ones from the boarding school. I don't have enough teachers. I almost lost a student because I was too practical. I thought of teaching her I should have listened instead... Sit with her and drink a cup of coffee. Focus on the child not on grades, the child not the content. I started to spend time with her. She showed me songs she had written... I need to work on myself...

I decided to see to it that all children would attend class. There was a lot of invisible drop out. I prepared a table and every child that did not miss any lesson that week got a prize. The kids said that prizes should be given to students who have made progress as well. A child who missed 16 lessons and the next week only 7, was told by his friends- their idea – that he has improved, though not enough.. This big paper table was never torn (or put on fire) like many other decorations on the wall. It was very important to them. Now they all come to class regularly but they still wait to be praised at the end of the week and get prizes. It is a ceremony. **Did this affect other classes?** All teachers who were involved in my class knew and cooperated.

I miss having a meeting once a month with all the class staff... when we sat with Michal in the homeroom teachers' forum, Nehama 'bought' the idea. She asked me where I found the special treat they liked as a prize? But any food would do... EB noted the achievement for a while, but then stopped. I asked him to have a notice in the hall... I should have insisted... I am sorry that I didn't. The forum gave an opportunity to acknowledge success. I enjoyed it when R was enthusiastic with my stories.

I took a child who was not entitled to be part of the project, a silent and small student. His classmates regularly abused him. He wanted to get toasted cheese sandwiches. His coach teacher gave those to him regularly and he started to attend most lessons, not all, but much more. He became more confident in class. I am now wavering- how



much should I be involved in helping him I do not want to take over his responsibility?! For instance, he gives his class mates his very expensive phone.

Should I not allow that? I know it is a kind of appeasement towards them. It is their code of behavior...

A child asked me for more private lessons I know he drinks... try to find out how determined he is.

Teachers do not speak enough about the class. We should have regular meetings with the boarding school people as well.

The teachers' goal is not to give up. The very best teachers were given to my class. Last year I had to run after the students in math lessons. Now the vice principal teaches. It is now the management's emphasis on this class's learning.

I gave lessons as much as I could, so that they would be able to take the Hebrew grammar matriculation exam next year. I didn't give in on their presence... I looked for them in the dining room. I was a real "pain..."

**Trust and respect-** (as you are speaking to me I am giving myself a personal account) I insist on an apology if a student hurts anybody. I used to cry here a lot, I was hurt by every little thing. Now I have been strengthened by the great management team here.

The students stole chocolate from my bag. I do not believe them. I think they don't have the personal will to resist stealing. The next week I didn't bring the chocolate. On an excursion they stole a coke from the driver's fridge. I spoke with them and it was returned.

A student with 8 failing marks, very intelligent, had started to work and I, stupidly said in class something about him maybe having to leave school. He was very upset and started shouting. He was right. I apologized to him but he wouldn't forgive me. After several days he came and told everyone he had a birthday, which wasn't true I knew. I told him we should meet for coffee and celebrate. "Really, will you meet with him?" the students asked? When we met and spoke, we decided that the 21/5 would become his birthday. He started off a new way.

**Learning outcomes-** Pedagogical- this year we worked differently, with folders. So all had learning outcomes to show every lesson. It worked well. When they had all the lessons in front of them they realized how important a copybook is, especially with

hierarchic subjects. I gave them a mark on this copybook and students managed better, though maybe the one's who had the copybook would have managed anyway?! Administrative- The work with the forum of homeroom teachers helped. It must be expanded.

But I like the flexibility, things are never permanent and fixed. I think to myself – "what will I have today?!?"

Moral- mutual respect amongst student was very important to me. That the student should feel good and would not hurt anyone. They can be terrible to one another...tread on each other...in school we don't give up. If one runs away he meets the principal. We call parents. No one can smoke, for instance, they must respect the roles. I like the definite proclamation of the management a law must always be obeyed!

Before, things were settled among ourselves. Now we can call in the police if necessary, nothing is overlooked.

There is a lot of cooperation with management they are very sensitive. If there is a serious problem with a student I can always say he will talk with the principal and the principal always finds the time for it.

**Learning organization-** this was a crazy year because of the strike. Not much learning but the homeroom teachers' forum was a frame of organizational learning. I liked the disciplinary group, I wasn't really part of it this year. Everyone wants to be part of a team . I asked to teach Hebrew so that I would have a team.

I wish once a month there would be a celebration of good work. Not only study- helping the house master for instance. The project in which I am involved (Ogen) is not about studying and is a grate success. We are focused on learning, we should concentrate more on the child's good nature .I should have mentioned the good work the teachers did in my project. I will write about it in he mashovit.

One day a student saw me cry because I heard my son was wounded. She told the principal and a few minute later he arrived in class with a glass of water for me. This warmed my heart .I wish my students too, will one day have a manager who finds time for such things.

## Appendix 10

### Research diary

In this part some of the research diary is presented. The pages mentioned are the ones in the original file.

(p.16)...In the whole staff meeting planed, EB wanted to speak of progress and work towards making the vision known and meaningful. Every member of the board shared an incident s/he viewed or was part of in the last week, which represented a good example of a main idea presented in the vision. in a way - celebrating success, and my idea of moving their focus and emotions towards achievements and away from self flagellation. These stories could then be mentioned as part of the evening meeting.

DO told of two sisters who had left the school and decided to come back. There was a long meeting where the decision was they were accepted into the most suitable classes for each, not the classes they had wanted. There were two points she thought of s a success- 1.the fact they came back and decided to stay although not according to their wishes (a different class). DO saw this as an indication of

"Giving every child the specific and suitable answer to her needs " ... (from school vision) 2. The well organized process of reception – the "meeting and coordinating information amongst all people in charge in school" ... (from school vision).

As an outcome of this story, they then decided to better organize the 'new student reception', a procedure which two team members will work on.

EB spoke of the opening of the learning center which was one of the 6 points in the plan established by the management team. He spoke of the excitement he felt having a beginning of an answer for the lowest achievers, which were practically neglected up to this year. This center is planned to grow (DO's plan) and he has found and dedicated funs for this purpose.

MD spoke of the first two meetings with the home class forum (one of the 6 points in the plan established by the management team).The meetings took place during the strike (a sign of high commitment and real enthusiasm and belief in the necessity of the group work according to MD). This forum has started to activate the learning community as planned, and is lead in methods designed to gradually establish a coaching culture amongst staff and through their work further on to the students.

These stories told and discussed during the rest of the meeting were uplifting and left the group in good feeling and were translated into actions ahead.

....

(p.18) The 4<sup>th</sup> management team meeting

As things seemed to me stuck or at least not moving as intensively as I had wanted- partly because of the long strike, I thought it was very important to meet and conserve the momentum. The work done with MD concerning the home class teacher's forum and with JS, planning the HODs work, is constantly progressing and will be progressing even more so, now that work has started again (end of strike). Other members of the management team don't seem as dedicated – and I work with them, mainly by mail. The work with them is slow and seems not to be in their highest of priorities as I think it should be . Even EB does not seem to doing the real work - planning and executing. He is taking a philosophical role –motivating and speaking of the big ideas, about the process.. not enough doing, modeling and leading the staff by action.

EB was very anxious to have this meeting and together decide of ways and actions to further the implementation of the vision at all school levels .It was important, he thought, to show the whole staff the continuation of the process started on the 30<sup>th</sup> of August. I agree it is important, though the work itself and not the showing –off should be the main game...

(p.23) 5<sup>th</sup> meeting with JS (24/12/07)

Coming into her room there was a student asking for some confirmation which was obviously not JS's job to deal with. My asking about it helped her realize how much time she wastes this way. I know and have seen before this is something characteristic of her work and that of others in S-School. She came out with different ideas to change this and wrote it down to further take care of it. New responsible and organized attitude. I will ask about it next time. She then spoke of the Friday incident. She realized I knew about it, and mentioned that this fact shows that there is a process going on, this she said, was part of it. She wasn't sure I would be told and was happy as it is an indication, according to her, that things are being treated and not covered-up or ignored. She told me she felt bad, as a staff member who was present at the scene (not from the management's team) had said, that the team is "a cuckoo nest-



who would want to be a part of it?"...she said she was trying hard to help and do work instead of the missing members (MD and OK1 - ill) and help EB, as it is a difficult time and situation. In our first coaching meeting she said she takes over other people's work, finding it hard to ask for help or to say no. In this situation, she acts in a similar way though now, it is from a strong, not weak point. Out of her understanding of the need and her choice to help. This according to her is a sign of influence of the process she personally is going through as part of the school process,

I liked her awareness, I am not sure her answer is complete. It is in her comfort zone, her usual way of behaving and the way people are used to see her act. In a stressed time it is common to fall into old behaviors. Still, if she feels that way I didn't find it necessary to ask about (?!). This part I felt was important to her and I tried hard to stay in a coaching mode and as far as possible from gossip.

...

**(p. 45) Party time- management team celebrating meeting on the 24/3**

We met at the beginning of the week, in the morning before the students had arrived from home. Eli arranged a pleasant meeting room, not his office as usual; everyone brought food- "The right scenery", as EB said later when we discussed the meeting- "to create the good atmosphere wanted and gain their utmost corporation".

He started by thanking each member and giving the books- a great and very pleasant surprise for all – "we never get presents!?! "Everybody has won, and all must have prizes!" (Carroll Lewis in Alice in Wonderland)

He told them the plan for the meeting though they knew it was going to include a 'result presentation' using their first tables. He wanted to better explain the new tool – its value and usage, which I did-

**The jigsaw puzzle metaphor-** I brought a small 6 piece jigsaw puzzle and laid it out, put together, on my right side- "this, at the beginning of our work together, was your visual model of your own project. It was vivid in your imagination, and whole, though included several components. To gradually bring this image to life, (I moved the puzzle to my left side) several different procedures should take place at the same time along the year, allowing each and every part of the project to realize. After shifting the puzzle back to the right **side**, I went on-"What often happens is, that being busy as you all are and involved in many other important activities, some tend to move single parts of the project over time, then move others. Some parts are forgotten or neglected



for long periods. ( and I took parts of the puzzle, as I was speaking , and moved them each, one at a time, towards the left, putting each down separately , some stayed behind.)

What happens if we don't move the puzzle systematical together all the time? the wholeness of the picture brakes in our mind and to the outside observers- the school-teachers, students... as well.

The planning table helps first well defining the different components/ procedures of the project, and then, moving all of them together by planning specific activities contributing to each component during the planned-for time (each table plans about a month ahead.) and I slowly dragged the whole puzzle to the left.

This explanation created a sudden understanding. The P-R tables became friendly and useful. I saw it happen as they all redid their planning table accordingly and very willingly, and more so, by the fact that 4 of the people announced they would start Immediately using such a table for other projects or activities they have .....

#### (p.55) Closing meeting with EB 24.6.08

I Brought the numbers each team member gave him/herself regarding the project s/he was responsible for- 10 being the indicator of achieving the whole plan as was first seen as a vision when we started. Numbers were between 5-12.

EB wanted to speak through our main processes! Better than I had planned.

Vision-"we needed to break the principle resistance and make the vision into our northern star. We didn't carry out this process well. We didn't make it our centre. The beginning was right - including all the staff in a discussion on the wording, to reflect the place. Somewhere along the line we stopped pushing it. It went on conducted sluggishly, beside other things. Post factum, we should have, in an earlier stage seen to it that the vision would be available to the whole community, hung up in all the classes, in the school doorway. We should have seen to it that the home class teachers would deal with the vision in class and connect it to student's personal visions...

Next year from the beginning I plan to have the vision as a theme in all classes, it will hang in every class and become part of work. I imposed the mission on OK1, in charge of social activities, but there was no process of evaluation or feedback with the home class teachers... Next year I plan to use the visual- cosmetic representation of the vision (the posters) ...

## Appendix 11

### Statistic row information concerning DISC questionnaire

This appendix presents the statistical tables which were the base for all the tables presented concerning DISC questionnaire creation and validation process (3.9.3). The tables are hereby presented according to their order in 3.9.3 and the number is according to the table in the thesis. (1. Sector is connected to table 1)

#### 1. Reliability

Vision items-

##### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .914             | 4          |

##### Item-Total Statistics

|      | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| vis2 | 10.86                      | 9.256                          | .767                             | .902                             |
| vis4 | 10.86                      | 9.250                          | .841                             | .876                             |
| vis5 | 10.91                      | 9.363                          | .846                             | .875                             |
| vis6 | 10.91                      | 9.499                          | .767                             | .901                             |

Pedagogical LO items-

##### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .807             | 4          |

##### Item-Total Statistics

|         | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| plearn1 | 9.02                       | 4.732                          | .742                             | .698                             |
| plearn2 | 8.98                       | 4.599                          | .750                             | .692                             |
| plearn3 | 9.12                       | 4.816                          | .701                             | .719                             |
| achiev  | 9.44                       | 6.535                          | .329                             | .878                             |

Socio-Cultural LO items-

##### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .901             | 7          |

**Item-Total Statistics**

|         | Scale Mean if<br>Item Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
|---------|-------------------------------|--------------------------------------|--|--|
| mlearn1 | 20.45                         | 24.800                               | .751                                   | .882                                   |
| mlearn2 | 20.62                         | 24.826                               | .751                                   | .882                                   |
| mlearn3 | 20.40                         | 24.491                               | .789                                   | .878                                   |
| mlearn4 | 20.37                         | 24.978                               | .721                                   | .885                                   |
| mlearn5 | 20.59                         | 26.495                               | .563                                   | .903                                   |
| mlearn6 | 20.70                         | 24.892                               | .709                                   | .887                                   |
| mlearn7 | 20.64                         | 24.782                               | .686                                   | .890                                   |

Administrative LO items-

**Reliability Statistics**

| Cronbach's<br>Alpha | N of Items |
|---------------------|------------|
| .921                | 6          |

**Item-Total Statistics**

|         | Scale Mean if<br>Item Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
|---------|-------------------------------|--------------------------------------|--|--|
| alearn1 | 18.23                         | 22.216                               | .793                                   | .904                                   |
| alearn2 | 18.53                         | 23.082                               | .771                                   | .907                                   |
| alearn3 | 18.15                         | 22.182                               | .808                                   | .901                                   |
| alearn4 | 18.31                         | 22.604                               | .797                                   | .903                                   |
| alearn5 | 18.31                         | 22.866                               | .786                                   | .905                                   |
| alearn6 | 18.48                         | 23.807                               | .685                                   | .918                                   |

Attitude to work items-

**Reliability Statistics**

| Cronbach's<br>Alpha | N of Items |
|---------------------|------------|
| .846                | 4          |

**Item-Total Statistics**

|      | Scale Mean if<br>Item Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
|------|-------------------------------|--------------------------------------|--|--|
| att1 | 11.58                         | 6.259                                | .665                                   | .813                                   |
| att2 | 11.62                         | 6.192                                | .728                                   | .787                                   |
| att3 | 11.75                         | 6.064                                | .691                                   | .802                                   |
| att4 | 11.61                         | 6.431                                | .651                                   | .819                                   |

Whole questionnaire reliability-

Reliability Statistics

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .947             | 28         |

Item-Total Statistics

|            | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| vis1       | 97.17                      | 310.859                        | .384                             | .947                             |
| vis2       | 96.83                      | 296.379                        | .649                             | .945                             |
| vis3       | 97.33                      | 303.303                        | .541                             | .946                             |
| vis4       | 96.87                      | 297.329                        | .685                             | .945                             |
| vis5       | 96.93                      | 297.648                        | .679                             | .945                             |
| vis6       | 96.91                      | 297.907                        | .617                             | .945                             |
| plearn1    | 97.24                      | 300.342                        | .685                             | .945                             |
| plearn2    | 97.22                      | 301.286                        | .645                             | .945                             |
| plearn3    | 97.35                      | 303.779                        | .562                             | .946                             |
| mlearn_tot | 97.36                      | 301.539                        | .649                             | .945                             |
| mlearn1    | 96.94                      | 296.729                        | .708                             | .944                             |
| mlearn2    | 97.04                      | 296.991                        | .720                             | .944                             |
| mlearn3    | 96.84                      | 294.308                        | .805                             | .943                             |
| mlearn4    | 96.86                      | 296.467                        | .726                             | .944                             |
| mlearn5    | 97.10                      | 301.199                        | .591                             | .946                             |
| mlearn6    | 97.19                      | 297.036                        | .688                             | .945                             |
| mlearn7    | 97.08                      | 298.677                        | .642                             | .945                             |
| alearn1    | 96.63                      | 297.069                        | .649                             | .945                             |
| alearn2    | 96.91                      | 297.014                        | .682                             | .945                             |
| alearn3    | 96.60                      | 296.169                        | .668                             | .945                             |
| alearn4    | 96.73                      | 296.516                        | .713                             | .944                             |
| alearn5    | 96.73                      | 296.266                        | .717                             | .944                             |
| alearn6    | 96.92                      | 297.099                        | .679                             | .945                             |
| achiev     | 97.72                      | 314.463                        | .270                             | .948                             |
| att1       | 96.51                      | 311.083                        | .344                             | .948                             |
| att2       | 96.53                      | 308.263                        | .441                             | .947                             |
| att3       | 96.66                      | 307.864                        | .422                             | .947                             |
| att4       | 96.51                      | 311.099                        | .343                             | .948                             |

## Appendix 12

### Statistic row information for quantitative data

This appendix consists the statistical tables which were the base for all the tables presented in section 4.1 of the thesis, in which quantitative data was presented. The tables are hereby presented according to their order in 4.1. The number next to each subject is according to the relevant table in the thesis.

(For instance – '2. Reliability of questionnaire' as presented in table 2).

### 2. Reliability of questionnaire

#### Pre intervention- staff

##### Vision items-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .546                   | 4          | vis2 11.00                 | 3.444                          | .256                             | .542                             |
|                        |            | vis4 10.32                 | 3.673                          | .156                             | .633                             |
|                        |            | vis5 10.37                 | 3.579                          | .619                             | .343                             |
|                        |            | vis6 10.63                 | 2.801                          | .458                             | .351                             |

##### Pedagogical LOs-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .763                   | 4          | Plear1 9.0000              | 2.600                          | .753                             | .597                             |
|                        |            | Plear2 8.8387              | 2.740                          | .586                             | .695                             |
|                        |            | Plear3 8.8226              | 2.476                          | .769                             | .582                             |
|                        |            | Achiev 9.1452              | 4.070                          | .190                             | .862                             |

##### Socio-cultural LOs-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .631                   | 7          | Mlear1 19.68               | 6.989                          | .354                             | .592                             |
|                        |            | Mlear2 20.41               | 7.539                          | .164                             | .647                             |
|                        |            | Mlear3 19.74               | 6.384                          | .540                             | .536                             |
|                        |            | Mlear4 19.38               | 6.867                          | .403                             | .578                             |
|                        |            | Mlear5 19.65               | 6.831                          | .309                             | .606                             |
|                        |            | Mlear6 20.64               | 6.481                          | .353                             | .592                             |
|                        |            | Mlear7 20.46               | 6.464                          | .324                             | .604                             |

Administrative LOs-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .677                   | 6          | Alear1 18.17               | 6.793                          | .430                             | .628                             |
|                        |            | Alear2 18.47               | 6.426                          | .428                             | .628                             |
|                        |            | Alear3 17.19               | 6.413                          | .563                             | .584                             |
|                        |            | Alear4 17.50               | 7.132                          | .251                             | .693                             |
|                        |            | Alear5 17.73               | 7.608                          | .244                             | .684                             |
|                        |            | Alear6 17.44               | 6.217                          | .564                             | .580                             |

Attitudes to work-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .607                   | 4          | Att1 11.82                 | 2.479                          | .426                             | .516                             |
|                        |            | Att2 12.18                 | 1.722                          | .572                             | .364                             |
|                        |            | Att3 12.32                 | 2.492                          | .265                             | .628                             |
|                        |            | Att4 12.32                 | 2.546                          | .320                             | .582                             |

Whole questionnaire-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .783                   | 22         | Plear1 73.1207             | 44.047                         | .472                             | .766                             |
|                        |            | Plear2 72.9483             | 48.560                         | -.002                            | .795                             |
|                        |            | Plear3 72.9310             | 45.477                         | .368                             | .773                             |
|                        |            | Mlear_tot 73.0862          | 45.626                         | .290                             | .777                             |
|                        |            | Mlear1 72.4310             | 47.799                         | .116                             | .785                             |
|                        |            | Mlear2 73.1552             | 45.930                         | .318                             | .775                             |
|                        |            | Mlear3 72.5345             | 43.802                         | .494                             | .765                             |
|                        |            | Mlear4 72.1897             | 44.025                         | .524                             | .764                             |
|                        |            | Mlear5 72.4310             | 45.263                         | .295                             | .777                             |
|                        |            | Mlear6 73.4483             | 43.613                         | .427                             | .768                             |
|                        |            | Mlear7 73.1207             | 45.083                         | .251                             | .781                             |
|                        |            | Alear1 72.9483             | 43.060                         | .494                             | .764                             |
|                        |            | Alear2 73.3276             | 41.558                         | .547                             | .759                             |
|                        |            | Alear3 71.8793             | 45.190                         | .353                             | .773                             |
|                        |            | Alear4 72.2241             | 44.046                         | .400                             | .770                             |
|                        |            | Alear5 72.5345             | 44.802                         | .357                             | .773                             |
|                        |            | Alear6 72.1897             | 45.347                         | .266                             | .779                             |
|                        |            | Achiev 73.2759             | 47.546                         | .215                             | .780                             |
|                        |            | Att1 71.7069               | 46.438                         | .369                             | .774                             |
|                        |            | Att2 72.0517               | 45.953                         | .247                             | .780                             |
|                        |            | Att3 72.1897               | 47.561                         | .094                             | .789                             |
|                        |            | Att4 72.0862               | 44.948                         | .481                             | .768                             |

Pre intervention-students

Socio-cultural

LOs-

Reliability Statistics

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .688             | 7          |

| Cronbach's Alpha if Item Deleted | Corrected Item-Total Correlation | Scale Variance if Item Deleted | Scale Mean if Item Deleted |        |
|----------------------------------|----------------------------------|--------------------------------|----------------------------|--------|
| .645                             | .442                             | 13.812                         | 20.16                      | mlear1 |
| .596                             | .600                             | 12.108                         | 21.00                      | mlear2 |
| .669                             | .335                             | 14.415                         | 20.74                      | mlear3 |
| .673                             | .321                             | 14.310                         | 20.53                      | mlear4 |
| .659                             | .388                             | 12.711                         | 20.79                      | mlear5 |
| .682                             | .293                             | 14.000                         | 21.00                      | mlear6 |
| .645                             | .430                             | 12.475                         | 20.89                      | mlear7 |

Administrative LOs-

Reliability Statistics

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .705             | 6          |

| Cronbach's Alpha if Item Deleted | Corrected Item-Total Correlation | Scale Variance if Item Deleted | Scale Mean if Item Deleted |        |
|----------------------------------|----------------------------------|--------------------------------|----------------------------|--------|
| .680                             | .403                             | 10.491                         | 18.19                      | alear1 |
| .705                             | .299                             | 10.234                         | 18.35                      | alear2 |
| .730                             | .191                             | 11.012                         | 17.65                      | alear3 |
| .587                             | .641                             | 7.411                          | 18.76                      | alear4 |
| .592                             | .627                             | 7.234                          | 18.65                      | alear5 |
| .652                             | .490                             | 9.453                          | 17.86                      | alear6 |

Staff attitude to work-

Reliability Statistics

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .786             | 4          |

| Cronbach's Alpha if Item Deleted | Corrected Item-Total Correlation | Scale Variance if Item Deleted | Scale Mean if Item Deleted |      |
|----------------------------------|----------------------------------|--------------------------------|----------------------------|------|
| .795                             | .456                             | 9.548                          | 10.96                      | att1 |
| .702                             | .657                             | 7.902                          | 10.68                      | att2 |
| .725                             | .609                             | 7.821                          | 11.22                      | att3 |
| .693                             | .674                             | 6.652                          | 11.14                      | att4 |

Whole questionnaire-

Reliability Statistics

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .869             | 18         |

| Cronbach's Alpha if Item Deleted | Corrected Item-Total Correlation | Scale Variance if Item Deleted | Scale Mean if Item Deleted |        |
|----------------------------------|----------------------------------|--------------------------------|----------------------------|--------|
| .868                             | .336                             | 95.270                         | 60.61                      | plear1 |
| .859                             | .606                             | 91.305                         | 60.03                      | mlear1 |
| .857                             | .629                             | 88.894                         | 60.84                      | mlear2 |
| .863                             | .483                             | 92.690                         | 60.56                      | mlear3 |
| .866                             | .393                             | 93.805                         | 60.28                      | mlear4 |
| .865                             | .431                             | 91.660                         | 60.47                      | mlear5 |
| .864                             | .453                             | 93.012                         | 60.69                      | mlear6 |
| .865                             | .440                             | 91.177                         | 60.75                      | mlear7 |
| .868                             | .312                             | 97.516                         | 60.38                      | alear1 |
| .874                             | .156                             | 98.717                         | 60.59                      | alear2 |
| .867                             | .377                             | 95.547                         | 59.78                      | alear3 |
| .858                             | .599                             | 87.980                         | 60.94                      | alear4 |
| .855                             | .659                             | 86.238                         | 60.81                      | alear5 |
| .859                             | .585                             | 91.628                         | 60.03                      | alear6 |
| .871                             | .279                             | 95.677                         | 60.27                      | att1   |
| .867                             | .371                             | 93.431                         | 59.94                      | att2   |
| .850                             | .744                             | 83.948                         | 60.56                      | att3   |
| .849                             | .748                             | 82.015                         | 60.47                      | att4   |

Post intervention –Staff

Vision-

Item-Total Statistics

|      | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| vis2 | 11.18                      | 2.823                          | .270                             | .711                             |
| vis4 | 10.86                      | 2.409                          | .643                             | .412                             |
| vis5 | 11.00                      | 3.143                          | .439                             | .576                             |
| vis6 | 11.27                      | 2.874                          | .417                             | .581                             |

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .644             | 4          |

Pedagogical LOs-

Item-Total Statistics

|        | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|--------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Plear1 | 9.63                       | 1.875                          | .482                             | .601                             |
| Plear2 | 9.75                       | 1.652                          | .559                             | .544                             |
| Plear3 | 9.77                       | 2.000                          | .434                             | .632                             |
| Achiev | 10.23                      | 2.391                          | .397                             | .658                             |

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .680             | 4          |

Socio-cultural LOs-

Item-Total Statistics

|        | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|--------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Mlear1 | 21.00                      | 10.815                         | .575                             | .716                             |
| Mlear2 | 21.68                      | 11.115                         | .497                             | .732                             |
| Mlear3 | 21.07                      | 11.847                         | .461                             | .740                             |
| Mlear4 | 20.71                      | 11.249                         | .582                             | .719                             |
| Mlear5 | 21.25                      | 12.120                         | .220                             | .795                             |
| Mlear6 | 21.71                      | 10.582                         | .503                             | .731                             |
| Mlear7 | 21.71                      | 9.767                          | .625                             | .700                             |

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .764             | 7          |

Feel of safety-

Item-Total Statistics

|        | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|--------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Mlear1 | 6.19                       | 2.351                          | .597                             | .643                             |
| Mlear2 | 6.91                       | 2.410                          | .515                             | .726                             |
| Mlear7 | 6.91                       | 1.830                          | .626                             | .604                             |

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .747             | 3          |



AdministrativeLO-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .632                   | 6          | Alear1 19.03               | 7.282                          | .316                             | .611                             |
|                        |            | Alear2 19.52               | 6.441                          | .474                             | .540                             |
|                        |            | Alear3 18.21               | 8.363                          | .174                             | .656                             |
|                        |            | Alear4 18.31               | 7.878                          | .382                             | .586                             |
|                        |            | Alear5 18.58               | 6.585                          | .528                             | .519                             |
|                        |            | Alear6 18.21               | 8.030                          | .335                             | .600                             |

Attitude to work-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .723                   | 4          | Att1 12.39                 | 3.312                          | .292                             | .811                             |
|                        |            | Att2 12.77                 | 3.047                          | .695                             | .571                             |
|                        |            | Att3 12.84                 | 3.140                          | .453                             | .698                             |
|                        |            | Att4 12.61                 | 2.912                          | .719                             | .548                             |

Whole questionnaire-

| Reliability Statistics |            | Item-Total Statistics      |                                |                                  |                                  |
|------------------------|------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Cronbach's Alpha       | N of Items | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| .883                   | 22         | Plear1 76.57               | 75.582                         | .340                             | .882                             |
|                        |            | Plear2 76.67               | 77.458                         | .181                             | .886                             |
|                        |            | Plear3 76.69               | 77.462                         | .220                             | .884                             |
|                        |            | Mlear_tot 76.86            | 70.954                         | .658                             | .873                             |
|                        |            | Mlear1 76.38               | 71.773                         | .578                             | .875                             |
|                        |            | Mlear2 76.90               | 71.415                         | .713                             | .872                             |
|                        |            | Mlear3 76.29               | 73.189                         | .552                             | .876                             |
|                        |            | Mlear4 76.05               | 73.323                         | .549                             | .876                             |
|                        |            | Mlear5 76.33               | 74.408                         | .317                             | .884                             |
|                        |            | Mlear6 77.19               | 71.687                         | .599                             | .875                             |
|                        |            | Mlear7 77.10               | 68.065                         | .708                             | .870                             |
|                        |            | Alear1 76.55               | 72.073                         | .514                             | .877                             |
|                        |            | Alear2 77.21               | 66.189                         | .679                             | .871                             |
|                        |            | Alear3 75.86               | 77.004                         | .244                             | .884                             |
|                        |            | Alear4 76.19               | 76.137                         | .324                             | .882                             |
|                        |            | Alear5 76.52               | 70.887                         | .534                             | .877                             |
|                        |            | Alear6 76.10               | 77.265                         | .182                             | .887                             |
|                        |            | Achiev 77.21               | 75.914                         | .450                             | .880                             |
|                        |            | Att1 75.52                 | 77.137                         | .208                             | .885                             |
|                        |            | Att2 75.95                 | 72.473                         | .643                             | .874                             |
|                        |            | Att3 76.00                 | 72.975                         | .495                             | .878                             |
|                        |            | Att4 75.85                 | 70.504                         | .771                             | .870                             |

## Post intervention-students Socio-cultural LOs-

Item-Total Statistics

|        | Scale Mean if<br>Item Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
|--------|-------------------------------|--------------------------------------|--|--|
| Mlear1 | 20.40                         | 17.621                               | .428                                   | .771                                   |
| Mlear2 | 21.15                         | 16.345                               | .653                                   | .731                                   |
| Mlear3 | 20.65                         | 17.818                               | .565                                   | .752                                   |
| Mlear4 | 20.35                         | 16.555                               | .546                                   | .749                                   |
| Mlear5 | 20.75                         | 16.829                               | .559                                   | .747                                   |
| Mlear6 | 20.90                         | 13.989                               | .574                                   | .750                                   |
| Mlear7 | 20.70                         | 18.221                               | .330                                   | .789                                   |

Reliability Statistics

| Cronbach's<br>Alpha | N of Items |
|---------------------|------------|
| .784                | 7          |

## Administrative LOs

Item-Total Statistics

|        | Scale Mean if<br>Item Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
|--------|-------------------------------|--------------------------------------|--|--|
| Alear1 | 18.91                         | 8.563                                | .432                                   | .516                                   |
| Alear2 | 19.32                         | 9.084                                | .363                                   | .550                                   |
| Alear3 | 18.00                         | 11.619                               | .281                                   | .588                                   |
| Alear4 | 18.95                         | 9.855                                | .355                                   | .553                                   |
| Alear5 | 18.91                         | 10.182                               | .249                                   | .598                                   |
| Alear6 | 18.64                         | 9.671                                | .380                                   | .543                                   |

Reliability Statistics

| Cronbach's<br>Alpha | N of Items |
|---------------------|------------|
| .605                | 6          |

## Staff attitude to work-

Item-Total Statistics

|      | Scale Mean if<br>Item Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
|------|-------------------------------|--------------------------------------|--|--|
| Att1 | 11.10                         | 6.490                                | .630                                   | .687                                   |
| Att2 | 10.86                         | 6.529                                | .531                                   | .717                                   |
| Att3 | 11.33                         | 4.233                                | .757                                   | .562                                   |
| Att4 | 11.29                         | 5.214                                | .431                                   | .795                                   |

Reliability Statistics

| Cronbach's<br>Alpha | N of Items |
|---------------------|------------|
| .754                | 4          |

## Whole questionnaire-

Item-Total Statistics

|        | Scale Mean if<br>Item Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
|--------|-------------------------------|--------------------------------------|--|--|
| Plear1 | 61.21                         | 90.620                               | .489                                   | .846                                   |
| Mlear1 | 60.95                         | 90.608                               | .535                                   | .844                                   |
| Mlear2 | 61.68                         | 88.117                               | .712                                   | .837                                   |
| Mlear3 | 61.16                         | 93.696                               | .458                                   | .848                                   |
| Mlear4 | 60.84                         | 89.363                               | .549                                   | .843                                   |
| Mlear5 | 61.21                         | 87.953                               | .680                                   | .838                                   |
| Mlear6 | 61.37                         | 89.135                               | .363                                   | .855                                   |
| Mlear7 | 61.21                         | 96.064                               | .202                                   | .858                                   |
| Alear1 | 61.00                         | 91.778                               | .340                                   | .853                                   |
| Alear2 | 61.37                         | 92.801                               | .337                                   | .853                                   |
| Alear3 | 60.16                         | 97.918                               | .235                                   | .855                                   |
| Alear4 | 61.11                         | 93.766                               | .299                                   | .854                                   |
| Alear5 | 61.00                         | 87.000                               | .588                                   | .840                                   |
| Alear6 | 60.79                         | 90.509                               | .467                                   | .847                                   |
| Att1   | 60.84                         | 89.140                               | .853                                   | .836                                   |
| Att2   | 60.63                         | 91.801                               | .554                                   | .844                                   |
| Att3   | 61.11                         | 84.877                               | .658                                   | .837                                   |
| Att4   | 61.11                         | 92.544                               | .274                                   | .858                                   |

Reliability Statistics

| Cronbach's<br>Alpha | N of Items |
|---------------------|------------|
| .854                | 18         |

3. Descriptive statistics pre intervention

Staff-

| Std. Deviation | Mean   | Maximum | Minimum | N  |                                       |
|----------------|--------|---------|---------|----|---------------------------------------|
| 1.126          | 2.29   | 4       | 1       | 35 | Knowledge / school vision             |
| .996           | 2.91   | 4       | 1       | 23 | The ownership of School vision        |
| .59971         | 3.4200 | 4.75    | 2.33    | 25 | Vision                                |
| .53716         | 2.9402 | 3.75    | 1.50    | 39 | PLOs                                  |
| .41591         | 3.3321 | 4.21    | 2.43    | 38 | SCLOs                                 |
| .52917         | 3.5092 | 5.00    | 2.00    | 38 | ALOs                                  |
| .48392         | 4.0342 | 5.00    | 3.00    | 39 | Attitude to work                      |
| 1.678          | 2.62   | 5       | 1       | 29 | Manners of Organizational Learning    |
| 1.381          | 2.92   | 5       | 1       | 36 | Acknowledging and Celebrating success |
|                |        |         |         | 16 | Valid N                               |

Students-

| Std. Deviation | Mean   | Maximum | Minimum | N  |                  |
|----------------|--------|---------|---------|----|------------------|
| .839           | 3.41   | 5       | 2       | 40 | PLOs             |
| .59304         | 3.4821 | 4.57    | 2.14    | 40 | SCLOs            |
| .58820         | 3.6350 | 4.50    | 2.50    | 40 | ALOs             |
| .89142         | 3.6491 | 5.00    | 1.50    | 38 | Attitude to work |
|                |        |         |         | 38 | Valid N          |

4. Descriptive statistics post intervention

Staff-

| Descriptive Statistics |    |         |         |        |                |
|------------------------|----|---------|---------|--------|----------------|
|                        | N  | Minimum | Maximum | Mean   | Std. Deviation |
| vis1                   | 33 | 1       | 4       | 2.97   | 1.015          |
| vis3                   | 26 | 2       | 4       | 3.50   | .648           |
| vision                 | 28 | 2.75    | 5.00    | 3.7292 | .51800         |
| plearn                 | 32 | 2.00    | 4.00    | 3.2214 | .47560         |
| mlearn                 | 33 | 2.57    | 4.57    | 3.4746 | .54070         |
| alearn                 | 33 | 2.50    | 5.00    | 3.7449 | .51368         |
| att                    | 31 | 3.00    | 5.00    | 4.2177 | .56178         |
| Mlearn_tot             | 30 | 2       | 5       | 3.30   | .750           |
| Lorg1                  | 28 | 1       | 5       | 3.04   | 1.666          |
| Lorg2                  | 29 | 1       | 5       | 2.90   | 1.472          |
| mlearn127              | 33 | 2.00    | 4.67    | 3.3232 | .68963         |
| mlearn36               | 33 | 2.00    | 4.50    | 3.4242 | .65098         |
| mlearn45               | 33 | 2.00    | 5.00    | 3.7879 | .70744         |
| learning               | 34 | 2.76    | 4.29    | 3.5193 | .40738         |
| Valid N (listwise)     | 18 |         |         |        |                |

Students-

| Std. Deviation | Mean   | Maximum | Minimum | N  |                                |
|----------------|--------|---------|---------|----|--------------------------------|
| 1.065          | 1.91   | 4       | 1       | 22 | Knowledge / school vision      |
| 1.168          | 3.50   | 5       | 1       | 12 | The ownership of School vision |
| 1.00578        | 2.9286 | 4.67    | 1.00    | 14 | vision                         |
| 1.012          | 3.50   | 5       | 1       | 22 | PLOs                           |
| .69722         | 3.4167 | 4.67    | 2.33    | 22 | Feel of safety                 |
| .98253         | 3.3182 | 4.50    | 1.50    | 22 | Trust and respect              |
| .84419         | 3.6136 | 5.00    | 1.50    | 22 | Voluntary                      |

|        |        |      |      |    |                    |
|--------|--------|------|------|----|--------------------|
| .65707 | 3.4394 | 4.71 | 2.00 | 22 | SCLOs              |
| .60362 | 3.7576 | 4.83 | 2.67 | 22 | ALOs               |
| .55037 | 3.5812 | 4.71 | 2.43 | 22 | LOs                |
| .76847 | 3.7576 | 4.75 | 1.50 | 22 | Attitude to work   |
| .48924 | 3.4936 | 4.61 | 2.35 | 22 | totvars            |
|        |        |      |      | 12 | Valid N (listwise) |

5. Student vision-

Post intervention (pre intervention was taken from excel)

| Item-Total Statistics |                            |                                |                                  |                                  |
|-----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                       | Scale Mean If Item Deleted | Scale Variance If Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| vis1                  | 77.33                      | 186.242                        | .188                             | .898                             |
| vis3                  | 76.17                      | 192.333                        | .011                             | .901                             |
| vis2                  | 76.75                      | 173.477                        | .583                             | .887                             |
| vis4                  | 76.17                      | 182.879                        | .424                             | .891                             |
| vis5                  | 76.58                      | 177.174                        | .599                             | .887                             |
| Flear1                | 76.33                      | 178.242                        | .512                             | .889                             |
| Mlear1                | 76.17                      | 171.061                        | .767                             | .882                             |
| Mlear2                | 76.75                      | 172.932                        | .769                             | .883                             |
| Mlear3                | 76.25                      | 181.295                        | .493                             | .889                             |
| Mlear4                | 75.92                      | 177.720                        | .541                             | .888                             |
| Mlear5                | 76.25                      | 170.568                        | .788                             | .882                             |
| Mlear6                | 76.50                      | 179.727                        | .350                             | .894                             |
| Mlear7                | 76.17                      | 184.879                        | .340                             | .892                             |
| Alear1                | 75.92                      | 183.174                        | .230                             | .898                             |
| Alear2                | 76.17                      | 184.515                        | .258                             | .895                             |
| Alear3                | 75.17                      | 191.970                        | .126                             | .895                             |
| Alear4                | 76.00                      | 180.909                        | .460                             | .890                             |
| Alear5                | 76.08                      | 166.265                        | .728                             | .882                             |
| Alear6                | 75.67                      | 173.879                        | .693                             | .884                             |
| Att1                  | 76.00                      | 173.273                        | .856                             | .882                             |
| Att2                  | 75.58                      | 179.356                        | .576                             | .888                             |
| Att3                  | 76.33                      | 168.061                        | .720                             | .882                             |
| Att4                  | 76.42                      | 173.538                        | .494                             | .890                             |

6-7/ 17-18 Change in staff conception of school learning outcomes pre (1) to post(2) coaching intervention (group variables)

| Std. Error Mean | Std. Deviation | Mean | N  | time |                  |
|-----------------|----------------|------|----|------|------------------|
| .06346          | .40            | 3.29 | 39 | 1    | LOs              |
| .06987          | .41            | 3.52 | 34 | 2    |                  |
| .11994          | .60            | 3.42 | 25 | 1    | vision           |
| .09789          | .52            | 3.73 | 28 | 2    |                  |
| .08601          | .54            | 2.94 | 39 | 1    | PLOs             |
| .08407          | .48            | 3.22 | 32 | 2    |                  |
| .06747          | .42            | 3.33 | 38 | 1    | SCLOs            |
| .09412          | .54            | 3.47 | 33 | 2    |                  |
| .08584          | .53            | 3.51 | 38 | 1    | ALOs             |
| .08942          | .51            | 3.74 | 33 | 2    |                  |
| .07749          | .48            | 4.03 | 39 | 1    | Attitude to work |
| .10090          | .56            | 4.22 | 31 | 2    |                  |

| Independent Samples Test |                         |   |      |                              |    |                 |
|--------------------------|-------------------------|---|------|------------------------------|----|-----------------|
|                          |                         | Levene's Test for Equality of Variances |      | t-test for Equality of Means |    |                 |
|                          |                         | F                                       | Sig. | t                            | df | Sig. (2-tailed) |
| learning                 | Equal variances assumed | .870                                    | .354 | -2.456                       | 71 | .016            |
| vision                   | Equal variances assumed | .554                                    | .460 | -2.014                       | 51 | .049            |
| pleam                    | Equal variances assumed | .356                                    | .553 | -2.310                       | 69 | .024            |
| mlearn                   | Equal variances assumed | 3.949                                   | .051 | -1.253                       | 69 | .214            |
| aleam                    | Equal variances assumed | .086                                    | .770 | -1.898                       | 69 | .062            |
| att                      | Equal variances assumed | 1.247                                   | .268 | -1.468                       | 68 | .147            |

## 19. Change in independent items staff

Test Statistics<sup>a</sup>

|                        | vis1     | vis2    | vis3    | vis4    | vis5    | vis6    | Plear1   | Plear2   | Plear3  | Mlear tot |
|------------------------|----------|---------|---------|---------|---------|---------|----------|----------|---------|-----------|
| Mann-Whitney U         | 380.000  | 206.500 | 201.500 | 269.000 | 259.500 | 220.000 | 384.000  | 443.500  | 317.500 | 437.500   |
| Wilcoxon W             | 1010.000 | 531.500 | 477.500 | 569.000 | 535.500 | 496.000 | 1087.000 | 1146.500 | 878.500 | 1067.500  |
| Z                      | -2.517   | -2.520  | -2.115  | -.905   | -.697   | -.264   | -2.523   | -1.724   | -1.363  | -1.255    |
| Asymp. Sig. (2-tailed) | .012     | .012    | .034    | .366    | .486    | .792    | .012     | .085     | .173    | .209      |

a. Grouping Variable: time

## 21. Change in student conception of school learning outcomes pre (1) to post(2) coaching intervention (group variables)

| Std. Error Mean | Std. Deviation | Mean   | N  | time |                        |
|-----------------|----------------|--------|----|------|------------------------|
| .08418          | .53243         | 3.5425 | 40 | 1    | LOs                    |
| .11734          | .55037         | 3.5812 | 22 | 2    |                        |
| .133            | .839           | 3.41   | 40 | 1    | PLO                    |
| .216            | 1.012          | 3.50   | 22 | 2    |                        |
| .12525          | .79213         | 3.5375 | 40 | 1    | Feel of safety         |
| .14865          | .69722         | 3.4167 | 22 | 2    |                        |
| .10056          | .63599         | 3.3250 | 40 | 1    | Trust and respect      |
| .20948          | .98253         | 3.3182 | 22 | 2    |                        |
| .13179          | .83349         | 3.5625 | 40 | 1    | Volunteering           |
| .17998          | .84419         | 3.6136 | 22 | 2    |                        |
| .09377          | .59304         | 3.4821 | 40 | 1    | SCLOs                  |
| .14009          | .65707         | 3.4394 | 22 | 2    |                        |
| .09300          | .58820         | 3.6350 | 40 | 1    | ALOs                   |
| .12869          | .60362         | 3.7576 | 22 | 2    |                        |
| .14461          | .89142         | 3.6491 | 38 | 1    | Staff attitude To work |
| .16384          | .76847         | 3.7576 | 22 | 2    |                        |

| t-test for Equality of Means |                 |                 | Levene's Test for Equality of Variances |       |           |
|------------------------------|-----------------|-----------------|---|-------|-----------|
| Std. Error Difference        | Mean Difference | Sig. (2-tailed) | df                                      | t     |           |
| Lower                        | Upper           | Lower           | Upper                                   | Lower |           |
|                              |                 |                 |   |       |           |
| .14301                       | -.03866         | .788            | 60                                      | -.270 | learning  |
| .240                         | -.088           | .716            | 60                                      | -.365 | plear1    |
| .20180                       | .12083          | .552            | 60                                      | .599  | mlearn127 |
| .23236                       | .00682          | .977            | 30.910                                  | .029  | mlearn36  |
| .22223                       | -.05114         | .819            | 60                                      | -.230 | mlearn45  |
| .16356                       | .04275          | .795            | 60                                      | .261  | mlearn    |
| .15757                       | -.12258         | .440            | 60                                      | -.778 | alearn    |
| .22744                       | -.10845         | .635            | 58                                      | -.477 | att       |

# 11. Math-English-Hebrew grades in S-junior high School 2007

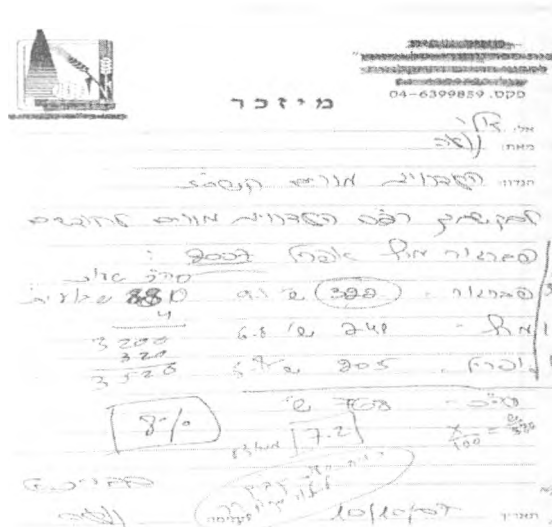
| No. of students failing | No of students | Hebrew | No. of students failing | No of students | Math | No. of students failing | No of students | English | Class              |
|-------------------------|----------------|--------|-------------------------|----------------|------|-------------------------|----------------|---------|--------------------|
| 1                       | 28             | 78     |                         | 8              | 78   |                         | 8              | *92     | 7 <sup>th</sup> -1 |
|                         |                |        | 1                       | 12             | 76   | 1                       | 20             | 88      |                    |
|                         |                |        | 3                       | 8              | 77   |                         |                |         |                    |
| 1                       | 27             | 87     |                         | 10             | 85   |                         | 18             | 72      | 7 <sup>th</sup> -2 |
|                         |                |        |                         | 10             | 76   |                         | 9              | 87*     |                    |
|                         |                |        | 1                       | 7              | 62   |                         |                |         |                    |
| 1                       | 30             | 76     | 2                       | 14             | 73   | 2                       | 10             | 86      | 8 <sup>th</sup> -1 |
|                         |                |        | 2                       | 5              | 53   | 2                       | 9              | 63      |                    |
|                         |                |        | 5                       | 11             | 64   |                         | 11             | 92*     |                    |
| 1                       | 31             | 74     |                         | 4              | 69   |                         | 16             | 84      | 8 <sup>th</sup> -2 |
|                         |                |        |                         | 15             | 73   | 1                       | 13             | 70      |                    |
|                         |                |        | 6                       | 12             | 58   |                         | 1              | 95*     |                    |
|                         | 23             | 70     | 6                       | 12             | 61   |                         | 17             | 80      | 8 <sup>th</sup> -3 |
|                         |                |        | 4                       | 7              | 70   |                         | 6              | 80      |                    |
|                         |                |        | 1                       | 3              | 80   |                         |                |         |                    |
|                         | 25             | 83     | 1                       | 5              | 64   |                         | 13             | 82      | 9 <sup>th</sup> -1 |
|                         |                |        | 3                       | 11             | 66   | 1                       | 6              | 83      |                    |
|                         |                |        |                         | 9              | 88   |                         | 6              | 91*     |                    |
| 6                       | 20             | 66     | 2                       | 11             | 62   |                         | 7              | 84*     | 9 <sup>th</sup> -2 |
|                         |                |        | 1                       | 6              | 79   |                         | 5              | 81      |                    |
|                         |                |        |                         | 2              | 90   | 1                       | 8              | 82      |                    |
|                         |                |        |                         |                |      |                         |                |         |                    |
| 1                       | 29             | 79     | 8                       | 10             | 45   | 4                       | 12             | 71      | 9 <sup>th</sup> -3 |

|  |  |  |   |    |    |   |    |    |  |
|--|--|--|---|----|----|---|----|----|--|
|  |  |  | 5 | 6  | 44 | 2 | 18 | 73 |  |
|  |  |  | 7 | 12 | 63 |   |    |    |  |

## 16. Staff attendance

The following document is the one the school gave me of the pre intervention information

It is in Hebrew and has some of my calculations on it. The numbers are readable for staff absence in February-March-April as are presented in the data.



The document is a handwritten form in Hebrew. At the top left is a logo of a building. To the right of the logo is the text "מ"ס 7" (M.S. 7). Below this is a date "10/10/07". The main body of the document contains several lines of handwritten text and calculations. A prominent calculation shows a sum of 3200, 320, and 3520, resulting in 3840. Another calculation shows 3840 divided by 4, resulting in 960. There are also some circled numbers and a small table of numbers. The bottom of the document has a signature and the date "10/10/07".

## 22. Correlations between items – pre and post intervention-staff

### Pre intervention

| Attitude to work | Celebrating success | Organizational learning | ALOs   | Mlearn_tot | SCLOs | PLOs | vision | Vision ownership | Knowledge of vision |                     |                         |
|------------------|---------------------|-------------------------|--------|------------|-------|------|--------|------------------|---------------------|---------------------|-------------------------|
| .008             | -.005               | -.293                   | -.070  | .221       | .157  | .143 | .478*  | .137             |                     | Pearson Correlation | Knowledge of vision     |
| .965             | .977                | .155                    | .693   | .231       | .377  | .413 | .025   | .545             |                     | Sig. (2-tailed)     |                         |
| 35               | 32                  | 25                      | 34     | 31         | 34    | 35   | 22     | 22               |                     | N                   |                         |
| .038             | .634**              | .370                    | .288   | -.053      | -.004 | .050 | .432*  |                  |                     | Pearson Correlation | Vision ownership        |
| .862             | .002                | .131                    | .193   | .820       | .985  | .821 | .040   |                  |                     | Sig. (2-tailed)     |                         |
| 23               | 22                  | 18                      | 22     | 21         | 22    | 23   | 23     |                  |                     | N                   |                         |
| .219             | .438*               | .529*                   | .162   | .255       | -.123 | .016 |        |                  |                     | Pearson Correlation | Vision                  |
| .294             | .032                | .017                    | .450   | .241       | .568  | .940 |        |                  |                     | Sig. (2-tailed)     |                         |
| 25               | 24                  | 20                      | 24     | 23         | 24    | 25   |        |                  |                     | N                   |                         |
| .092             | -.146               | .327                    | .271   | .303       | .291  |      |        |                  |                     | Pearson Correlation | PLOs                    |
| .576             | .394                | .083                    | .100   | .077       | .076  |      |        |                  |                     | Sig. (2-tailed)     |                         |
| 39               | 36                  | 29                      | 38     | 35         | 38    |      |        |                  |                     | N                   |                         |
| .246             | -.087               | .017                    | .428** | .444**     |       |      |        |                  |                     | Pearson Correlation | SCLOs                   |
| .137             | .614                | .932                    | .007   | .008       |       |      |        |                  |                     | Sig. (2-tailed)     |                         |
| 38               | 36                  | 29                      | 38     | 35         |       |      |        |                  |                     | N                   |                         |
| .243             | -.140               | .149                    | .148   |            |       |      |        |                  |                     | Pearson Correlation | Mlearn_tot              |
| .160             | .423                | .448                    | .396   |            |       |      |        |                  |                     | Sig. (2-tailed)     |                         |
| 35               | 35                  | 28                      | 35     |            |       |      |        |                  |                     | N                   |                         |
| .424**           | .164                | .427*                   |        |            |       |      |        |                  |                     | Pearson Correlation | ALOs                    |
| .008             | .340                | .021                    |        |            |       |      |        |                  |                     | Sig. (2-tailed)     |                         |
| 38               | 36                  | 29                      |        |            |       |      |        |                  |                     | N                   |                         |
| .196             | .131                |                         |        |            |       |      |        |                  |                     | Pearson Correlation | Organizational learning |
| .308             | .497                |                         |        |            |       |      |        |                  |                     | Sig. (2-tailed)     |                         |
| 29               | 29                  |                         |        |            |       |      |        |                  |                     | N                   |                         |
| -.099            |                     |                         |        |            |       |      |        |                  |                     | Pearson Correlation | Celebrating success     |
| .565             |                     |                         |        |            |       |      |        |                  |                     | Sig. (2-tailed)     |                         |
| 36               |                     |                         |        |            |       |      |        |                  |                     | N                   |                         |
|                  |                     |                         |        |            |       |      |        |                  |                     | Pearson Correlation | Attitude to work        |
|                  |                     |                         |        |            |       |      |        |                  |                     | Sig. (2-tailed)     |                         |
|                  |                     |                         |        |            |       |      |        |                  |                     | N                   |                         |



# Post intervention-

| Attitud<br>e to<br>work | Celebra<br>t<br>success | Orgeni<br>zelearn<br>ng | ALOs | Mlear_<br>tot | SCLOs | Volenti<br>ering | Trust &<br>respect | Feel of<br>safety | PLOs  | vision | Vision<br>owners<br>h | Vision<br>Knowle<br>d |                 |
|-------------------------|-------------------------|-------------------------|------|---------------|-------|------------------|--------------------|-------------------|-------|--------|-----------------------|-----------------------|-----------------|
| .416                    | -.040                   | .409                    | .300 | .116          | .374  | .465             | .353               | .135              | .133  | .352   | .183                  | 1                     | VisionKnoele    |
| .022                    | .840                    | .034                    | .095 | .548          | .035  | .007             | .047               | .460              | .474  | .071   | .382                  |                       | P               |
| 30                      | 28                      | 27                      | 32   | 29            | 32    | 32               | 32                 | 32                | 31    | 27     | 25                    | 33                    | n               |
| .181                    | -.255                   | .022                    | .027 | .145          | .245  | .054             | .266               | .253              | .647  | .145   | 1                     | .183                  | Vision owners   |
| .396                    | .240                    | .920                    | .897 | .500          | .237  | .798             | .198               | .222              | .000  | .480   |                       | .382                  | P               |
| 24                      | 23                      | 23                      | 25   | 24            | 25    | 25               | 25                 | 25                | 25    | 26     | 26                    | 25                    | n               |
| .362                    | .520                    | .064                    | .273 | .501          | .481  | .250             | .328               | .504              | .416  | 1      | .145                  | .352                  | vision          |
| .069                    | .008                    | .765                    | .169 | .011          | .011  | .209             | .095               | .007              | .031  |        | .480                  | .071                  | P               |
| 26                      | 25                      | 24                      | 27   | 25            | 27    | 27               | 27                 | 27                | 27    | 28     | 26                    | 27                    | n               |
| .085                    | .076                    | -.071                   | .122 | .407          | .431  | .191             | .390               | .375              | 1     | .416   | .647                  | .133                  | PLOs            |
| .648                    | .694                    | .718                    | .507 | .029          | .016  | .303             | .030               | .037              |       | .031   | .000                  | .474                  | P               |
| 31                      | 29                      | 28                      | 32   | 29            | 31    | 31               | 31                 | 31                | 32    | 27     | 25                    | 31                    | n               |
| .137                    | .073                    | .124                    | .348 | .569          | .868  | .273             | .555               | 1                 | .375  | .504   | .253                  | .135                  | Safety          |
| .469                    | .713                    | .537                    | .051 | .001          | .000  | .124             | .001               |                   | .037  | .007   | .222                  | .460                  | P               |
| 30                      | 28                      | 27                      | 32   | 30            | 33    | 33               | 33                 | 33                | 31    | 27     | 25                    | 32                    | n               |
| .171                    | .228                    | .241                    | .472 | .380          | .767  | .303             | 1                  | .555              | .390  | .328   | .266                  | .353                  | Trust           |
| .365                    | .243                    | .226                    | .006 | .038          | .000  | .086             |                    | .001              | .030  | .095   | .198                  | .047                  | P               |
| 30                      | 28                      | 27                      | 32   | 30            | 33    | 33               | 33                 | 33                | 31    | 27     | 25                    | 32                    | n               |
| .370                    | .229                    | .204                    | .297 | .444          | .629  | 1                | .303               | .273              | .191  | .250   | .054                  | .465                  | Volunteering    |
| .044                    | .241                    | .308                    | .099 | .014          | .000  |                  | .086               | .124              | .303  | .209   | .798                  | .007                  | P               |
| 30                      | 28                      | 27                      | 32   | 30            | 33    | 33               | 33                 | 33                | 31    | 27     | 25                    | 32                    | n               |
| .235                    | .194                    | .212                    | .454 | .599          | 1     | .629             | .767               | .868              | .431  | .481   | .245                  | .374                  | SCLO            |
| .211                    | .322                    | .289                    | .009 | .000          |       | .000             | .000               | .000              | .016  | .011   | .237                  | .035                  | P               |
| 30                      | 28                      | 27                      | 32   | 30            | 33    | 33               | 33                 | 33                | 31    | 27     | 25                    | 32                    | n               |
| .487                    | .169                    | -.220                   | .244 | 1             | .599  | .444             | .380               | .569              | .407  | .501   | .145                  | .116                  | Mlear_tot       |
| .009                    | .409                    | .280                    | .193 |               | .000  | .014             | .038               | .001              | .029  | .011   | .500                  | .548                  | P               |
| 28                      | 26                      | 26                      | 30   | 30            | 30    | 30               | 30                 | 30                | 29    | 25     | 24                    | 29                    | n               |
| .249                    | .499                    | .331                    | 1    | .244          | .454  | .297             | .472               | .348              | .122  | .273   | .027                  | .300                  | ALOs            |
| .177                    | .006                    | .085                    |      | .193          | .009  | .099             | .006               | .051              | .507  | .169   | .897                  | .095                  | P               |
| 31                      | 29                      | 28                      | 33   | 30            | 32    | 32               | 32                 | 32                | 32    | 27     | 25                    | 32                    | n               |
| .011                    | -.094                   | 1                       | .331 | -.220         | .212  | .204             | .241               | .124              | -.071 | .064   | .022                  | .409                  | Org learning    |
| .955                    | .647                    |                         | .085 | .280          | .289  | .308             | .226               | .537              | .718  | .765   | .920                  | .034                  | P               |
| 27                      | 26                      | 28                      | 28   | 26            | 27    | 27               | 27                 | 27                | 28    | 24     | 23                    | 27                    | n               |
| .209                    | 1                       | -.094                   | .499 | .169          | .194  | .229             | .228               | .073              | .076  | .520   | -.255                 | -.040                 | Celebrating suc |
| .286                    |                         | .647                    | .006 | .409          | .322  | .241             | .243               | .713              | .694  | .008   | .240                  | .840                  | P               |
| 28                      | 29                      | 26                      | 29   | 26            | 28    | 28               | 28                 | 28                | 29    | 25     | 23                    | 28                    | n               |
| 1                       | .209                    | .011                    | .249 | .487          | .235  | .370             | .171               | .137              | .085  | .362   | .181                  | .416                  | Attitude to wor |
|                         | .286                    | .955                    | .177 | .009          | .211  | .044             | .365               | .469              | .648  | .069   | .396                  | .022                  | P               |
| 31                      | 28                      | 27                      | 31   | 28            | 30    | 30               | 30                 | 30                | 31    | 26     | 24                    | 30                    | n               |

## Appendix 13

### D.I.S.C - Diagnostic Inventory of School Culture

A diagnostic questionnaire to determine school culture and levels of performance.

Note –The questionnaire presented is the DISC1 staff version. The questions or sections with a\* sign are those which are not part of the student questionnaire DISC2

\*Dear Teacher,

Thank you for agreeing to participate in a survey of attitudes regarding school procedures and the organizational culture at school. All information given by you shall remain confidential and will only be used as feedback for the school, with the aid of which targets and goals for improvement will be defined.

In addition, the data will be used for a doctoral research aimed at testing the efficacy of the improvement plan.

Any identifiable details will remain completely confidential

I have read the above, understood the contents and agree to participate in the survey

If you agree please put a tick in the square ☐

#### \*Section 1 Personal details

please encircle the suitable answer and continue according to instructions.

Gender – male/female    teaching experience – 1-2    3-5    6-10    over ten years

Age: up to 30    31-35    36-40    41-45    46-50    over 50

Subject(s) taught \_\_\_\_\_

I have / I do not have a managerial position

---

#### Section 2 – The School vision

a. Is there a school vision? What is it?

Please encircle the most suitable answer and follow instructions accordingly –

- I don't know (please proceed to **section 3**)
- There is a vision, but I don't remember what it is (please proceed to **section 3**)
- There is a vision, but I only remember part of it \_\_\_\_\_  
\_\_\_\_\_
- There is a vision which says \_\_\_\_\_  
\_\_\_\_\_

b. The school vision is known, published and referred to on various occasion.  
Please encircle the most suitable answer

I definitely agree   I agree   I agree partly   I disagree   I definitely disagree

c. The school vision is that of - please encircle the most suitable answer

- The entire school community- pupils, parents, teachers and management
- The teachers and management
- Management alone
- The head teacher alone

d. Do projects and teaching curricula which the school initiates or undertakes reflect a cohesive conception which is connected to the vision –  
please encircle the most suitable answer

I definitely agree   I agree   I agree partly   I disagree   I definitely disagree

e. Do cultural, educational and social activities at school reflect a cohesive conception which is connected to the vision – please encircle the most suitable answer

I definitely agree   I agree   I agree partly   I disagree   I definitely disagree

\* f. Is the school vision translated into concrete targets and goals within the team teaching your subject? Please encircle the most suitable answer

I definitely agree   I agree   I agree partly   I disagree   I definitely disagree

### Section3   **School Learning Outcomes**

School learning outcomes are tangible evidence of the learning procedures at school in the various fields – pedagogical, moral and administrative

a. In your opinion, the pedagogical learning outcomes at school are –

Please encircle the most suitable answer

excellent   very good   good   fair   bad

\*b. In your opinion, the pedagogical learning outcomes in the subject you teach at school are – please encircle the most suitable answer

excellent    very good    good    fair    bad

\*c. In your opinion, the pedagogical learning outcomes in the subjects you teach, as reflected in exams and relevant outer indexes such as Piza, Tims, Meitzav, matriculation and others \_\_\_\_\_ are – Please encircle the relevant exams and the most suitable answer-

excellent    very good    good    fair    bad

d. In your opinion, the socio-cultural learning outcomes in school are – Please encircle the most suitable answer

excellent    very good    good    fair    bad

e. Please encircle the level of the following socio-cultural learning outcomes within the school community according to the following criteria:

|  |           |      |      |          |     |
|--|-----------|------|------|----------|-----|
| 1. Safe atmosphere (lack of violence)    | very good | good | fair | not good | bad |
| 2. Use of clean language                 | very good | good | fair | not good | bad |
| 3. Relations of trust and respect        | very good | good | fair | not good | bad |
| 4. Mutual aid at school                  | very good | good | fair | not good | bad |
| 5. Voluntary activity                    | very good | good | fair | not good | bad |
| 6. Honor system – no cheating            | very good | good | fair | not good | bad |
| 7. Care of school equipment and Building | very good | good | fair | not good | bad |

f. .Please encircle the level of administrative learning outcomes at school according to the following criteria:

|                                      |           |      |      |          |     |
|--------------------------------------|-----------|------|------|----------|-----|
| 1. Student attendance                | very good | good | fair | not good | bad |
| 2. Punctuality                       | very good | good | fair | not good | bad |
| 3. Teacher attendance                | very good | good | fair | not good | bad |
| 4. Efficient timetable               | very good | good | fair | not good | bad |
| 5. Efficient examination program     | very good | good | fair | not good | bad |
| 6. Aesthetics and environment upkeep | very good | good | fair | not good | bad |

**\*Section 4 - Striving for achievement**

The concept of striving for achievement is expressed by the aspiration to lead the whole student body to attain a quality level of learning outcomes of 100%.

In the classes I teach – please encircle the most suitable answer

- no child is left behind – they all achieve 100%
- most children achieve 100%, a few are less successful
- the achievement curve splits normally around a high average (about 80)
- the achievement curve splits normally around a low average (around 65)
- 100% is out of the question, the students achieve a great deal less, and most do not succeed at all

**\*Section 5. Learning in the Organization**

a. Is it customary at school to learn from –

Please encircle the suitable answers

successes      analysis of one's own failure      other \_\_\_\_\_

b. In what ways are successes celebrated at school - please encircle the most suitable answer

- School celebrations are events determined by the calendar
- Successes (if any) are noted in the course of regular celebrations determined by the calendar
- Success in studies and other outstanding achievements are cited at special ceremonies or in the school newspaper
- A part of every ceremony, event or publication of the school newspaper is dedicated to the announcement and celebration of successes
- The successes and achievements of the school community – classes, teams etc. are noted in various ways, systematically in a planned and ongoing manner during the whole year.

**Section 6 – Following are four successions expressing dimensions of the**

**School climate**

Please encircle the digit in each of the successions, which, in your assessment , best express the functioning of the educational staff

|                                   |   |   |   |   |   |  |
|-----------------------------------|---|---|---|---|---|--|
| Acts with commitment              | 5 | 4 | 3 | 2 | 1 | Acts without commitment                    |
| Aimed at and focused on the goals | 5 | 4 | 3 | 2 | 1 | Acts without clarity or knowledge of goals |
| Works in collaboration            | 5 | 4 | 3 | 2 | 1 | Works in isolation                         |
| Encourages achievement            | 5 | 4 | 3 | 2 | 1 | Encourages competitiveness                 |

## Appendix 14

### The DISC questionnaire – More about findings during the validating process

This is in addition to what was presented in part 3.9.3.

The raw statistical materials are presented in appendix 11.

#### Field description

892 people filled in the questionnaire from different schools-

617 women (69.2%) and 263 men (29.5%)

147 defined themselves as holding managerial role (16.5%) and 685 (76.8%) did not .

Participants gave demographic information-Their age, seniority, their teaching discipline. They gave information about their school as well- type of settlement- urban or rural (330 and 526 accordingly), and school size- small up to 320 students, medium sized- up to 500 and large- over 500 students.(the number of teachers from each school size were 114, 289, 369 accordingly).

Participants according to school level- High school, junior high school, special education, is described in the following table

#### population according to school level

| School level       | N   | %     |
|--------------------|-----|-------|
| High school        | 259 | 29.0  |
| junior high school | 198 | 22.2  |
| Primary school     | 320 | 35.9  |
| special education  | 66  | 7.4   |
| Total              | 843 | 94.5  |
| Not mentioned      | 49  | 5.5   |
| Total              | 892 | 100.0 |

Participants wrote their sector as well- Jewish, Arab, Druze. The population division according to sector is provided in the next table. Participants were chosen according to a comfort sample, students studding towards their M.Ed. degree, at the Derby extension in Haifa, Israel, and came from the area. That created a relatively large number of Arab and Druze representatives, and of schools from rural settlements. This information was taken into account while analyzing the data.

Participants according to sector

| Sector | N   | %     |
|--------|-----|-------|
| Jewish | 159 | 17.8  |
| Arab   | 617 | 69.2  |
| Druze  | 116 | 13.0  |
| Total  | 892 | 100.0 |

Participants worked at 63 schools as follows-

11 Jewish schools- 4 high schools, 2 junior high schools, 4 primary schools

45 Arab schools- 13 high schools, 10 junior high schools, 15 primary schools

7 Druze schools- 2 high schools, 1 junior high schools, 3 primary schools

(The remaining schools were from the special education).

Each school had an average of 14.15 representatives. 44 of the schools (69.8%), were represented by 12 participants.

Analysis of data

1. One could expect many significant correlations, due to the large sample, some of which may have been of chance origin. Therefore, only significant correlations ( $p<0.001$ ) with high intensity ( $r \geq 0.35$ ) were taken into account.

2. Pearson and Spirman tests were conducted while testing correlations, for the need of controlling background variables. The level  $r=0.3$  was chosen as significant. No significant correlations were found between participants' background variables and research variables- no gender differences, no correlations to seniority or age.

Participants holding managerial roles were found significantly higher in their perceptions concerning 'organizational learning' only.

On the other hand, background variables concerning schools were found to have the following significant differences-

Small schools were found as significantly lower achievers than medium size or large schools.

School level differences- primary schools were usually found to have high achievements and high schools low ones. Junior high schools' achievements were not consistent- sometimes resembled primary schools and in other times, high schools. Urban schools were found to have significantly higher results than rural schools concerning 'school vision' and 'organizational learning'.

The sector variable was found to have significant differences (apart from concerning celebrating successes). The Jewish sector was found to have significantly higher results than in the Arab or Druze sector. Only the item concerning staff's acquaintance with school vision, Druze were found to have higher results than all the other sectors.

The differences described, were taken into account while using regressions to analyze the results of school learning outcomes. This was done by creating dummy-variableness, to control correlations.

**School size 1** - 0=small school, 1= medium or large school

**School level 1** - 0=primary school+ junior high school, 1= high school

**School level 2** - 0= junior high school+ high school, 1= primary school

**Sector1** - 0= Arabs + Druze schools, 1= Jewish schools

**Sector 2** - 0= Jewish +Arab schools, 1=Druze schools

### Findings presented according to main processes

a. The internalization of the school's common vision process-

1. A significant and positive correlation was found between school learning outcomes (LOs) and the item relating to the degree of which school community felt involved in the creation and ownership of the school vision. The question out of

DISC1questionnaire (Appendix 13)-

"The school vision is that of (choose the most accurate)-



a-The head teacher alone, b--Management alone, c- The teachers and management, d- the whole school community- pupils, parents, teachers and management"

Correlations found between this item and the different LOs were  $0.32 \leq r \leq 0.43$  ,  $p < 0.001$ , as presented in table 4 below.

2. A strong correlation was found between the deferent LOs and the vision items (4 items). These items refer to- how often vision is mentioned or published? To what degree school vision comes to expiration in school projects and learning programs? To what degree does it come to expiration in cultural and social activities? and To what degree is it translated into specific goals and objectives in the various discipline groups.

Correlations found between the vision items and the different LOs were  $0.53 \leq r \leq 0.63$ ,  $p < 0.001$ , and are presented in table 4 below.

**b. The process of transforming school’s learning community into a community of learners - Organizational learning -**

1. The item concerning manners of organizational learning in school, considering 'learning from success' as the most effective and progressive type, was found to have a correlation with different LOs -  $p < 0.001$ ,  $0.2 \leq r \leq 0.4$ , these correlations are presented in the table below.

2. The item concerning recognizing success and celebrating it was not found correlated to LOs.

The following table presents correlation between deferent LOs and the items mentioned above. The correlations were calculated while controlling the school background variables, as they were found to have a significant correlation with the items discussed.

### Correlation between deferent LOs and other items

| Variables under control-<br>size1 & sector1 & sector2 &<br>stage1 & stage2 |              | LOs as<br>whole | Pedagogical<br>LOs | Administrative<br>LOs | Cultural<br>LOs |
|--|--------------|-----------------|--------------------|-----------------------|-----------------|
| Vision   | Correlation  | .63             | .53                | .56                   | .57             |
|  | Significance | .000            | .000               | .000                  | .000            |
|  | Df           | 481             | 481                | 481                   | 481             |
| Ownership of and<br>involvement in<br>creating vision                      | Correlation  | .43             | .32                | .41                   | .38             |
|  | Significance | .000            | .000               | .000                  | .000            |
|  | Df           | 472             | 472                | 472                   | 472             |
| Manners of<br>organizational<br>learning                                   | Correlation  | .39             | .2                 | .4                    | .35             |
|  | Significance | .000            | .000               | .000                  | .000            |
|  | Df           | 560             | 560                | 560                   | 560             |

#### c. Combining both processes-

A result related to both processes, strengthening the significant importance of internalizing school's common vision into school daily work, was found by analyzing the prediction of school LOs. The test was taken using a two stage regression- school background variables were put at the first stage for controlling matters, the predicting variables connected to the two processes in the second stage, to test their contribution to the prediction while the background variables were under control. Findings showed-

Pedagogical LOs were predicted /explained significantly positively and strongly by 'vision' variable, by ' school staff's attitude to work' and by 'manners of organizational learning'. The explained variance of the background characteristics was found to explain 9% , and the additional contribution of the predicting values was 34%. Together prediction of pedagogical LOs was 43%.<sup>1</sup>

LOs as a whole (pedagogical, socio-cultural and administrative together) were predicted / explained significantly positively and strongly by 'vision' variable and by 'manners of organizational learning'. The explained variance of the background

characteristics was found to explain 6%, and the additional contribution of the predicting values was 50% .Together prediction of LOs was 56%.<sup>1</sup>

### Regression tests- predicting Pedagogical LOs and predicting LOs

| Variable                | Pedagogical LOs |     |         | LOs (all three types) |     |         |
|-------------------------|-----------------|-----|---------|-----------------------|-----|---------|
|                         | B               | SeB | $\beta$ | B                     | SeB | $\beta$ |
| <b>Step 1</b>           |                 |     |         |                       |     |         |
| Size 1                  | .31             | .14 | .11*    | .10                   | .15 | .04     |
| Sector 1                | .27             | .10 | .14**   | .38                   | .10 | .20***  |
| Sector 2                | -.26            | .11 | -.12*   | .17                   | .11 | .08     |
| Level 1                 | -.13            | .11 | -.07    | -.38                  | .11 | -.23**  |
| Level 2                 | .35             | .10 | .23**   | -.131                 | .10 | -.09    |
| <b>Step 2</b>           |                 |     |         |                       |     |         |
| Size 1                  | -.06            | .12 | -.02    | -.25                  | .11 | -.09*   |
| Sector 1                | .12             | .09 | .06     | .26                   | .08 | .14***  |
| Sector 2                | -.29            | .01 | -.13*** | .20                   | .08 | .1*     |
| Level 1                 | .18             | .09 | .10*    | .01                   | .08 | .004    |
| Level 2                 | .56             | .08 | .36***  | .17                   | .07 | .11*    |
| Vision                  | .41             | .04 | .51***  | .45                   | .03 | .56***  |
| Staff attitude to work  | .13             | .05 | .12**   | .08                   | .04 | .07     |
| Organizational learning | .06             | .02 | .13**   | .13                   | .02 | .3***   |
|                         |                 |     |         |                       |     |         |

\*p <.05, \*\*p <.01, \*\*\*p <.001

Notes: 1. Predicting Ped. LOs - First step  $\Delta R^2=.09$ , p<.001. Second step  $\Delta R^2=.34$ , p<.001

The whole model:  $R^2=.43$ , p<.001  $F_{(10,383)}=28.71$

2. Predicting LOs - First step  $\Delta R^2=.06$ , p<.001. Second step  $\Delta R^2=.5$  p<.001

The whole model:  $R^2=.56$ , p<.001  $F_{(10,383)}=48.3$

#### **d. The development of a coaching culture process-**

1. 'Trust and mutual respect' and 'Feeling of safety in school', are main items enabling a coaching culture. These variables (the first consisted of two items in the DISC questionnaire, and the second of three) were found to have a strong correlation with

LOs while background variables and independent variables were controlled, as presented in the following table.

Correlations between LOs and 'Trust and mutual respect' items

| <u>Variables under control</u> - size1 & sector1 & sector2 & stage1 & stage2 & vision & Staff attitude to work & organizational learning |              | Safety in school | Trust and respect | Pedagogical LOs | Administrative LOs |
|--|--------------|------------------|-------------------|-----------------|--------------------|
| Safety in school   | Correlation  | 1                | .70               | .38             | .62                |
|  | Significance |                  | .000              | .000            | .000               |
|  | Df           |                  | 382               | 382             | 382                |
| Trust and respect  | Correlation  |                  | 1                 | .32             | .63                |
|  | Significance |                  |                   | .000            | .000               |
|  | Df           |                  |                   | 382             | 382                |

Remark- when not using the organizational learning items, so that Df would be higher (469 instead of 382), similar results were found.

2. 'Trust and mutual respect' and 'Feeling of safety in school', are all part of seven items, together representing socio-cultural (norms and values) LOs. A test to predict pedagogical LOs on the base of socio-cultural LOs can be seen as the influence of a coaching culture on pedagogical LOs. The test was taken using a three stage regression- school background variables were put at the first stage, the vision variable staff attitude to work, and organizational variables at the second step, and at the third step, the socio-cultural LOs. When socio-cultural LOs were not put into the equation (step 2), pedagogical LOs were predicted significantly – positively by vision, staff attitude to work and by manners of learning. When socio-cultural LOs were put into it as well, the prediction of pedagogical LOs grew by 10% but amongst all variables earlier put in, only vision remained significant. All together, the predicted percentage of pedagogical LOs using, vision and cultural LOs was 53%. (9% by background variables and 34% more by vision and socio-cultural LOs) as shown in the next table.<sup>1</sup>

Regression tests- predicting Pedagogical LOs out of socio-cultural LOs

| Variable                | Pedagogical LOs |      |         |
|-------------------------|-----------------|------|---------|
|                         | B               | SeB  | $\beta$ |
| Step 1                  |                 |      |         |
| Size 1                  | .306            | .145 | .11*    |
| Sector 1                | .274            | .103 | .15**   |
| Sector 2                | -.265           | .108 | -.12*   |
| Level 1                 | -.133           | .109 | -.08    |
| Level 2                 | .352            | .103 | .23**   |
| Step 2                  |                 |      |         |
| Size 1                  | -.060           | .122 | -.02    |
| Sector 1                | .116            | .088 | .06     |
| Sector 2                | -.294           | .091 | -.1**   |
| Level 1                 | .180            | .091 | .11*    |
| Level 2                 | .561            | .085 | .37***  |
| Vision                  | .412            | .039 | .52***  |
| Staff attitude to work  | .133            | .049 | .12**   |
| Organizational learning | .057            | .019 | .13**   |
| Step 3                  |                 |      |         |
| Size 1                  | .037            | .112 | .01     |
| Sector 1                | -.038           | .082 | -.02    |
| Sector 2                | -.384           | .084 | -.18*** |
| Level 1                 | .175            | .083 | .10*    |
| Level 2                 | .488            | .078 | .32***  |
| Vision                  | .236            | .041 | .3***   |
| Staff attitude to work  | .089            | .045 | .08*    |
| Organizational learning | .008            | .018 | .02     |
| Cultural LOs            | .401            | .045 | .43***  |

\*p < .05, \*\*p < .01, \*\*\*p < .001

Note: 1. Predicting Ped. LOs - First step  $\Delta R^2 = .09$ ,  $p < .001$ . Second step  $\Delta R^2 = .34$ ,  $p < .001$ , Third step  $\Delta R^2 = .1$ . The whole model:  $R^2 = .53$ ,  $p < .001$   $F_{(11,382)} = 38$ .

<sup>1</sup> When conducting regression tests without using items of organizational learning, which increased the number of answers from N=394 to N=479:

The vision variable remained a significant variable in all the regression tests.

In some of the tests done without the items of organizational learning, the staff attitude to work variable became significant as well.

On the whole, the prediction percentage of LOs or specifically, pedagogical LOs, without the organizational learning variables was lower by about 3.5%.

#### e. Correlations between types of LOs-

When adding administrative LOs to the third step they were not found significant and the total percentage of prediction did not change.

When testing the prediction of pedagogical LOs using a three step regression with administrative LOs instead of socio-cultural LOs, these added only 3%, to other predictors.

Correlations between LOs are presented in the following table (Background variables controlled)

Correlations between LOs

| <u>Variables under control</u> size1 & sector1 & sector2 & stage1 & stage2 & vision & Staff attitude to work & organizational learning |                                   | Pedagogical LOs | Administrative LOs | Socio-Cultural LOs |
|--|-----------------------------------|-----------------|--------------------|--------------------|
| Pedagogical LOs  | Correlation<br>Significance<br>Df | 1               | .24<br>.000<br>382 | .41<br>.000<br>382 |
| Administrative LOs   | Correlation<br>Significance<br>Df |                 | 1                  | .66<br>.000<br>382 |

Taking the above points into consideration, including the correlations which showed close connection between administrative and cultural LOs, I tested correlations between each couple of LOs controlling the third (as well as other variables)-

Correlation between pedagogical LOs and cultural LOs (controlling administrative LOs) -was found  $r = .38$ ,  $p < 0.001$ ,  $Df = 468$

Correlation between pedagogical LOs and administrative LOs (controlling cultural LOs)- was not found significant

Correlation between administrative LOs and cultural LOs (controlling pedagogical LOs)- was found  $r = .66$ ,  $p < 0.001$ ,  $Df = 468$ .

Within group agreement in DISC1

$R_{WG}$  represents the degree of agreement between participants in a certain group about a specific value given to a specific item or variable or average mark on the scale. It is the proportion between the standard of divagation found and the predicted standard of divagation, and is calculated separately for every group participating in the research. It can be calculated both when there is a uniform null distribution and when there is a triangular null distribution, either negatively or positively skewed.

Every group has its own  $R_{WG}$  value, and the accepted value for agreement is 0.70. When this value is achieved, the item is said to have an agreement of answers within the group (Cohen, Dovich & Eick, 2001; Dunlap, Burke, & Smith-Crowe, 2003; James, Demaree & Wolf, 1984,1993).

Although  $R_{wg} > 0.70$  is the accepted value for good agreement, this questionnaire was tested for the first time, therefore,  $R_{wg} > 0.60$  can be treated as acceptable.

**Within group agreement in this study-** In this study the value was first calculated without any assumptions on the standard of divagation. These values are presented in the following table. Calculations using uniform null distribution or triangular null distribution, were not found better.

# Rwg -Within group agreement for DISC items in all schools

Items are presented in growing order of Rwg

| Variable - Item   | Max  | Min | N  | Me<br>an | Std.<br>Dev. |
|---|------|-----|----|----------|--------------|
| Organizational learning- celebrating success                                | 1.00 | .00 | 62 | .20      | .27          |
| Vision- Degree of acutance with school vision                               | 1.00 | .00 | 63 | .43      | .33          |
| Vision- Degree of cooperation in creating the school vision                 | 1.00 | .00 | 59 | .52      | .33          |
| Organizational learning- manners of organizational learning                 | 1.00 | .00 | 61 | .56      | .43          |
| Staff attitude to work- collaboration verses isolation                      | .90  | .00 | 63 | .59      | .23          |
| Socio-Cultural LO- Voluntary activity                                       | .96  | .14 | 63 | .60      | .20          |
| Staff attitude to work- Value of achievement verses competitiveness         | .96  | .00 | 62 | .61      | .22          |
| Socio-Cultural LO- Care of school equipment and building                    | 1.00 | .00 | 63 | .61      | .21          |
| Socio-Cultural LO- Honor system – no cheating                               | .92  | .05 | 62 | .64      | .20          |
| Vision- translation into concrete targets within the discipline team        | 1.00 | .00 | 58 | .64      | .25          |
| Vision- published and referred to on various occasions                      | 1.00 | .00 | 58 | .64      | .26          |
| Staff attitude to work- commitment verses non-commitment                    | .96  | .05 | 63 | .65      | .23          |
| Vision- connection to projects and teaching curricula                       | 1.00 | .00 | 59 | .66      | .22          |
| Staff attitude to work- focused on the goals verses acting with no clarity  | .93  | .17 | 63 | .66      | .21          |
| Vision- connection to cultural, educational and social activities           | 1.00 | .02 | 58 | .67      | .23          |
| Pedagogical LO- degree of achievements in your discipline                   | .92  | .23 | 62 | .68      | .16          |
| Socio-Cultural LO- as whole   | .92  | .29 | 63 | .68      | .16          |
| Socio-Cultural LO- Safe atmosphere  | .96  | .14 | 63 | .69      | .18          |
| Pedagogical LO- degree of achievements in your discipline in external exams | .94  | .17 | 61 | .69      | .16          |
| Socio-Cultural LO- Mutual aid at school                                     | .96  | .24 | 63 | .69      | .14          |
| Administrative LO- Aesthetics and environment upkeep                        | 1.00 | .29 | 63 | .70      | .16          |
| Socio-Cultural LO- Use of clean language                                    | 1.00 | .02 | 63 | .71      | .16          |
| Socio-Cultural LO-Mutual trust and respect                                  | .92  | .45 | 63 | .72      | .12          |
| Administrative LO- Efficient timetable                                      | 1.00 | .33 | 63 | .73      | .16          |
| Pedagogical LO- school achievements in whole                                | .93  | .20 | 63 | .73      | .14          |
| Administrative LO- Efficient examination programme                          | 1.00 | .02 | 63 | .74      | .17          |
| Administrative LO- Punctuality  | 1.00 | .17 | 63 | .74      | .16          |



|   |      |     |    |     |     |
|---|------|-----|----|-----|-----|
| Administrative LO-Teacher attendance        | .96  | .00 | 63 | .77 | .17 |
| Administrative LO-Student attendance        | 1.00 | .04 | 63 | .77 | .16 |
| Value of achievement in the classes I teach | 1.00 | .45 | 62 | .78 | .13 |

### Conclusions from the DISC validation process and further planning

First the conclusions connected to KCM's main ideas will be presented as they found expression in the findings. Then, conclusions about further strengthening DISC1 questionnaire's validity.

**a. Vision-** The protruding findings connected to the vision, both from analyzing the correlations and the regressions, strengthen the central importance according to the KCM framework associated with tailoring and internalizing school vision. Empirical findings strengthen the following ideas-

1. A strait connection was found between the number of people out of school community and their degree of involvement in planning and defining school vision, with the improvement of all school LOs.
2. A strait connection was found between positioning the vision as central in school, (often related too- a vision which comes to expression in dally learning, in cultural activities and in planning the school work in all discipline groups) and with the improvement of all school LOs.

These conclusion show that a work focusing on internalizing the school vision, may bring an improvement on school LOs. This idea is empirically strengthened by the prediction of different LOs, and was found true in all types of schools, not depending on sector, level or type of settlement.

**b. A Coaching Culture** – was found significantly important in the process of improving LOs. Coaching culture depends, among other things, on 'mutual trust and respect' and on a 'safe atmosphere'. These two items were found to have a strong correlation with pedagogical LOs and specially, with administrative LOs. In addition,

these items were part of the socio-cultural LOs, which were found, as mentioned, to significantly predict pedagogical LOs. (Socio-cultural LOs add 10% to prediction of pedagogical LOs, over background and other variables, bringing the explained variance to 53%).

### c. Learning community- Organizational learning-

1. A significant correlation was found between organizational learning in school and deferent LOs.

The question from DISC1 as follows, asked participants to circle the suitable answer/s and write –

"Is it customary at school to learn from- successes, analysis of one's own failure, other methods".

The maximum points (5), was given to 'learning from success'. This correlation therefore, shows that learning from success, which is one of KCM's main focuses at work, as a value, was strengthened by empirical evidence as well, as significantly related to LOs improvements.

2. The idea of celebrating success was not found correlated to the dependent variables in the DISC. That is to say, according to the participants, no significant connection exists between improving LOs and celebrating success. Nevertheless, this finding did not change one of the main concepts of work using KCM, although it was not acknowledged or known in school. An example from the research diary, documenting work with one of the management team members that addressed her work with annulment although it was a impressively educational -

*"Maybe it is not suitable for me to tell you, but I gave a student money, so that he could join the activity. I knew that otherwise, he wouldn't have been able to take part in it...I am sure many other teachers do that as well (OK2). This is very moving" I said, everything she had done and mentioned throughout our work, was in her eyes obvious; she could not speak about anything she had done as special or as her success.(Research diary).*

The manageress' humble words reflect a consistent attitude in school about all aspects of doing. According to her, there was no need for acknowledging her work or that of others, no place for celebrating success.

It would be interesting to find out whether KCM intervention will bring a change in this school attitude- will the post DISC1 questionnaire hold evidence of the change?

d. Although a questionnaire such as the DISC is subjective as it asks participants about their perceptions, LOs in Jewish schools were consistently found to be significantly higher than in non-Jewish schools. This finding strengthens the questionnaire validity, as it is a known and objective fact as well, according to external exams and measurements.

e. According to the test of 'within group agreement' ( $R_{WG}$ ), regarding the first items (on the white background), ways should be thought of to improve the value found of within group agreement. It is of no surprise, that items concerning pedagogical LOs and the value of achievement item were found to have a high agreement  $R_{wg} > 0.68$ , as these items have quantitative indications in school (marks). The very high group agreement of administrative LOs is more surprising.

f. The need to enhance validity and reliability of the questionnaire-

Despite all statistical attempts used, it is important to further test the questionnaire in additional Jewish schools and make the sample closer to a representative one of the Israeli population.

The teachers chosen in each school may not have been representatives of the entire school as well.

There was no second use of the questionnaire within a short time on the same teachers without any intervention in between to better verify reliability.

**g. Variable definitions-**The statistical analysis showed in many ways, that socio-cultural and administrative LOs were to some degree multiculeniariac variables, values not quite separated, in contradiction to the theory.

More research should be conducted trying to achieve better results of separation.

Similarly, statistical analysis shows that the sub group variables of socio-cultural LOs: 'Trust and mutual respect' and 'Feeling of safety in school' were to some degree multiculeniariac variables as well. More research should be conducted trying to achieve better results of separation.

## Appendix 15

### S-School vision

S- School aspires to function as a leading educational organization in the area, functioning according to high quality organizational principles, based on cooperation and leading processes which allow the students to gain a maximum of success while achieving excellent learning outcomes – pedagogical, socio-cultural and administrative.

The school believes that all humans were born equal with the right to be different. The actions/activities of the school are therefore aimed at bringing out all the beauty of difference, nurturing the uniqueness and exposing the variety of humanity. The school sees this as a condition necessary for the full utilization and expression of the potential of each individual – whether personal, social or educational.

The school has chosen to concentrate on human sciences and agriculture as specialized field through which learning skills, work ethics, responsibility towards each other, to society and the surroundings in which we live can be taught.

## Appendix 16

### Letter to S-School staff

August 30<sup>th</sup> 2007

Greetings to the staff team of the S-School,

My name is Gilli Beskin, and my original training was as a mathematics teacher. I am now a moderator and coach at schools. In the forthcoming year I shall be coaching members of the management team at school. This process will take place in conjunction with a research and evaluation under the guidance of the Derby University in England, as part of a doctoral thesis.

Coaching as a profession and a method for the advancement of effective work is becoming ever more accepted in different occupational fields and even in the educational systems around the world.

This present research follows a previous research I carried out on the subject which resulted in the creation of a model which will now be researched. The aim is to promote high-quality learning outcomes at schools – pedagogical, socio-cultural and administrative. The coaching program will be aimed at achieving specific goals which will be defined jointly with the staff. At the same time, the research will examine the way the process affects the school and the extent to which goals were reached.

The involvement of the school staff is planned to be as follows:

- At the diagnostic stage – filling in questionnaires by all members of the school staff and by representatives of pupils.
- Interviews with teachers in order to assess the effect of the process.
- Collection of various papers and documents.
- A repetition of the questionnaire at the end of the process.

The information gathered will either be completely anonymous or else identifying details will be erased, this in order to ensure the privacy of the participants. Each interview will be given to the participant in its processed form, for confirmation. The information gathered will serve research purposes only and will not be forwarded to any other person or body. This information will be kept for a period of 18 months from the day of their gathering and will then be destroyed.

It is the right of any member of the team to refrain from taking part or to resign in the course of the research. However, it is highly important to receive as much information from as many members as possible in order to come up with reliable data. It is therefore my hope that participation will be complete.

I intend to proceed with the utmost transparency in the course of the process, and to share the findings and conclusions, bearing in mind the ethical limitations necessary, in order to hear your impressions.

Thank you for your cooperation,  
Gilli Beskin



