

**AN ACCOUNT OF A MAINLY WEB-BASED,
ACTION-RESEARCH, PROGRAMME
AND ITS EFFECTS ON THE PROFESSIONAL
DEVELOPMENT OF A GROUP OF
PRIMARY SCHOOL PRINCIPALS IN ISRAEL**

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requirements for the degree of

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TOVA RON

Abstract

This thesis is an account of an action research that took place in Israel between May 2000 and December 2001 investigating a programme for the professional development of primary principals. Most of this programme was conducted through virtual channels. In addition to the improvement of managerial behaviours of principals, this programme attempted to form a professional support group for its ten participants. There were three types of sessions: face-to-face, synchronized and a-synchronized.

The research presented five research questions. First, it investigated the effectiveness of the programme; secondly - the feasibility of it generating a professional support group. The third question compared the user-friendliness of synchronized sessions with a-synchronized. The fourth question looked into the substance and degree of the use of virtual channels of communication by the principals following their experience in the programme; the fifth question investigated the principals' preferences regarding participating in virtual sessions compared to face-to-face sessions.

The research was qualitative, attempting to look into the processes of development that the programme generated. It was an action research since I conducted and researched the programme. The small size of the group required the use of methodical elements of case study, too. The data was obtained through interviews, observations and document-analysis. The findings show that participants have experienced differing degrees of openness to changes and to 'others', as well as of 'involvement' with one another and with some 'relevant others'. They have adopted, in limited forms, the use of ICT. Whilst they participated in the a-synchronized sessions, the synchronized session failed. There was evidence of a lasting effect of the programme six months after the programme had come to its end.

The research suggests further investigation in order to learn more about the potential of virtual programmes for the professional development of primary principals.

Abbreviations

- CASA - Committee for the Advancement of School Administration
- CET - Centre for Educational Technology
- CPEA - Cooperative Project in Educational Administration
- CSCL - Computer Supported Cooperative Learning
- ERA - Educational Reform Act
- F2F - Face-to-Face
- HEADLAMP - Headteachers Leadership and Management Programme
- ICT - Information Communication Technology
- IDF - Israel Defense Forces
- LEA - Local Educational Authorities
- LLL - Long Life Learning
- LPSH - Leadership Programmes for Serving Headteachers
- NCSL - National College for School Leadership
- NDC - National Development Centre
- OTTO - One-Term Training Opportunity
- PBL - Problem-Based Learning
- SES - Socio-Economic Status
- SMTF - School Management Task Force
- TTA - Teachers Training Agency
- UCEA - University Council for Educational Administration

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This thesis is the story of a programme for professional development of primary principals that took place in Israel during the academic year 2000-2001. I played both the roles of the instructor for the programme and its researcher at the same time; thus, the study is an action-research project in all the relevant methodical and ethical aspects. The principals who participated in the programme were 'playing' the usual role of trainees, except they were aware of its additional interest to me. The unique nature of the programme was the fact that most sessions and activities were conducted in a virtual manner, based on the Internet. This characteristic raised my interest in researching the programme.

This chapter is the introduction to the thesis. It begins by presenting circumstances in the Israeli educational system and my personal professional experience as sources for the idea of planning this programme. It then describes briefly the research and its background in order to clarify the circumstances of the research. The next section describes the specific areas in which the thesis sought to establish new knowledge, leading to the research questions and relating them to these areas, thus clarifying the relevance of each question to the research.

After establishing the background to the programme, three themes that guided the research are presented. The first of these was derived from the

concepts of educational management and educational leadership that the programme for professional development of principals addressed. This led to the issue of programmes for such professional development in the USA, the United Kingdom and in Israel. The fact that the specific investigated programme was of a virtual nature then prompted a discussion of the characteristics of instruction via the Internet and its implications for the instructor, the participants and the environment. The discussion of these themes is brief as they are explored in more detail in the second chapter, the literature review.

The fourth section discusses the main methodological considerations of the research, positioning it in the field of qualitative research. It continues by discussing two methodical aspects of the research: the fact that it was an action research and the use of some principles of case study. These themes are more broadly discussed in Chapter 3, Methodology. This section concludes by highlighting some relevant ethical issues.

The next section presents the structure of the presentation of the findings and the analysis. It includes the phases of the research and the categorizing system that facilitated the discussion. This section also explains the structure of the four chapters, 4, 5, 6 and 7, that present and analyse the data.

The structure of the introductory chapter, with the exception of the background to the research, is parallel to the structure of the thesis; it therefore provides a mapping guide for the reader.

1.2 The subject of the research: a programme for professional development of primary principals

My professional experience led to the programme for professional development of principals that this thesis discusses. Its origins and rationale are described, followed by a presentation of the programme's history. The section continues by presenting some essential facts about the programme that this thesis researched.

Between 1982 and 1994, I headed a 1-8 primary school. For the majority of that time my school was an "exemplifying" school, principals from all over the country came to learn some of its managerial and educational principles. Since 1994 I have been working with primary principals, counseling and training them in various kinds of professional support. Between 1998 and 2001, I headed the Department of Professional Development for Primary Principals at the Teachers' Centre in Dimona, Israel. This centre provided professional support for a vast region, which included 65 primary heads.

These experiences revealed the inhibitions of principals who have come to realise the significance of collaborating with colleagues but refrain from doing so since they are in a competitive situation: they compete over supervisors' attention, parents' decision-making about the choice of school for their children, as well as municipality resources. The fact that the principals from my city, who formed my official supervision group, were my competitors for the same resources encouraged me to try a programme for professional development of principals from geographically remote areas.

When I first met, separately, the potential participants, between May and August 2000 (as indicated in the itinerary of the research), I discovered that the idea of a programme for principals who worked in areas that were far away from one another appealed to them, and aroused their interest. However, I had to find a way of bringing together these principals in a manner that would overcome the distances and consider their limited time.

The knowledge and experience of virtual infrastructures that I had acquired in recent years through my work at the Centre for Educational Technology (CET) were of great use. The Internet had opened up new horizons to international resources of learning and information for me. It had facilitated access to virtual colleagues, international virtual seminars and printed matter that I had found on the web. This experience strengthened my conviction in the potential contribution of virtual channels to my work with principals, and my urge to research it.

The programme that I had in mind intended to support the principals' needs by making positive use of modern channels of communication as the main vehicles for training. The idea was to form a group of ten principals who did not know one another from all over the country. I wanted to find out whether the geographical remoteness would neutralize the apprehension and competitiveness and enable an open discussion.

The programme was planned to bring together the members of the group mainly through virtual channels, with some face-to-face sessions, in order to share their experiences and develop professionally. They would discuss

themes that would be chosen in accordance with the participants' wishes and their current practice. I planned to use both synchronized and a-synchronized channels: the synchronized sessions would take place once a month in a chat-room that all the participants would be able to access, each session lasting for about 90 minutes. The a-synchronized sessions would be forums of discussion the participants would be able to access during an agreed period; each time they would discuss a topic of professional interest. This would enable each participant to choose the frequency and intensiveness of their participation.

In addition, there would be channels that could facilitate informal interrelations of all participants, including the trainer who would respond to individual needs and preferences. All participants would also be able to contact one another, using personal e-mail addresses.

The concept seemed daring: in 2000, there was still much of the unknown in conducting virtual sessions of training. Sivan (1998) referred to two main forms of Internet use for instruction and training: the synchronic and a-synchronic. While the first consists of all kinds of on-line talking, known mostly as chat-rooms or videoconferences, the second includes forums of discussions, electronic mail (e-mail), and message boards. Sivan (1998) also described the high level of commitment that members of such groups develop towards one another, even if not previously personally acquainted. These channels could develop to be the main tracks of instruction and training and seemed appropriate for the programme.

The preparations for the programme began in May 2000 and included a preliminary interview (see pp. 367-368) with each potential participant. Besides learning about the principals' needs and interests, I intended to offer them the opportunity to join the programme, pointing out the fact that it would be researched as part of my doctoral thesis.

The programme itself started in October 2000 and lasted until June 2001 (upon conducting the fourth interview), and included face-to-face and virtual sessions. Four more interviews were conducted during this period; one of them was a telephone interview after a particular face-to-face session. Between July 2001 and November 2001, I had no contact at all with the principals. I conducted the fifth and last interview with each participant during November-December 2001.

During the programme there were no dropouts: all principals who had joined at the beginning continued to participate and cooperate throughout, although the participants varied in their seniority in principalship, their gender, the size and culture of the schools that they were heading, as well as in their technological competence. This leads to some considerations of the main themes that the programme referred to, the first one being educational leadership.

1.3 What new knowledge has the research tried to establish?

This section presents the research questions and the themes that they refer to. The questions are presented briefly, demonstrating the knowledge that this thesis has attempted to establish by looking for answers.

The programme for professional development of primary principals raised questions in four different areas:

1. The effectiveness of the programme. Any programme for professional development is evaluated by its capability to improve its participants' practice in their role. This refers to the trainees' functioning in their 'real world of work', beyond the boundaries of the programme.
2. The feasibility of a virtual professional group providing a platform for professional collaboration. The common feeling of principals that they lacked such a group was one of the starting points of the virtual programme and its research. I hoped, but could not be sure, that participation in the programme, and maintaining the activities, would facilitate the establishment of interrelations of the principals with one another.
3. The degree and manner that principals have adopted the use of virtual vehicles as facilitators of their daily work. I had been acquainted with the routine of principalship and the way it was overburdening their itinerary. One of the reasons for planning the programme for professional development was to offer its participants new modes of communication that might relieve this burden. Therefore, I wanted to know whether the principals would adopt the use of such virtual channels as a result of having practised it in the programme.

4. The degree of user-friendliness of both virtual channels, synchronic (chat-room) and a-synchronic (forums, e-mailing), to the participants.

The use of synchronic and a-synchronic infrastructure was new to most of the participants in the programme; its potential as facilitators of managerial communication was altogether new to all of them. I wanted to find out if any of these channels of communication were user-friendlier than the others in order to benefit from it in my practice in future programmes. It was also of interest to discover whether the frequency of use could reinforce the friendliness and, as a result, the preparedness of the participants to use it more often.

Thus, there were five research questions:

1. **How effective was the researched programme?** This was a basic question since evaluating the effect of a training programme should be a routine procedure. However, this research question deserves some comments. I did not intend to measure the functioning of the participating principals by any "objective" criteria, checking it using procedures of pre-post evaluation. It seemed significant to learn whether the participants would be able to acknowledge the contribution of the programme to their own professional development, confirming it by their own accounts.

The expected effect was in areas that would be discussed in the programme for professional development of the principals. It would include aspects of educational leadership as reflected through changes in decision-making, staff development, educational evaluation and school

marketing. This research question relates directly to the effectiveness of the programme for the professional development of primary principals.

2. **Can such a programme form an active and worthwhile support group for its participants?** From the beginning of the programme it attempted to provide participants with opportunities to form unthreatening professional interrelations. On one hand, bringing together principals who did not compete with one another seemed to provide such an opportunity. On the other hand, the virtual nature of the programme required that the participants adjust to new modes of connection, acquiring technological skills and adopting them. Was it too daring? Findings that show the development of professional connections between the participants will establish the *raison d'être* of this programme.
3. **To what degree are synchronized vs. a-synchronized sessions effective and user-friendly?** This question was significant for my vision in planning the programme: I tried to foresee networks of principals from different areas, communicating and sharing professionally. Therefore, I thought it was crucial the two technological environments, the chat-rooms and the forums, were evaluated by the degree they were user-friendly. This question related to my interest in the potential of virtual channels of communication.

4. **To what extent, in what ways, and how effectively, do participants utilize virtual tools as managerial communication systems, following such a training programme?** This question emerged in view of the burden of the role of 'principalship', and the multitude of internal and external professional connections it entails. These connections and interrelations are time consuming and there may sometimes be disturbances in schools functioning caused by post delays. Thus, while the programme could solve the problem of sharing and consulting without competing, it still required the principals to adjust to new modes of communication.

5. **Is there an ideal proportion of face-to-face and virtual sessions in such a training programme and, if so, what is that proportion?** I assumed that some of the sessions should be conducted face-to-face with the participants and instructors staying in the same place at the same time. I had not been able to define the proportion between virtual and face-to-face sessions. I intended to seek the answer to this question. In view of the expected gradual adjustment of the participants to the virtual settings, and the variety of their technological skills and improvement, I thought that the answers to this question would differ on different occasions. This question, as well as the third one, related to my interest in the potential of virtual channels of communication.

The examination of the research questions derived from the knowledge that had been accumulated in the relevant areas. The following part relates to these aspects.

1.4 What is already known in the relevant areas?

This section presents the themes that form the literature review chapter: educational management and educational leadership, programmes for the professional development of primary principals in the USA, the United Kingdom and Israel, and issues of distance learning, establishing their relevance to the research. Each theme is presented briefly demonstrating its relevance to the research.

Perspectives of educational management and educational leadership have been considered in the process of planning the programme for professional development of primary principals. Their implications for the practice of principals were discussed in some sessions. The concept of educational management is complicated. Gunter (1999) has suggested four leading questions for "individuals and clusters of field members" (1999, p: 230):

Practice - referring to the tasks that the practising principals have to accomplish and the areas they are tangent to, as "teaching, administration, management, leadership, research" (p.230). An interesting question that Gunter (1999, p. 230) raised concerns the principal's professional identity: "Is my professional identity separate from or an intrinsic part of my life in general?" These questions emerged directly and indirectly during sessions of

the programme for professional development of principals that this thesis has researched.

Knowledge - Gunter asked about the territory that the field of educational management covers and relates to.

Networks - with whom do principals maintain formal and informal relationships. This question relates to principals' connections within the organisation (school) and outside its boundaries. Principals' networking has established the *raison d'être* for this programme, attempting to offer new options for networking as well as new channels of communication.

Context - Gunter raised the implications of the broadening of the role of educational management on the principal's practice.

Whilst Gunter's (1999) questions refer to educational management, Ribbins (1999b) raised three questions that concern educational leadership and its development, thus relating directly to the issues that have established the programme that this research has investigated:

- a. The meaning of good leadership - what makes a good leader? How can one identify and develop these characteristics?
- b. What should principals learn in order to become good leaders? How should they learn it, and how could such a programme be evaluated?
- c. Could the practice of principals at their schools be an evidence of the effectiveness of such a programme, and how?

Chapter 2 discusses in detail issues of educational leadership and programmes for the professional development of leaders. It describes the development of programmes in the area of educational leadership. Three approaches to preparatory programmes for principals reflect the many faces of the subject: American programmes have demonstrated the debate of management vs. leadership; British programmes have demonstrated the debate of competence vs. theoretical understanding; Israeli programmes have demonstrated the debate of pedagogy vs. management.

The next central theme concerns aspects of distance learning and training, emphasizing the use of virtual channels that take advantage of facilities that the Internet offers. However, although allegedly, everyone can access the Internet and it has become user-friendly, its use as an environment for training and learning has raised the need to estimate perspectives of learning differently. These perspectives that are discussed at length in Chapter 2 (2.5-2.5.6), attempt to understand the process of e-learning and form the following questions:

- a. "Where" will the learning occur?
- b. "When" will the learning occur?
- c. How will the teacher interact with the learners?
- d. How will the learners learn?
- e. How will the learners interact with the teachers and with other learners?

These questions have also guided considerations of establishing and maintaining the virtual nature of the programme, thus becoming mostly

relevant. There have also been some methodological and methodical implications of the research, however, these were not central. The main methodological perspectives are discussed in the following section.

1.5 Methodological perspectives of the programme

This section presents the circumstances of the research and some principles that guided it. Following these principles it positions the research in the field of qualitative research.

I began to plan the research with no preliminary hypotheses. I did not assume that under certain circumstances some phenomena would occur or disappear. However, I was curious to discover the way that such a programme may develop and what could be its outcomes regarding the issues that I have mentioned in 1.3. I was looking for answers rather than assuming them; therefore, the research questions have not been constructed as statements but as questions, and I have not been able to prophesy the outcomes. Therefore, I was not going to function within the framework of a particular known paradigm.

I deliberated about the size of the group of participants in the programme. Usually, I instructed programmes for professional development of principals that consisted of about twenty participants. When I began to plan the current programme, I considered the following points. First, I realised that the size of the group should be reduced for two reasons: the first reason was the unique virtual nature of the programme. It required that I paid individual attention to all the participants, following each one's progress in the

programme and encouraging their adjustment to the environment. The second reason was my intention to research the programme. Such research required detailed documentation, and I wanted to avoid an excess of data that would be unmanageable.

In addition, I had to make sure that the size of the group would allow the development of active interactions during the sessions and in real life situations. I also wanted to diversify the group by including in it principals that differed from one another by seniority in principalship, gender, age, and the nature and size of their schools. After considering all of these points I decided to form a group of ten principals.

I have described the conflict about the size of the group because of its bearing on the nature of the research. I hoped that I was going to collect findings of a descriptive nature: I intended to interview the participants in order to learn about the way that participation in the programme affected them with regard to the relevant issues. I also intended to document the sessions. This entailed using technological facilities in order to document the occurrences in the virtual sessions and observations in order to document the face-to-face sessions.

I hoped that, during my visits to the schools to conduct the interviews, I would be able to witness phenomena that would indicate signs of the programme's effect and note them. However, findings of such a nature would entail elaboration other than statistical calculation. The words of such findings would be powerful from the point of view of their capability to

provide answers to the questions. I was not expecting to collect objective facts as data; rather, I expected to collect the participants' subjective views.

In addition, considering the size of the group, I realised that the collected data would not be manageable statistically. These considerations positioned the research in the area of qualitative research, where the questions are open and no defined results are expected (Sabar, 1999; Gibton, 2001).

The considerations that led to this methodological decision are discussed in depth in 3.4.3; therefore, I will not address them here. However, it is important to note that I did not adopt attitudes that place quantitative and qualitative researches at extreme contrasting edges of a continuum. I preferred to follow Ribbins's (1995) and Oakley's (2000) approach. They have facilitated the use of numerical and content analysis of the accumulated data of a descriptive manner, while attempting to get the maximal advantage from it.

After having positioned the approach of the research, I had to consider two significant methodical aspects. The first emerged from my double role as the instructor for the programme and its researcher. The second derived from the small size of the group of potential participants. This attributed the research, methodically, the characteristics of action research and case study.

1.6 Methodical implications for the research

This section will examine briefly some principles regarding action research and case study. It will touch upon the potential conflict of interest between my role as the instructor of the programme and my role as its researcher. Another aspect discussed will be the bearing of the size of the group on the research, and the answers that the case study method provided.

1.6.1 Action research - why and how?

Sagor (1993) has identified differences between scientific researcher and action researcher. The first difference concerns the choice that the researcher has made. He has described the traditional scientific researchers as researchers who "choose their topics based on their personal predilections or the preference of journal editors" (p. 7), while action researchers "want to do something to improve *their own situation*" (p.7).

Another difference is the point at which they choose to complete their research. While the scientific researcher's task is "usually complete upon publication of their report" (p.7), there seems to be no end to the action researchers' work because they always "want to know whether they can do something in a better way" (p.7).

Sagor's (1993) views of action research and action researchers seemed relevant to my research since they coincided with my intentions regarding the improvement of programmes for professional development of principals. I had been looking at the possibility of providing a programme that would offer its participants a framework for collaboration and sharing and, at the same time,

bring them closer through virtual vehicles of communication. The attempt to improve my work with principals by adding these two characteristics to programmes that I have been conducting seemed appropriate under the roof of an action research.

However, I had to consider, in addition to its benefits, the pitfalls of such a research and find ways to overcome them. In 3.5.1, there is a discussion of the difficulties that action research present to the researchers. Such a considerable obstacle bears an ethical aspect: action researchers might confront situations in which they have to attend to their obligation to the research rather than to their obligation towards the subjects of their practice. This has been a source for criticism of action research (Murray and Lawrence, 2000). I have chosen to overcome these obstacles using Winter's (1989) four principles of action for practitioner-researchers. He (Winter, 1989) has advised them to form a deep understanding of the problem; to base conclusions on facts rather than on interpretations; to make sure of their ability to develop further enquiry and to improve the researcher's practice in view of the research's result. In addition, as part of my attempt to produce a trustworthy action research, I have followed most of Elliot's (1997) and Zeller-mayer's (2001) guiding principles.

As mentioned in the previous section, the size of the group raised the need to consider the appropriateness and principles of case study in some parts of my research.

1.6.2 Elements of case study in the research

The practice of action research has not provided answers to all the methodical obstacles in this research: I realised that I would need to attribute significance to the voice of each one of the participating principals (Schratz, 1993). However, doing so required that I find ways to benefit from the data that each member would yield. This emphasized the need to establish a group of a manageable size. In 3.5.2, I address broadly the advantages of case study, its methodical difficulties and the terms that a researcher should comply with in order to maintain a worthwhile research. The discussion in this chapter is, therefore, brief.

Yin's (1994) and Bassegy's (2002) definitions of case study related the uniqueness of case study to the feasibility it provides to conduct a study of a limited phenomenon/process at the time of its occurring. Johnson (1994) and Sabar (1999) added the advantage of using a variety of research tools. In addition, in order to secure the quality of the parts that have utilized the case study method in my research, I have attempted to locate throughout the process at least some of the characteristics that Yin (1992) and Bassegy (1999) have identified as necessary to attribute significance to case study, see Table 3.1.

The data has been obtained from three sources: interviews, observations and document analysis. Chapter 3, which considers the methodology, describes in detail the processes of obtaining the findings, their presentation, and the analysing principles including the categorization system that I constructed.

The research has raised some ethical issues. I have already mentioned in 1.6.1 the tension between the role of the instructor and the role of the researcher. At times, I have felt that I might have neglected my instructing role in order not to harm the research. There has also been the issue of getting the principals' consent to participate in a programme, being aware that it will lead to a doctoral thesis. Anonymity of the participants in a small professional community has also concerned me.

The analysis of the findings has been complex, since the programme for the professional development of primary principals lasted from May 2000 to December 2001 (including the preliminary and the finalizing interviews) this meant that the research was longitudinal. The next section presents briefly the organizing elements of the data analysis.

1.7 How to read and understand the findings

This section provides the reader with the essential elements of the findings' analysis. This includes establishing the continuity of the programme and the research, and the categories that have been derived from the research questions and from the findings.

In order to manage the findings I have divided the period between May 2000 and December 2001 (the itinerary of the research, pp. 363-365) into three phases: *Origins*, *Actors* and *Review*. The uniqueness of each phase is described in Chapter 4, which explains the structure of the findings' description and analysis.

Origins lasted from May 2000 to December 2000 and included the first interviews with all principals and the first experiences in the programme, a face-to-face session, an a-synchronized session (forum) and a synchronized session (chat-room), and the second interview. This period included two stages: 'Genesis' - the stage of interviewing and 'Familiarization' - the stage where the participants experienced each type of session for the first time. Chapter 5 discusses this phase, reviewing its different aspects.

Actors lasted from January 2001 until June 2001, when the programme came to its end. This included two stages: 'Instructor-centred', where I was the initiator of all activities, and 'Participant-centred', where the principals started to act on their own, communicating with one another and collaborating. Chapter 6 is structured around the analysis of this phase.

Review lasted from June 2001, when the programme ended, to December 2001, when I completed the fifth interview with all participants. This consisted of 'Independence', where the principals had been preparing the next academic year during summer vacation, benefiting hopefully both from the programme and from their new professional acquaintances. 'Reflection' was the period from November to December 2001, when I interviewed the participants for the fifth and last time. The findings of this phase are presented and analysed in Chapter 7.

Reviewing the findings, I allocated each phase a category. These categories relate to the research questions emerging from the data. The categorizing

system is also explained in Chapter 4. The categories used are: openness, involvement and the lasting effect, see Table 4.3.

Several aspects of 'openness' developed during the phase "Origins". These are discussed in detail in Chapter 5. Its development into the category of 'involvement' has entailed a variety of forms of involvement, and a specific pace for every participant. These are shown and analysed in Chapter 6. The 'lasting effect' of the programme, although only over a short period of six months, is discussed in Chapter 7.

1.8 Closing the circle

In a way, Chapter 8, which summarizes the thesis, closes the circle of the research. It takes the reader back to the research questions, illuminating them by the light of the analysed findings. Then it reflects upon the research, trying to evaluate it using the perspectives I have gained during the process of this experience. My personal reflections summarize the chapter as well as the thesis.

CHAPTER 2

A REVIEW OF THE LITERATURE

2.1 Introduction

This chapter presents the theoretical and applied background that has concerned the main issues in this research. It is structured around five key themes. Firstly, it discusses the development of 'management' in the educational context. It will argue that since the late 1960s the perception of principalship as a managerial-administrative role has been replaced by an approach that stresses the factor of leadership as a main dimension of the role.

A discussion of educational leadership follows, offering some of its characteristics rather than a definition. In order to illustrate these characteristics, the practice of leadership is presented; this practice has been reflected in researches that have investigated principals' roles through observing principals, interviewing them and interpreting their managerial behaviours.

Thirdly, it examines programmes for the professional development of principals, addressing two types of programmes: preparatory and in-service. The discussion describes the development of such programmes and their relationship to the perception of principals' roles. This leads to a discussion of the issue of the effectiveness of these programmes.

The fourth theme is the effectiveness of programmes for principals' professional development. A brief presentation of some models for

evaluating training programmes, is followed by a discussion of the ability of various programmes to strengthen the professional capacity of principals in view of changes in principalship as previously discussed. From this broad perspective, it will narrow to focus on the issue of distance training.

The programme that this research has examined was mainly web-based. Therefore, experiences of integrating strategies of distance training, especially those that are ICT and web-based, follow. This section explores what is already known about such experiences, their feasibility and their general potential for professional development of principals, as well as the unknown in the field. However, in view of the specific nature of the programme on which this thesis is based, i.e., a programme for the professional development of ten primary principals, I chose not to plunge into the 'general sea' of accumulating descriptions of web-site programmes but rather restrict myself to the generic characteristics of such programmes and the requirements they might raise.

The summary of the chapter leads to a discussion of methodology, which is the subject of the next chapter.

2.2 The concept of principalship in view of three current educational movements

This section presents three educational changes in schools that developed between the 1960s and the 1990s, catalyzing the transition from educational management to educational leadership: the effective school, the autonomous school and the self-governed school. It also examines their contribution to the understanding of educational leadership and its practice. It goes on discussing the effects of these movements on

principals' role and functioning. Programmes for professional development of principals, like the one that this thesis has researched, are constantly renewed, as the role-perception does, in accordance with resummptions in the field of educational management and leadership.

2.2.1 Effective Schools

This section describes the agenda of effective schools, and the way they affected the role of principals.

The focus of educators and policy makers on students' academic achievements, mainly those of lower socio-economic status, emerged in the late 1960s with the notion of effective schooling (Sharan and Shachar, 1990). Murphy *et al* (1985 p.7) have defined effective schools, as "schools where students' achievements exceed the expected ones, considering the low socio-economic status of their populations." Others (Block, 1983; Squires *et al*, 1984; Purkey and Smith, 1983 and 1985; Clark *et al*, 1984; Rozenholtz, 1985; Sharan and Shachar, 1990) have conducted researches in schools situated in poor and crime-stricken neighbourhoods, whose pupils achieved relatively high grades, trying to explain the 'unexpected' results. All these studies have reached similar understandings: principals play the key role in advancing students' academic achievements, thus, their involvement and interest in this aspect of principalship was identified as crucial.

The focus on students' achievements unified the perception of principals' roles by various stakeholders. They expected the principals to be directly involved in students' progress, thus making their schools effective. However, principals were obliged, at the same time, to take care of the

routine formal aspects of their work (Friedman, 1997a), and report to local and government authorities. Leading an effective school meant shifting their main occupation and interest from administration to educational management. This affected their daily routine as well: whilst most administrative chores were inspection-oriented, and needed to be done in order to assure the daily function of the school, leading effective schools changed principals' schedules, putting on their agenda tasks as described by Southworth (1995):

...emphasizes the centrality of teaching and learning...ensures that there are explicit curriculum aims... acts as an exemplar. Regularly teaches, leads assemblies... ensures that the teachers have some non-contact time. Sets high expectations for self, children and staff. Encourage and develops others to take on ...responsibility and leadership. Involves the deputy head in policy decision-making...involves teachers...in curriculum planning and school organization; generally... nurtures and maintains a school culture...is personally tolerant...ensures that school has an explicit and understood development plan...involves parents and governors in the work and the life of school... (p.241-242)

Sammons *et al* (1995) have identified 11 factors that determine the effectiveness of principals' performance:

Professional leadership, shared vision and goals, a learning environment, concentration on teaching and learning, purposeful teaching, high expectation, positive reinforcement, monitoring progress, pupils rights and responsibilities, home-school partnership, a learning organization. (p.8)

Apparently, the description of the routine of principals, and the factors that determined their degree of effectiveness changed their role perceptions and their job-priorities. These characteristics and factors directed principals to focus on pedagogic issues. In addition, organisational

tasks were needed in order to promote the main school's goal to improve the achievement of students. Programmes for professional development of principals have had to adjust themselves to these concepts

The movement for autonomous schools followed in the 1980s.

2.2.2 The movement for autonomous schools

The following discussion concerns the characteristics of autonomous schools, describing their effect on principals' functioning.

The rise of the movement for autonomous schools (Yonai, 1984; Foor, 1985; Reshef, 1987; Hewton, 1988) in the early 1980s broadened the principals' role, emphasising, even more, their centrality in determining schools' quality. While policy-makers had initiated the movement for effective schools, this movement emerged mainly by principals' initiatives. The definitions of autonomous schools focus on school's functioning and include the following aspects:

1. Defining school's educational policy and planning ways of its realization. (Glaubman and Iram, 1999, p.467, author's translation)
2. Teamwork thinking and planning. School's ideological decisions as well as practical ways of implementing them cannot be achieved effectively, unless reached by all members. (Danilov, 1996, p.34, author's translation)
3. Planning and implementing a School-Based Curriculum. (Hewton, 1988, p.86)
4. Processing of educational evaluation as part of school's practice. (Nevo, 1990, p.15, author's translation)
5. Maintaining partnership relations with the community. (Danilov, 1996, p.58; Glaubman and Iram, 1999a, p.479, author's translation)

Again, any programme for the professional development of principals had to respond to these aspects, including them in its syllabus.

There were some implications on the perception of principalship by the concept of 'accountability' that had replaced 'responsibility'. This became a key concept for principals who presumed to lead autonomous schools. Yonai (1984) has differentiated between accountability and reporting, pointing at their distinctive origins: reporting was principals' way of responding to authorities' demands, sometimes - in order to get resources. Accountability, on the other hand, originated from principals' need to assume responsibility for the results of the pedagogic and organisational processes that they had administered in their schools. The Israeli Ministry of Education issued the first circular on April 1985, informing its new policy:

...moving the pedagogic weight from the government to schools, and empowering it through its pedagogic autonomy, as a policy, has been the Ministry's policy ever since the beginning of the 1980s. This policy means turning school into a social-pedagogic unit, that provides for its own needs within the framework of the national system. The national system maintains its power in order to ensure its basic goals, as social integration, and the maintenance of the core curriculum. Within these boundaries, schools will be given a formal authority in every pedagogic aspect... (The Israeli Ministry of Education, 1985, p.5, author's translation)

This development brought about a change in the practice of principals. It has widened their responsibility for students' achievement and schools' quality. Autonomous schools were expected to define their pedagogic vision, attending to curricular (Hewton, 1988) and instructional aspects (Brickner and Ron, 1999), as well as to conduct processes of educational

assessment (Kula and Glaubman, 1994; Nevo, 2001), all these became part of principals' role, redefining them as leaders rather than managers.

My research, which has investigated a programme for professional development of principals, will examine whether such aspects that have been discussed in the programme have contributed to the participants' functioning.

2.2.3 School-based management

This section presents the idea of self-management as a broadening of school autonomy, adding the financial aspect of management to principals' responsibility. As in the last two sections, it relates this movement to the principal's role and to the effect on programmes for professional development of principals.

Bush (1999) has suggested an ideological platform for self-management:

Self-management is predicated on the assumption that decisions for individual units...are best made by people within those schools rather than by national or local politicians or officials. (p.242)

Friedman and Brama (1988) have added that self-management based itself on the idea that planning included management of resources was an essential role of managers. They pointed out that it is a relatively recent notion in educational management. This role has been previously acknowledged as part of non-educational organizations. Likewise, the National College for School Leadership (NCSL) has defined principals as those who:

Create and implement a strategic plan, underpinned by sound financial planning, which identifies priorities and targets for ensuring that pupils achieve high standards and make progress, increasing teachers' effectiveness and securing school improvement. (NCSL, 2000, p.1)

With the exception of the financial aspect, self-management was a continuation of the previous movement for autonomous schools.

Wohlstetter and Mohrman (1996, p.1) have acknowledged this sequence noting that "under the banner of community participation, decentralization or teacher empowerment, school-based management has been on the educational reform agenda for decades" identifying the change: "now it is gaining support as a means to improve school performance." However, self-management aroused some question marks as well. Thus, Wohlstetter and Mohrman (1996) have noted that a lack of understanding of "the specific processes by which school-based management is supposed to lead to performance improvement has received little attention and efforts to achieve that goal have been hit-and-miss" (p. 2), concluding that this might lead to missing the target of improvement.

Bush (1999) has suggested keeping things in proportion, commenting:

....the content and monitoring of education are centrally determined, but, within a framework, schools are encouraged to compete for clients in the educational market place. (p. 242).

This contradiction has been a source of Smyth's (1996) criticism of self-management. He considered the mandatory character of self-management as a conflict with its basic idea. He also regarded the context of resources' reduction as unfit for self-management.

As noted by Bush (1999), self-management added new dimensions to the role of principals:

...There is little doubt that it has transformed the working life of principals... together with governing bodies, they now have responsibility for many aspects of school and college management, ...These include the management of finance and staff...". (p.243)

Caldwell and Spinks (1988) have thought that under the circumstances of self-managing schools, "the headteacher...is the catalyst for action" (p. 165). They argued that a transition to self-managed schooling required "three to five years for full-scale implementation". While the concept of autonomous schools was about decentralizing the processes of decision-making, in regard to self-governance it consisted of the right to manage school's resources, including the financial aspects. Could budgeting be separated from pedagogic aspects and regarded as a separated component of educational management?

Davis (1994) has claimed that budgeting was not merely about financing schools, but about managing all kinds of educational resources. From this point of view, he (p. 328) presented the budgetary function not merely as a component of the headteachers' role, but rather as an organizing element of management, leading to pedagogic decision-making. He (Davis, 1994) considered budgeting to be a connecting link between planning and implementation in the chain of management. Obviously, the most impressive plan could not materialize without allocating all kinds of school resources. This emphasized the emerging need for a long-range plan.

Having known the dynamics and pace of schools, I tend to agree, partly, with King (1999) who has appealed strongly against a long range planning.

She has estimated that planning school procedure five years ahead was neither feasible nor useful at a time when the rhythm of changes in educational perspectives, as well as the ever-changing situation in schools, kept raising a constant need to look for new courses of action of school leadership. To illustrate the ever-reforming state of schools, she proposed a cartoon (1999, p.182) that described` two people on camels, one of them addressing the other, saying: "Don't ask me if we are there yet, we are nomads" comparing it to the constant move of educational work. Although she doubted the necessity for establishing a long-term plan of work, she insisted upon the schools' need to have an end clearly in mind. My agreement is restricted to the duration of a school's planning: I estimate that schools need an umbrella of vision for the next years as guiding lines for operative planning operatively each annual school's actions.

Williams (1997) has presented, in view of the multiple functions of school management, the need to share it with experts. He has thus commented that:

The concept of a single all-knowing leader, competent in all matters such as governance, finance, personnel, curriculum, assessment, external relations, site and buildings maintenance is demonstrably impossible. (p.11)

With this in mind, he introduced the concept of partnership, claiming teachers' elective power:

Each teacher elects to follow a leader in a variety of concerns but on other occasions will offer or seek, a leadership role. (1997, p.12).

While planning the programme for the professional development of principals, I considered the possibility of addressing budgetary issues. In

the end, I decided that the specific programme that I was planning did not intend to provide the principals with formulas for document filling. However, the principle that I wanted them to carry in mind was that there should be an obvious compatibility between the allocation of school resources and its goals and aims.

2.3 Being an educational leader

The discussion in this section begins by presenting various researchers' approaches to educational leadership, demonstrating mainly their difficulty in defining it, and showing how they have coped with this difficulty. Next, it roots aspects of educational leadership in principals' practices, as recorded and reported in studies.

2.3.1 Educational management and leadership

This section discusses both terms - educational management and educational leadership - presenting ambiguities that educational researchers point at or, sometimes, create. It offers the use of Ribbins's and Gunter's (2002) mapping as a conceptual framework for the research, relating to the principals' role, as described by researchers.

Bush and Jackson (2002, p.417) have stated that, "the connection between the quality of leadership and school effectiveness is demonstrated by research in many parts of the world". Sergiovanni (1995; 2000) and Southworth (1995) have also shared this view. However, this agreement does not form an agreed-upon understanding of the term. Ribbins and Gunter (2002) have noted that:

The field within which the study and practice of educational leadership is located has a number of overlapping and related parts

to which various labels are attached - including educational administration, educational management and educational policy. (p.359)

Researchers and practitioners might become confused when discussing concepts that are connected with educational management/leadership. Gunter and Ribbins (2002) illustrated with precision a certain degree of confusion that characterizes this theme. Thus, the transition from perceiving principalship as management to its perception as leadership seemed to be a complex issue of discussion.

MacGilchrest *et al* (1995) have indicated distinctions between management and leadership, based on other writers, identifying "building and maintaining an organisational structure" (p.8) by managers vs. "building and maintaining an organisational culture" (p.8) by leaders; "designing and carrying out plans; getting things done..." (p.8) by managers vs. "establishing a mission for the school" (p.8) by leaders; "doing things right" (p.8) by managers vs. "doing the right things" (p.8) by leaders. These distinctions may seem theoretical rather than practical thus not helpful to principals in forming their leadership-oriented role-perception. However, concerning educational management and educational leadership, Ribbins (1999a: p.234) has noted: "in the United Kingdom at least, the two terms are used interchangeably", a fact that only increases the confusion.

Turning from theory to practice, Southworth and Conner (1999:p.13) have expressed their belief that "the way leadership is conceptualised and perceived within a school is a factor which influences the school's capacity to cope with change and undertake improvement work". Sergiovanni (2001: p.40) has similarly considered leadership as essential to understanding and

improving principalship: "...leadership continues to be important in determining whether school will work well for teaching and learning or not...."

Holly and Southworth (1989) have noted the importance of educational leadership and, at the same time, the difficulty in defining it:

Leadership is difficult to define. Although getting an overall agreement regarding its importance, leadership seemed to be difficult to define, as there are numerous definitions of leadership, each emphasizing some things and, often, underemphasizing others. (p.49)

Still, the issue seemed of much significance when coming to understand the principal's role and its development. Some approaches were elaborated to address this difficulty. Holly and Southworth (1989 p.49) have suggested the use of "dimensions of leadership." Similarly, Sergiovanni (1995 p.4) has acknowledged that the definition of this term had gone through changes, choosing first to identify its borders as responsibility for "planning, organizing, leading, and controlling." Later, he (Sergiovanni, 2001) was more directive, formulating what he called "The Standard prescription":

- Know clearly what your problem is and know specifically what your goals are.
- Explore every possible solution to the problem or every possible route to achieve the goals.
- Evaluate the costs and the benefits of each alternative.
- Systematically compare the alternatives.
- Choose the single most effective course of action.
- Apply this course of action throughout the system as a one-best way. (p. 3)

As for a possible confusion between educational management and leadership, Sergiovanni (2001) chose to by-pass it by presenting what he thought were the meanings of educational leadership:

Leadership means: ...influencing parents, teachers, and students to follow the leader's vision. ... influencing parents, teachers, and students to identify, understand and find solutions to the problem they find. ...not only pursuing useful goals that meet the needs of the parents, teachers and students, but goals that elevate them to higher moral level. ...enhancing purpose, meaning and significance that parents, teachers and students experience by serving shared ideas and ideals. ...being practical by selecting means to achieve purposes that take into account the loosely connected, messy, and non-linear characteristics of schools. (2001: p.40)

Although Leithwood *et al* (1999) have been aware of the existing definitions, after surveying 54 articles on leadership, they have concluded that: "no attempt was made to label the form or model of leadership in question" (p.7). They found that "some of these articles supported multiple perspectives on leadership, while others treated leadership as a generally understood phenomenon without specific discussion of its meaning" (p.7).

Leithwood *et al* (1999) chose to classify leaderships as:

- a. Instructional leadership - ...assumes that the critical focus for attention by leaders is the behaviours of teachers as they engage in activities directly affecting the growth of students. (p.8).
- b. Transformational leadership - ...included as part of this leadership category are...charismatic, visionary, cultural and empowering concepts of leadership...the central focus of leadership ought to be the commitments and capacities of organizational members. (p. 9).
- c. Moral leadership - includes normative, political/democratic, and symbolic concepts of leadership. (p.10).

- d. Participative leadership - ...assumes that the decision-making processes ought to be the central focus for leaders (p.12).
- e. Managerial leadership - ...assumes that the focus of leaders ought to be on functions, tasks, or behaviours and that if these functions are carried out completely, the works of others in the organization will be facilitated. (p.14).
- f. Contingent leadership - ...assumes that what is important is how leaders respond to the unique organizational circumstances or problems that they face. (p. 15).

In relation to my research, I chose not go deeper, if at all, into arguments about differences, if any, between styles of educational leadership, seeing other aspects as more relevant. My opinion, having read arguments for different approaches, was that neither a leader in any field, nor an educational leader, could represent a prototype of one model. Educational leadership and management consist of combined components of these types. At different times, under different circumstances, principals exercise relevant aspects as an appropriate answer or solution.

I was not going to propose that the principals discuss the distinction between educational leadership and management. It was my intention to identify, in the programme, elements of leadership in the practice of educational management, broadening the participants' options for actions under certain circumstances. My research would attempt to examine whether the participating principals improved their managerial practice, following the programme. As for my study, I sought to locate it within an organized scheme, model, or type of educational management/leadership.

The mapping concept could prove to be a useful tool. Ribbins's (1999a, p.236) mapping of the field appealed to me. Explaining his aim, he

described his aspiration to "devise a map within which the various concerns of the field of educational management might be located." Having chosen two dimensions: the purpose of study and its level, Ribbins (1999a: p.236) structured his typology as presented in the following figure:

Figure 2.1: Towards a Map of the Field

		Purpose of Study			
		Critique	Clarify	Describe	Technique
Level of Study	Macro	1	2	3	4
	Meso	5	6	7	8
	Micro	9	10	10	12

(Ribbins, 1999a: p.236)

I found the flexibility of the typology of assistance, assuming a situation where: "...much research in the field might be located in two or more boxes in the field" (Ribbins, 1999a: p.236), allowing a freedom of planning and conceptualizing a research. I felt that I could map my own research within this framework considering that whilst I could identify the level of the research as 'Micro', I could locate all the components of the 'purpose of study'. The component of critique is less emphasized, than the descriptive that is accompanied by some clarifications.

Ribbins and Gunter (2002) have offered some typologies as frameworks for analysing, understanding, and sometimes improving educational leadership. The "Conceptual" domain was the closest to the nature of this research, as its purpose was defined "to analyse and through this to enable and improve and explain"; its focus on "leaders, leading and leadership"; its context "distinction and inter-relationship of macro-meso-micro"; its method "conceptual and developmental"; its audience

"...all professional researchers and researching professionals", and its communication "...mainly ...research community" (Table 1, p.378). I hoped that this domain would facilitate some agreement about the shift from educational management to educational leadership, at least in parts of it.

2.3.2 Practicing educational leadership

In the following section, I will discuss ways in which principals demonstrate educational leadership within their ordinary routine. Field studies present how principals perceive leadership and practise it. This aspect relates to my intention to plan a programme that would assist its participants to generate changes take charge of their implications, in a way that reflects their leadership.

Ribbins (in Pascall and Ribbins, 1998) interviewed Joan McConnell who was "head of St. Mary RC Primary". She thought that:

Leadership entails a lot of things like energy, drive, caring about the place, liking the children (daft though that may seem) and being able to get on with people...When I think leadership I think about those sorts of things and their importance in getting people to work with you... (Pascall and Ribbins, 1998: p.157).

Popper (1994) expressed his interpretation of leadership, combining some of what Leithwood *et al* (1999) has considered as instructional, transformational, managerial and contingent leadership.

Michael Ashford, whom Ribbins (Pascall and Ribbins, 1998: p.68) has interviewed, described what used to be his personal perception of 'leadership': "I used, very much, to manage by example", thus assuming a transformational leadership". However, his role perspective had changed since then. Assuming a managerial leadership, he declared that now "I get

my satisfaction out of seeing others function effectively" (Pascall and Ribbins, 1998, p.68). Yet he had not abandoned his "caring for children and enjoyment in their delight at school, finding satisfaction in teaching them" (Pascall and Ribbins, 1998, p.68), thus applying a "course of action throughout the system as a one-best way" (Sergiovanni, 2001, p.3).

Liz Paver, who had been a primary principal from 1976 until 1997 was asked by Ribbins (Pascall and Ribbins, 1998) what kind of a leader she thought she was. She came forward with a description of her preferred actions as principal:

I like making decisions...it is either come follow me or it's nothing...I try to be an open-door head... Everybody has their own character and must do things their own ways. The staff may say I am too willing to find a compromise. (Pascall and Ribbins, 1998, p.188)

Thus, she assumed, by choice, less of Sergiovanni's (2001, p.40) notion of "influencing parents, teachers, and students" and more of the managerial and contingent styles of leadership described by Leithwood *et al* (1999). Southworth (1999) distinguished between the current perception of educational leadership and previous perceptions of management. He asked ten principals who had been in-service before 1988 about the difference they sensed in their role due to the introduction of the National Curriculum, and concluded the main changes were as follows:

1. Accountability - ...Ultimately it is all my responsibility, mine with the governors, the buck stops with me. They saw themselves as personally accountable for the success of the school. (p.47).
2. School improves - the heads were empowered by their position. (p.47).

3. Management and leadership - ...all have been managing a large number of changes, at a fast pace, under considerable pressure" (p.48). "In responding to this new order, heads themselves had to change... (p.49).
4. Job satisfaction and dissatisfaction - You never know what's going to be next. There's no predictability to headship...it is very draining but also very rewarding. (p.50).
5. Effective Headteachers - These heads believed effective school leaders need to continue to exhibit similar characteristics to those identified in earlier analyses...Second...the work appears to have intensified in recent times...Third, too little has been paid to whether effective heads are not actually unusual heads...Fourth...The conundrum of 'effectiveness' is that no one can predict which of the characteristics matters most. (p.52). (Southworth, 1999, pp.47-53)

All respondents in my research admitted that they had been under much pressure. How could any principal function constructively under such circumstances, and how did it reflect in their daily practice?

Southworth (1995) has conducted a case study researching the tasks that a primary principal, Ron Lacey, carried out. He observed Lacey at his school, interviewed him and significant others, took fieldnotes, and for days even shadowed him, writing down his daily itinerary. He appreciated that Lacey's effect on the school's daily routine, concluding that this principal functioned as a school leader, attributing it to five factors:

He was the school founder. He was the most experienced professional at the school. The staff perceived him to be a successful headteacher. He had authority by virtue of his position in the organization. He had political guile and was active in the micropolitics of school. (p.149)

Thus, Southworth (1995) has attributed to Ron Lacey all styles of educational leadership as named later by Leithwood *et al* (1999).

In the same research, Southworth (1995) also interviewed Ron Lacey and observed him and others who were relevant to his role. On 18 November 1988, he observed Ron Lacey during thirty minutes, from 10:15 to 10:45 a.m. (p.82). During half an hour, Ron entered fourth and third grade classrooms, talked to pupils, accommodating himself beside some of them on cushions. He discussed with a passing teacher some pupil's difficulties, went to the staffroom, picking up some trash on his way, shared a nice letter with a teacher, went into his office, meanwhile soothing and calming a staff-member after she had a telephone talk with a parent. This shows a mixture of roles but, although it looked as if he had not demonstrated managerial behaviour, he actually attended carefully to each issue and person.

This observation raised the following doubts and questions:

- a. Were these characteristics the required ones in order to become an educational leader? If this was the case, I should carry the characteristics in mind when planning the programme.
- b. Were these characteristics acquired or was Ron Lacey, or any other principal for that matter, a "born" principal? If some are carrying, from birth, the characteristics of principalship, the owners of such required skills should be located rather than worked in order to be achieved, when no guarantee of success was offered. If, on the other hand, there are acquired characteristics, the design of my programme should include them, and the research should examine its affect on the participant's behaviours.
- c. How could a programme for professional development of principals facilitate their adopting such behaviours?

These questions could be decisive for the formation of programmes for professional development of principals, and specifically for me, when planning my programme.

2.4 Professional development of principals

This part discusses professional development of principals. It starts with some general observations and goes on to specific subjects: it refers to two kinds of programmes, for aspiring principals and for principals in-service. The analysis of the programmes engages in their contents and in organisational aspects, i.e., who initiated the programmes, what were their academic frameworks, and who participated in them. The programmes that are discussed are British, American and Israeli.

2.4.1 Programmes for prospective principals

This part relates to various developmental aspects of programmes for the professional development of principals. It then provides some historical background about the development of such programmes in the USA, UK and Israel. The next section will discuss the contents of these programmes. My research engaged itself in a certain programme for principals' professional development; this programme was based on the principals' needs. Preparatory programmes have not provided the principals with appropriate managerial tools (the first interview, pp. 366-367). I wanted to learn whether other preparatory programmes were providing principals with appropriate managerial skills.

Cuban (1988) described the historical connection between teaching and principalship:

In the beginning there were teachers. Then there were principals. The first principals were teachers. Hence, the oldest form of public school administration was derived from the classroom. (p.53)

Brundrett (2000) broadened Cuban's (1988) insight, commenting that programmes for principals' professional development presented an "apparently belated arrival" (p.vii), starting in the 1970s. Until then, it was believed that principals did not need any training, as their role perception was mainly that of teaching. The interest that Ron Lacey, the primary principal whom Southworth (1995) was observing, took in his pupils' assignments, looking at their learning from as close as sitting with them on the cushions, suggests that this perception was not detached from reality. However, the changes in expectations of principals and the broadening perception of their role demanded that they were prepared for it, and at the first stages of assuming it.

Brundrett (2000, p.15) pointed to the fact that "Since headteachers are promoted from among teachers, promotion takes them away from the occupational role for which they have been trained and socialised, and places them in a position of organisational leadership for which they are relatively unprepared." Southworth (1995, p.204) criticized the fact that, although there was an acknowledgement of the significance of educational leadership, "the prevailing emphases in headteacher and management development are instrumental and technical ones", offering two reasons for this absurdity: "first, headteacher development has generally been regarded as training." This implied that one who knew what it meant to be a leader could pass this "knowledge package" to another who did not. The second reason that Southworth (1995, p.204) offered was that "although training courses for heads have recently been given less emphasis than

formerly, the underlying instrumental rationale remains undisturbed". Explaining this last observation Southworth (1995, p.204) implied that "instrumentality means that headteacher development is ill-founded and limited."

Bush (1998, p.322) observed: "the Educational Reform Act (ERA) and subsequent legislation have transformed the context within which educational leaders have to operate". He has (p.325) argued that "the implementation of the ERA lent a new urgency to the evident need for well-prepared school leaders" thus representing similar needs in other places and the emergence of professional development programmes for aspiring and prospective principals.

Although there were changes in the role of principalship, and although these changes emphasized the need to reinforce the managerial and leadership skills of prospective principals, the programmes that Southworth (1995), Bush (1998) and Brundrett (2000) had examined showed that principalship was still considered as a broadening of teaching. I considered this view as relevant to my role as a researcher, while learning about paths for professional development of principals. In addition, it was of much interest to me in my instructing role, when I conducted the programme for professional development of principals.

2.4.1.1 Some historical perspectives

This section describes the main stages of the development of programmes for preparing educational managers, in the USA, the UK and Israel, from an organisational point of view. It identifies the phases of the main developments, without discussing the contents of the programmes, in

different eras and countries. In the case of each country, one programme is presented as a general illustration for the discussion.

The programmes for professional development of principals that my research examined had not been planned in a vacuum. Its context consisted of programmes of the same kind that had taken place before this programme. Previous experience could be a valuable source for designing my mainly web-based programme for professional development of principals, as well as for its research.

The Americans differentiated between educational administration and pedagogy long before the British did (Brundrett, 2000). A comparison between the developments of general management in both countries showed that the path of developing *management* as an independent area, in both countries, was similar.

Formal management development hardly existed in Britain before the Second World War, apart from courses leading to the qualification of professional bodies. This is in sharp contrast to the USA where, beginning with the Wharton School at Pennsylvania University, approximately 20 business schools were established between 1881 and 1910 and a further 180 by 1930. (Sadler, 1989, p.221)

Brundrett (2001) followed Murphy (1998) and Murphy and Forsyth (1999) noting that there had been:

Four distinct periods in the evolution of training programmes for school principalship in the USA: the 'ideological era'; the 'prescriptive era'; the 'behavioural science era' and the 'dialectical era'. (Brundrett, 2001, p.230)

These periods will be further discussed.

The changes in the first half of the 1900s were swift; consequently, the changes in the contents of the preparatory programmes for principals kept changing as well, each reflecting the perceptions of education and management of its time.

The first era, the 'ideological', occurred in the early 1900s and coincided with the belief that the role of a school was to instruct. Murphy (1998) and Murphy and Forsyth (1999) have noted that the main taught subjects in the programmes for principals' qualifications were about instruction. The course of study led to the formation of programmes that were characterized by formal and hierarchical teaching, leaving no room for self-learning, and criticism. This hierarchy suited the traditional hierarchical social structure, where teachers assumed a certain position and the headteacher assumed a status one step higher, resembling the social status of community's clergymen that changed in the 20th century.

The 'prescriptive' era was characterized by the perception of principals as leaders or catalysts of social changes`. However, the awakening of the movement for 'scientific' management, led mainly by Taylor (1947), emerged within the context of perceiving management as a lever for industrialism and modernism. The 'scientific' era was influenced by the development of scientific management. Taylor's (1947) model stressed the economic motivation of workers and the need to fortify the objective scientific elements in the process of planning the work. Even though this conception was not appropriate for educational management, it influenced programmes for training principals that "shifted from one which little differentiated from that of a majority of the teaching profession to one

that was consistent with the administration" (Brundrett, 2001). Apparently, this was the first time that principalship was related to management rather than to teaching and learning, as it had been previously.

Although this information seemed remote from the programme that I was planning, I thought it was appropriate to learn about the trends it represented. Learning the rationale for professional development of principals seemed a necessary step to take before deciding about the leading principles of my programme, both for the sake of the programme and for the sake of the research:

- a. The programme - the organizing principles of the programme were to be decided upon in view of the previous accumulated experience.
- b. The research - the data and its analysis would have to base itself on these organizing principles.

The foundation of bodies that were common to governmental and academic systems, like the Cooperative Project in Educational Administration (CPEA), the Committee for the Advancement of School Administration (CASA) (Murphy, 1998), and others, did not bring about satisfaction with the preparation of principals in the USA. Murphy (1998) describes attacks on the programmes for preparing principals, regarding the election of the potential principals, the theme of the courses, the organisational aspects and the teaching staff. Culberston (1988) has criticized the programmes, using a metaphor of inappropriate gowns that had been made of fabrics that represented the different eras, and were unfit for their role: preparing principals.

The critical research of Griffith *et al* (1988) motivated the foundation of the University Council for Educational Administration (UCEA) in 1991:

- To advance understanding in all areas relating to education administration and to enhance the research capability of participating institutions,
- To develop better methods of instruction, new materials, and other approaches to help bring about more effective pre-service and staff development programs for all professionals in educational administration, and
- To create more effective pathways and networks for exchanging new understandings and better methods among persons working to advance educational administration.

(UCEA, <http://ucea.org>. p. 1, downloaded on 27.9.02)

UCEA is still very active, and its goals reflect clearly developments and changes; the last goal, for instance, expressed current trends that believe in the value of networking as professional improvers. The next section, discussing the contents of preparatory programmes, will describe the focus of the programmes under the umbrella of UCEA.

The Danforth Experience (Milstein, 1993) represented one of the numerous efforts that were made in order to provide answers to the frequent expressions of dissatisfaction. Its broad expansion around the USA justified that this paper addressed it. This programme formed a connection between preparing aspiring principals for their future role and academic institutions. Gresso (1993) described a process of integrating academic staff into a programme for preparing principals:

The final decision was made to select institutions and departments of educational administration that would represent both groups - departments that already had initiated responses to the call for reform and those that were preparing to respond. The Danforth's

staff also decided to select a cohort of three to six departments of educational administration every 18 months" (Grosso, 1993, pp.6-7).

Grosso (1993) and Milstein (1993) identified a number of reasons for the decision to link programmes for principals to academic facilities and school districts:

1. The programmes they have examined were academic and detached from the realistic needs in the field.
2. This linkage could form the future cadre of principals from the ranks of high qualified and knowledgeable persons.
3. It responded to a need to recruit members of the minorities to the future cadres of school administrators and prepare them properly towards principalship, thus overcoming discrimination.
4. This linkage would support inexperienced principals enhancing their academic horizons and perspectives.
5. Linking the prospective principals to academic facilities would bring them closer and adjust future administrators' instruction at the university, based on principles of adult learning.
6. This linkage facilitated audits of the programmes, thus assuring their professional value.

This was one example of a country- wide effort to change substantially the preparation of principals. Other efforts were made constantly beginning in 1986; (Murphy, 1998) named the period the 'dialectical' era. This was the era of forming an understanding of the substance of principalship, thus identifying the ways for preparing administrators.

There was a constant relation of social settings, politics and development of the perception of principalship, leading to the development of qualifications for principals. Whilst the era of 'scientific' management reflected Taylor's (1947) influence on management, industry, economy and politics, the latter developments reflected the spirit of the movements for effective, autonomous and self-managed schools. All these movements emerged from the political need to prove that schools were improving the chances of children of weak strata to advance economically and socially. They emphasized as well the crucial role of the principal in that area: the effective schools (Clark *et al*, 1984; Murphy *et al*, 1985), the autonomous schools (Gordon *et al*, 1991), and the self-governed schools (Bush, 1998; Friedman and Brama, 1998).

The path of development of programmes for future principals in the UK was much shorter, beginning seriously in the 1980s (Brundrett, 2000; 2001). Brundrett (2000, pp.7-8) identified four eras in the development of programmes for prospective principals:

- a. Prior to 1980s
- b. The 1980s
- c. Early 1990s
- d. Late 1990s.

He (Brundrett, 2000, pp.7-8) compared these eras from several points of view that integrated with one another:

- a. *National initiatives* - that started in the late 1960s and early 1970s to acknowledge the need to prepare and train future principals towards their role; making it official in the 1980s, establishing the

first courses. These initiatives kept going in the early 1990s, defining the compulsory training courses, and developed programmes like HEADLAMP (Headteachers Leadership and Management Programme), National Professional Qualification for Headteachers (NPQH) and the Leadership Programmes for Serving Headteachers (LPSH), in the late 1990s.

- b. *LEA programmes* - LEAs provided and sponsored, prior to the 1980s, headship induction in academic programmes. This continued in the 1980s together with the National Development Centre (NDC.) In the early 1990s mechanisms were added for appraising principals and deputies and, in the late 1990s, LEAs assumed a central position in preparing principals with HEADLAMP.
- c. *Academic programmes* - Before the 1980s there was some development of programmes that were part of the higher degree curricula in management. The 1980s were characterized by an increasing demand for academic programmes in higher degree studies, and some involvement with NDC and the School Management Task Force (SMTF) was formed. In the early 1990s there were doctoral programmes and more programmes for MBA in education, while the late 1990s brought about the expansion of HEADLAMP, NPQH and LPSH.
- d. *Independent agencies* - Before the 1980s some training and appraisal programmes, based on competency definitions and assessment, were used by the government in processes of recruitment. In the 1980s scholars like Boyaritz and Handy

offered competency definitions for educational management, some were adopted by LEAs. In the early 1990s, training was based in schools, as well, and in the late 1990s, there was an integration of knowledge into HEADLAMP, NPQH and LPSH. (Based on figure 1: Dimensions of the development of leadership and management programmes in England and Wales, Brundrett, 2000, pp.7-8).

One significant benchmark within these developments was the One-Term Training Opportunity (OTTO): the Department of Education offered, at that time, a one term training opportunity emphasizing two conditions:

- Central government had a rightful place in the organisation and promulgation of training courses for school leaders;
- Such courses should take cognizance of the best of leadership and management practice *both from inside and outside education*". (Brundrett, 2000, p.23)

These conditions reflected two seemingly opposite directions: centrality and openness. The government's stand, emphasizing its centrality, was different from the tendencies in the USA where programmes for preparing prospective principals had been directed mainly by academic institutions. This centrality did not affect the openness towards integration of knowledge regarding leadership and management that had been developed and accumulated outside the world of education. Apparently, as far as this understanding was concerned, the programmes in the UK caught up with the spirit of their parallel American ones.

The programmes that the prospective participants of my programme had attended before, as testified by them in the first interview (pp 366-367), were initiated by the Ministry of Education, i.e., they were of a

centralistic nature. Therefore, the spirit of the Ministry directed the content and messages. I planned to shape my programme to keep open opportunities. Still, I was not planning to contradict the messages of the Ministry, acknowledging the fact that the participants functioned within the framework of the educational system, abiding by its priorities and messages.

The idea of OTTO (Brundrett, 2000) of preparing principals in a one term programme aroused objections regarding the short period involved, it was felt that this could not provide sufficient opportunities for professional development. Another objection regarded the recruitment of principals from the ranks of teachers. Dennison (1985, quoted in Brundrett, 2000) addressed this point, arguing that good teachers would not necessarily make good principals, because of the different competencies that both roles required. In spite of the criticism, "the courses did have many positive outcomes for those who have been able to experience them" (Brundrett, 2000, p.28); this was stated not only by the participating principals, but by their deputies and staff members, as well.

The criticism brought about repetitive efforts to define the principal's role, trying to identify its uniqueness on one hand and the common denominator it had with management, on the other, in order to be able to tailor appropriate programmes. The complexity of this role caused difficulties in making decisions about the contents of the preparatory courses, as will be discussed in the next section.

In the 1990s, there were leading ideas for preparatory programmes (Brundrett 2000, 2001):

- a. HEADLAMP published in detail in 1995 (Brundrett 2000, 2001). This programme needed to comply with the requirements of the Teachers Training Agency, who had allowed some degree of flexibility as far as individual principals' needs were concerned (Brundrett, 2000).
- b. NPQH - (National Professional Qualifications for Headteachers) led by the Secretariat of Education that, as indicated by its title, referred to principals' required qualifications rather than to preparatory programmes; nevertheless it affected the preparatory programmes as well, as it served the assessment centres.

The organisational aspects in the process of developing programmes for professional development for future principals in Israel resembled the British case rather than that of the Americans.

Processes of selecting and nominating principals in Israel, from 1948 (the establishment of the Israeli State), until the 1980s, did not change: eligible candidates for principalship could be teachers who had had five years experience in teaching. The selecting and nominating committee included three members representing educational and political organizations and interests: a supervisor of the Ministry of Education, a representative of the local authority and a member of the teachers' union. Until the early 1980s, there was no requirement for any diploma in management or academic qualifications. Thus, principals reached their role by emerging from the ranks of teachers.

At the beginning of the 1980s, following the emphasis that effective and autonomous schools ascribed to the role of the principal, the issue was put on the agenda. The Ministry of Education (1981) defined the specific terms that candidacy for principalship required:

- a. A seniority of at least five years of teaching.
- b. An academic degree (being entitled to at least BA).
- c. A diploma of graduation from a two-year course for principals at one of the universities, or, alternatively, a MA degree in educational administration and management.

However, the potential candidates for principalship were not able to fulfil these conditions, at that time there were no courses, academic or otherwise, of training for principalship. Many prospective candidates had not acquired an academic degree; these conditions could have prevented the institutionalization of principals' nomination instead of promoting it. Therefore, it was decided that, during the next five years, the academic systems, as well as prospective candidates and principals in service, would accommodate themselves to the new terms.

During this period, universities developed and ran two-year courses for serving principals; teachers who wished to become principals could join these experiential programmes in order to prepare themselves for promotion to principalship. The rapidity of the change caused the universities to act hastily: some of the academic courses were annexed to the training courses for principalship. Over the years the candidates realized that they actually had an opportunity to advance academically and many chose to study towards a MA degree in educational

administration and management, waiving the need to go through the training course.

Since 1997 much thought has been dedicated, in Israel, to the issue of training principals. Chen (1997a; 1997b) and Inbar (1997) stressed the need for organisational aspects, while Kremer-Chayun (1997) insisted that the main topics should be pedagogic. This debate was reflected in the programmes for principals that the University of Tel Aviv conducted (School of Education, 1986; 1997). Friedman (1999) was nominated by the Ministry of Education, Culture and Sports, to head a committee that would examine the issue of training principals and present recommendations for a reform. Although the Ministry formally accepted the suggested reform (Friedman, 1999), no practical steps were taken to implement it. In 2002, the programme was still "a rule that does not guide the praxis." However, the leading academic establishments in Israel developed, each one separately, a programme for the qualification that was sufficient and complied with the terms.

The debate between those who recommended that programmes for professional development of prospective principals should focus on pedagogic issues (Kremer-Chayun, 1997) and those who recommended that it should emphasise organisational aspects (Inbar, 1997; Friedman, 1999) was of great interest to me in planning my programme. I ascribed much importance to the organisational aspects, believing at the same time, that these aspects should be discussed in an educational context. This debate also leads us to the themes of programmes for preparing principals in the USA, the UK, and Israel.

2.4.1.2 The topics of preparatory programmes

This section discusses the structure of current programmes for prospective principals. It examines the proportions of educational/pedagogical themes and organisational/managerial themes in such programmes, as they reflect the perceptions of the role 'principalship' in a variety of programmes in different countries. As noted in the previous section, I was at the stage of forming the *raison-d'etre* of my programme; therefore, these perceptions and their representation in various programmes were of much interest to me.

Bush and Jackson (2002, p.420) distinguished "between those systems that have mandatory programmes and those where courses are available but not mandatory". However, they found in their research of programmes for aspiring, newly appointed and experienced principals, that:

The content of educational leadership programmes has considerable similarities in different countries, leading to a hypothesis that there is an international curriculum for school leadership preparation. Most courses focus on leadership, including vision, mission and transformational leadership, give prominence to issues of learning and teaching, often described as instructional leadership, and incorporate consideration of the main task areas of administration or management, such as human resources and professional development, finance, curriculum and external relations. (Bush and Jackson, 2002, pp.420-421)

The American Debate: A Reflection of Management vs. Leadership

The Danforth Experience (Milstein, 1993) was a nation-wide effort in the USA to develop preparatory programmes for aspiring principals, under the umbrella of academic supervision and local districts. Under this collaborative umbrella, several programmes had been developed. The

University of Central Florida, for instance, entitled its efforts to develop an appropriate programme "From a minimal programme to the Renaissance" (Milstein, 1993, p.62). It consisted of four aspects of courses:

- 3 foundations courses - measurement, research, and sociology.
- 2 curriculum courses - theory and inquiry.
- 7 courses in administration and supervision - organisation and administration, system planning and management, supervisory functions, supervisory techniques, law, instructional programs, and finance.
- 1 course equivalent for the internship, which requires 30 field hours for each academic hour of credit; the internship requirement is now being increased...to four academic credits to represent more realistically the actual number of hours spent in this activity. (University of Central Florida, in Milstein 1993, pp.68-69)

Apparently, in the case of the University of Central Florida, the balance of the two areas of studies for aspiring principals demonstrated a heavier weight of managerial and administrative themes compared to themes that dealt with instruction and learning. This programme also initiated changes of instructional methods, using "simulations, case studies, role playing, reflective writing, and practitioner presentations on a regular basis in their courses" (University of Central Florida, in Milstein 1993, p.69). Moreover, the programme demanded that its participants would take part in staff meetings and other kinds of activities that characterized the principals' agenda. However, this programme was one of others that were developed in the Danforth Experience. Were there any actions taken in order to appraise these programmes and draw conclusions for the significance and importance of the topics in them?

Cordiero *et al* (1993) examined programmes that were initiated within the Danforth experience, attempting to assess their impact. They (Cordeiro

et al, 1993, p.22) looked into the contents of the programmes, asking "the facilitators to rate the importance of 77 instructional topics in their programs. Instructional topics were grouped into 17 general contents areas." 42 topics were rated as highly important by more than 50 percent of the responding facilitators, and the leading topic was "leadership". Cordeiro *et al* (1993) graded the topics (Table 2.2, pp.23-24), commenting that:

Considering the current topics of interest in the corporate world today, it is interesting to note several items that were rated highly: multicultural and gender issues, group dynamics, computer applications, moral and ethical dimensions of leadership, and coalition building. (Cordeiro *et al*, 1993, pp.22-24)

On the other hand "Five general content areas were not rated high by respondents: business management and administration, labor management relations, politics, administration of special programs, and job skills" (Cordeiro *et al*, 1993, p.24). Apparently, the facilitators were drawing a line that differentiated educational leadership from general management. Another indicator, mainly concerning the way they rated leadership and management, was their preferring leadership as more important and relevant than management.

This was not the only programme that differentiated between leadership and management. Bush (1998, p.328) criticised the standards of NPQH referring, among other reservations, to "the distinction being made between 'leadership' and 'management'"; Bush argued:

The stress on leadership at the expense of management is controversial. Where the distinction is made, the former is usually associated with values and purpose, while the latter relates to implementation or the technical aspects of management. (1998, p.328)

Bush, basing this view on the practice of schools, continued:

Organizations which are over managed but under led eventually lose any sense of spirit or purpose. Poorly managed organizations with strong charismatic leaders may soar temporarily only to crash shortly thereafter. (1998, p.328)

Bridges and Hallinger (1995) did not necessarily agree with Bush's (1998) view. They (Bridges and Hallinger, 1995) identified the source of dissatisfaction as the existing ways of training towards principalship. Instead training programmes would focus on transferring knowledge, the programmes developed and enhanced a "Problem Based Learning" (PBL) Programme. The main idea was for principals to get an optimal probable preparation for their future role in an environment that would be as similar to their future workplace as possible. The training programme confronted the prospective principals with authentic problems that they would encounter in their future role, and analysed the potential advantages and risks in each solution. Bridges & Hallinger (1995) defined their goals, as follows:

1. Familiarize prospective principals with the problems they are likely to face in the future....
2. Acquaint students with the knowledge that is relevant to these high- impact problems...
3. Foster skills in applying this knowledge....
4. Develop problem-solving skills...
5. Develop skills in implementing solutions...
6. Develop leadership skills that facilitate collaboration....
7. Develop an array of affective capacities....
8. Develop self-directed learning skills.... (pp.6-7)

The instructional process that Bridges and Hallinger (1995) recommended invited students to undertake responsibility for the contents and encouraged them to provide the problems. I noted these principles as

guidance for my programme. However, the amount of consideration that I thought relevant for my programme was increasing, making me realise that, for practical reasons, not all of them would be implemented.

The Danforth Experience could be representing efforts that had been done in the USA to define an 'ideal' programme for preparing principals, we could identify the increase in managerial topics and a decrease in topics referring to instruction and learning. This inclination reflected Friedman's observation:

Based on the findings of researches of effective schools, and on the modern managerial approaches, I find it possible to group the principals' essential assignments in five areas:

1. Strategic direction and school development
2. Instruction and learning, including educating and shaping pupils' personality
3. Leading and managing the staff
4. Allocating effectively and efficiently all school resources
5. Accountability. (Friedman, 1999, pp.22-23)

Friedman's (1999) document fully coincided with the requirements of teachers' centres in the UK to present, from 1997, programmes that would address the following 'management tasks' (Brundrett, 2000):

Strategic direction and development of the school; Teaching and learning; Leading and managing staff; Efficient and effective deployment of staff and resources; Accountability. (TTA, 1998, p.9, in Brundrett, 2000, pp.79-80)

In both documents (Friedman, 1999, p.23; TTA, 1998, in Brundrett, 2000), only the second group of requirements "Instruction and learning, including educating and shaping pupils' personality" reflected the fact that the principals had been appointed to lead institutions of an

educational nature. All other requirements could be appropriate for programmes of professional development for managers in any area.

The British Debate: Competence vs. Theoretical Understandings

The nature of the principal's job, or, as Brundrett (2000, p.31) has asked, "what do headteachers do?" led the changes in the contents of the preparatory programmes in the UK. Bush (1998, p.327) presented the Teachers Training Agency's (TTA) national standards for principals. He (Bush, 1998) noted that these standards affected the programmes for practising principals rather than those of preparatory programmes: "Core purpose of headship; Key outcomes of headship; Professional knowledge and understandings; Key areas of headship" (Bush, 1998, p.327). These standards did not specify required qualifications, but referred to requirements of principals. At the same time, the system that the TTA created in order to meet these requirements aroused some concerns:

On the one hand, Glatter (1997) expressed apprehension in view of its bureaucratic structure, fearing that its complexity would prove destructive. On the other hand, the universities, who had gained experience in teaching about school leadership and management, feared that they were going to lose their relative advantage and position in the arena of training for principalship. Bolam (1997) and Glatter (1997) thought it right to integrate the academic knowledge and experience with the principles of the NPQH, in order to take advantage of the integrated knowledge and practice and avoid a programme that would be totally different to its precedents.

Apparently, in the 'struggle' between the approach that preferred acquirement of managerial competence and the alternative that inclined to enhance academic-theoretical knowledge in the process of qualifying principals for their prospective role, the former gained acknowledgement. Brundrett (2000, p.76) quoted Whitehead (1997) observing that: "the MA was very interesting but didn't involve much practical advice and training. The NPQH isn't pie-in-the-sky. It's stuff you can use."

It did not stop the debate about its appropriateness, or the apprehension that it would narrow the professional horizons of principals (Jones and Moore, 1995). Macfarlane and Lomas (1994, p.29) went further, claiming that defining educational management by using its skills regressed the training programmes for principals to the 1960s, where such programmes had been "systematic training models", believing, like Jones and Moore (1995), that such a programme might diminish principals' professional perspective.

In spite of these attacks and apprehensions, Brundrett (2000) did not regard it as a minimalist programme:

It is noticeable that the Teacher Training Agency strove hard to avoid the more reductive elements of the competence model in their training courses yet the fact remains that much of the subsumed 'rationale' for HEADLAMP, NPQH and LPSH contains within it large elements of a competency model. This has offered a ready avenue of criticism for those who were concerned with critiquing the introduction of such national programmes. (p.68)

However, this inclination caused some changes in the academic programmes, as pointed out by Shepherds (1996) who noted the influence of the competence-based approach on the universities, who had added

practical aspects based on competence and principals' work to the syllabus of their preparatory programmes.

The Israeli Debate: Pedagogy vs. Management in Programmes for Professional Development of Principals

The main universities in the country had carried out programmes for aspiring principals since 1983, when preparatory programmes became an obligatory requirement for principalship. The differences between programmes did not reflect ideological disputes, but rather the variety of academic courses that each university could offer its students, at the time. Beyond the slight differences, all programmes formed and represented a certain balance of three main bodies of knowledge: pedagogic, administrative and applicative. The University of Tel Aviv (Centre for Professional Development in Education, 1986; 1997) offered programmes that emphasized mainly the first two, almost neglecting the latter. Although the universities strove to maintain their academic freedom, these programmes needed the approval of the Ministry of Education; therefore, minor changes were introduced in the programmes.

A comparison between training courses for principals that took place at the School of Education in Tel-Aviv University in 1986 and in 1997-1998 (Centre for Professional Development in Education, 1986; 1997) demonstrated almost no change in the course over 10 years. The programmes consist of compulsory courses and elective ones. The compulsory courses reflected the division into the three main topics:

- a. Pedagogy (Education)
- b. Administration
- c. Practical aspect

The programmes for qualification for future principals have aroused a great deal of debate, mostly doubting their effectiveness (Chen, 1995; Inbar, 1997), as the topic of training programmes for principals appears frequently in the agenda of policy makers. Chen (1997) investigated these programmes, asking graduates to name knowledge or managerial skills they had acquired in the programmes. The graduates were not able to do so. Therefore Chen (1997) suggested that it was time to re-design the programmes. Table 2.1 compares programmes of qualification for future principals, in 1886-1987 and in 1997.

Table 2.1 Comparing the syllabus of 1986 and of 1997(*)

Topic	Course of 1986-1987	Course of 1997-1998
Pedagogy (Education)	<ul style="list-style-type: none"> • Introduction to sociology of Education • Introduction to psychology of Education • Philosophical aspects of education • Introduction to educational assessment • Introduction to theories in evaluation • Curricular evaluation • A synthesis of findings in educational policy and research • Qualitative and quantitative approaches in educational research 	
	<ul style="list-style-type: none"> • Children with "special needs" in the educational system 	<ul style="list-style-type: none"> • Experimental schools - policy and practice
Administration	<ul style="list-style-type: none"> • Introduction to educational management • Autonomy and effectiveness in schools • Educational systems' analysis • Educational leadership • An analysis of educational systems (mainly schools) • Judicial perspectives in educational management • Organizational behaviour perspectives in schools 	
Practical Aspects	<ul style="list-style-type: none"> • Human-relations workshop • A two-days practical workshop: meet the main functionaries at the Ministry of Education 	
		<ul style="list-style-type: none"> • Conducting staff-meeting (workshop)

Topic	Course of 1986-1987	Course of 1997-1998
	<ul style="list-style-type: none"> • Use of SSPX (a computing language) • Participant observation as a principals' tool 	<ul style="list-style-type: none"> • Implementing use of computers as principal ship's managerial tools • Teachers' assessment

(* Based on Centre for Professional Development in Education (1986; 1997).

Inbar's (1997) suggestions, on the other hand, considered both preparatory and in-service training, and regarded key features of contemporary schools, including components of:

- a. Management of school activities - regarding educational services that school presumes to offer, developing quality standards, planning, activating and evaluating programmes of change
- b. Budgetary management - securing resources and allocating them in accordance with the present and future needs
- c. Managing personnel - recruitment, development and evaluation; developing motivational aspects, planning and evaluating teamwork, using feedbacks, problem-based learning and encouraging effective work relations
- d. Knowledge management - search, collection and organization of data as a base for problem solving.

Inbar (1997) expected these units to deepen the professionalism of principals, providing them with an understanding of the value of Long Life Learning (LLL).

Friedman (1999) has proposed, at the request of the Ministry of Education, a new programme for training for principalship that would last

up to two years for pre-service candidates and up to five years for principals in-service. The paper (Friedman, 1999) indicated benchmarks for evaluation in order to certify the continuation of the programme and its value. The programme offered four core obligatory knowledge-bodies in education and management, and a personal programme that would be adjusted individually for all participants in accordance with their specific needs-assessment. The obligatory knowledge bodies were:

- a. Educational vision - Development of an educational vision that is committed to raising students' achievements and developing their learning skills.
- b. Curricular planning - Planning teaching and learning in a way that will ensure the realization of school's visions.
- c. Educational evaluation - Conducting an inner supervision at school, including a constant evaluation of students and processes, in order to conduct changes consequently.
- d. Accountability - Securing for effectiveness, and frequent reporting to local authorities (Friedman, 1999, p. 5).

Friedman's (1999) proposal included assessment centres, where principals would be assessed and develop their professional assessment skills. This proposed programme was innovative and revolutionary in two senses: it created a continuum of training both in concept and in practice of the pre-service and in-service programmes, and it recommended that the training programmes all over the country be unified. Friedman (1999) justified this continuum using principals' testimonies that expressed confusion caused by contradictory tendencies they had sensed in those two phases of training. The call for a unification of programmes, on the other hand, seemed dictatorial. However, Friedman (1999) justified it by

explaining the need for a basis of key national agreements, in a rapidly changing era, that exposed principals to a diversity of perceptions, views, practices and fashion in education as well as in society as a whole.

Friedman's (1999) suggestions were published by the Ministry of Education, Culture and Sports, who acknowledged them as guidelines for future programmes, but no actual steps were taken to implement them. The current programme of the Centre for Professional Development in Education (2002) at the Tel Aviv University, demonstrates a clear tendency to focus on managerial-organisational topics, allocating just one theme, titled "Innovative Schools", to pedagogy.

The Israeli programmes that I had reviewed until now were in the mainstream. One exceptional programme could be regarded as marginal for its specific nature and participants. However, its uniqueness, not only in Israel but also elsewhere, made it worth mentioning. This programme was designed in order to ease the passage of retired officers of the Israeli Defence Forces (IDF) into principalship. Most IDF officers retire in their early 40s after having served in the army since their recruitment at the age of 18 and having developed no other career. One of the professional courses they are offered is to take a one-year programme in order to qualify themselves for principalship (Barkol, 2002). The questions about the supposed relationship between military commanding experience and educational management was explained by Barkol (2002) by referring to parallel values, as presented in Figure 2.2:

Figure 2.2: Military values transformed into educational ones

Military Values	Educational Values
A sense of commitment and mission	
Commitment and caring for young soldiers	Commitment and caring for young pupils
A criticizing approach towards females in service	A criticizing approach towards female teachers in service
Perception of the military arena of action as a battlefield	Perception of the educational arena of action as a battlefield

Barkol (2002) concluded that the process of transforming military commanders into principals, should consider aspects of organisational culture that were different in military and educational organizations. Was this conclusion valid for the programme I was planning, as well?

Reviewing preparatory programmes in the USA, the UK and Israel had provided some necessary background for the development of my programme. It seemed to me that examining programmes for professional development of principals in-service could be equally worthwhile.

2.4.2 Programmes for principals in-service

This section describes programmes for the professional development of principals in-service, in different countries, presenting common denominators, as well as differences. The discussion refers, amongst other things, to the context of such programmes and to the extent to which they are compulsory.

Bush and Jackson (2002) have conducted a comparative research, investigating programmes for preparation of school leaders, noting (Bush and Jackson, 2002, p.417): "the relationship between high quality school

leadership and educational outcomes is well documented." In their work, they distinguished between programmes for aspiring and serving principals. In addition, they differentiate between programmes for newly appointed principals and those with experience.

"While most centres have established programmes for aspiring leaders, few have made provision for newly appointed principals" (Bush and Jackson, 2002, p.421). Bush and Jackson named a few exceptional programmes in Chicago, New South Wales and New Zealand. Ng (2001) noted some difficulties in planning such programmes:

- a. The diversity of approaches, mainly the competence-based approach and the "continuous development" or 'summit' approach" (Ng, 2001, p.75) that seemed a promising option. Each approach dictated a different nature of professional development.
- b. Needs that differ from one principal to another: newly appointed principals differ from one another in perceptions, experience, and personal qualifications. Adding the particular circumstances of each school raises the need for an individualistic approach and programme, which complicates the feasibility of conducting such programmes.
- c. The themes that facilitate professional development: some principals need to strengthen their competencies, while others need to form a firm base of values and attitudes.
- d. Action and behaviours: acquiring competence, values and attitudes does not necessarily promise that principals will be able to realise, in their schools, the goal of enhancing students' learning in the wider concept, i.e., beyond formal achievements. How would a programme for professional development serve in this aspect?

Baker (1992, p.7) and others had identified "the need for an induction programme for headteachers and deputies". She also differentiated between obligatory and voluntary processes of inducting newly appointed teachers. Nevertheless, Weindling and Earley (1987) had reported that 14 percent of local authorities conducted mentoring programmes that were meant for both newly appointed and experienced principals.

The issue of mentoring, sometimes defined as apprenticeship, was not new, either in Britain or in the educational context. Bush and Chew (1999) compared processes of mentoring in England and Wales with those of Singapore. They (Bush and Chew, 1999) raised the centrality of the mentor's role, and the relationships that they developed with their protégés. Baker (1992) quoted the conditions that the School Management Task force had defined, regarding these two issues:

- (i) Mentors must be current practising headteachers
- (ii) The 'pilot' must be regional.
- (iii) The 'pilot' must have headteachers in control of the scheme.
- (iv) There must be a period of preparation for mentors.
- (v) There must be some form of a contract with the mentor, eg. Seven days a year.
- (vi) It must be a fully-costed pilot. (Baker, 1992, pp. 30-31)

Although my role was not that of a mentor, I thought it useful to investigate which of these conditions I could adopt. I divided the conditions into two groups: those that I could adopt and others that were not manageable in my programme. This is presented in Figure 2.3.

Adoptable conditions

Figure 2.3: A comparison between mentoring and my role

Adoptable conditions	Unmanageable conditions
I had practised principalship until 1993, working with principals ever since	My programme was nation-wide and not local
I was in control of the scheme	The participating principals were in control of themselves
I utilized my previous work with principals as a preparatory stage for my role	There were agreements between the participants and me.
	The project was initiated by me; there was no cover for the expenses of either the participants or me

Daresh and Male (2000) conducted a follow-up of cases of accompaniment for newly appointed British headteachers and American principals. They looked into the transition that headteachers and principals sensed that they had experienced on completion of the first year of their role. They (Daresh and Male, 2000) interviewed telephonically 32 voluntary participants, half of whom were British and half American, in their first year in the role, asking them:

- a. In what ways do you believe that training in school management has assisted you in carrying out your role as a headteacher or principal?
- b. What activities might have been added to your training to make this more effective in preparing you for your present role? (Daresh and Male, 2000, p.90)

The interviewed principals mentioned two factors more than others: "Preparation for the leadership and the principalship. Professional support received throughout the induction period" (Daresh and Male, 2000, p.89)

Daresh and Male's findings (2000) indicated that newly appointed educational managers in both the UK and USA evaluated technical skills, such as managing budgets, as most crucial for their success. Even so, there were differences between their views of the contribution of the preparatory programmes to their capacity to function satisfactorily. The Americans valued their academic preparation; they thought that it enabled them to evaluate their mentors professionally and decide which of the directive patterns they watched were worth adopting and which were in contrast to their role perception as built up through their previous academic studies. The British headteachers' main preparation for principalship was their previous experience in different roles before they started the headship role. They all indicated the importance of these previous roles to their capacity to succeed when assuming their posts.

These findings have provided a clear indication of the contribution of both academic learning and practical experience to the professional development of newly appointed principals. Concerning practical aspects, they made me realise that I had to look for my prospective participants' needs, which I did in the first interview (pp 366-367).

Bush and Chew (1999) have related to the choice of mentors, the development of the relationships and the mentors' capacity to detect and sharpen the abilities of the protégés, as critical for the success of the process. However, they have referred to the time limitations as a probable obstacle for the success of such a programme. The conditions that Baker (1992) presented reflect this; I suspected that the obligatory seven days that had been set as a condition could not epitomise the

support that protégés received and the amount of advice, deliberation and experience that mentors were expected to provide.

Whilst mentorship was the choice of some LEAs for professional development of principals, LPSH was a formal programme planned and practised, from 1998 onwards (Brundrett, 2000; Tomlinson, 2001) as a third phase in a whole programme for professional development of principals. It included HEADLAMP and NPQH, as well. Tomlinson (2001) describes it as:

... a four-day programme followed by a further day a year later at which progress in achieving personal development and school improvement targets is evaluated. Before the four-day programme, the headteacher and six governors and staff fill in diagnostic questionnaires on Headteacher Characteristics, Leadership Styles, and Context for School Improvement (school climate). These provide the basis for what is essentially a 360-degree feedback, which underpins the first two days of the programme. These are conceptualized by models of Organisational Effectiveness. (p.57)

Thus, LPSH aimed at addressing the needs of serving principals. It aimed to form a process that would include:

- (1) Diagnostics, including self-diagnosis and the use of standardized diagnostic instruments plus internal, local education authority and other data about the performance of the school;
- (2) A four-day residential workshop, incorporating feedback on the diagnostic instruments, individual coaching and group sessions and resulting in individual action plans; and
- (3) Follow-up support through Information and Communications Technologies (ICT), coaching and mentoring. Each headteacher will be carefully paired with a partner from business who will also contribute to the implementation of the action plan. (TTA, 1998, p.4 in Brundrett 2000, p.85)

Brundrett (2000) has noted that the recruitment of business mentors into this programme raised concerns that it would not maintain the required balance between educational and non-educational practice.

The short duration of the programme was its apparent weakness: initially a sequence of four days and, later on, one day each academic year. Tomlinson (2001) referred to the continuous nature of the programme, noting activities for professional development, assistance in developing styles of leadership and understanding deeply contexts of educational leadership. A budget of £2,250 was allocated for the professional development of each newly appointed principal (Brundrett, 2000; Tomlinson, 2001), demonstrating the importance that the government that was the financing body attributed to principals' professional development. Tomlinson (2001) noted that although the programme was relatively new, starting in 1998, its evaluations "have been significantly more positive than for the NPQH, perhaps because of all preparatory work that was able to be completed before the programme was launched". (p.58)

While LPSH was a programme for newly appointed principals, the Shanghai Education Commission and Shanghai Institute for Education established four types of programmes of training for principals (Wenchang and Daming, 2001), based on their different experiences. The first type concerned aspiring principals; therefore, I will not refer to them here. However, three programmes had been designed and administered for principals in-service. There seemed to be appealing aspects in the programmes, as presented by Wenchang and Daming (2001):

- a. Differentiation between various principals, based on their actual functioning, as seen in their practice.
- b. The 'buffet' that expressed respect for principals' capacity to choose their menu of learning and activities.
- c. The broad 'field learning' that could enhance the professional horizons of all trainees.
- d. The opportunity for self-investigation and writing essays based on this process.

Table 2.2 presents the principles of these programmes

Table 2.2 Programmes for principals in-service, Shanghai

Name	Purpose	Approach	Content
Position Training	Improving an in-service principals' capacity	Open learning & free choice: training package; Buffet	Training package (300 school hours on different curricula and series lectures for different needs of a principal in charge of teaching affairs or staff development) Buffet (the training menu was published and the trainees pick up what they need or what they like).
Research Training	Improving the administrative Competence of a principal with good experience and excellent performance	Curricula providing; Problem-based study	Curriculum (240 school hours on designed around the present problems in school reform). Problem-based-study (300 school hours on reading materials/visiting educational officials/discussing with school administrators, teachers, students, parents/peer seminar/ social investigation/paper work assisted by trainer)

Name	Purpose	Approach	Content
Advanced Research Training	Offering an eminent principal the chance to sum up his/her successful experience and his/her ideas on school leadership	Lecture; Broad visitation; Reviewing and commenting on the achievements and experiences that the trainee has got. Essay writing.	Lectures and mini-course (240 school hours) Specific study (300 school hours) <ul style="list-style-type: none"> a. broad reading b. broad visiting ... c. educational investigation d. broad discussion and interviewing e. peer seminar f. book writing assisted by trainer

(Wenchang and Daming, 2001, p.15)

When planning my programme for the professional development of principals, I had to consider the limited scope of my research in terms of the number of participating principals (only ten) and the time scale (one academic year). These limitations did not facilitate a complete practice of all these principles, mainly - the first principle of principals' differentiation: although all principals could express their views in the programmes sessions, and during the personal interviews, and I have noted some fieldnotes, the degree of differentiation was limited. However, the other principles could guide me in the spirit of my programme. I could also learn from the programmes for professional development of principals in Israel.

The Israeli repertoire of programmes for professional development for in-service principals could be characterized by its not being systematic and uniform. Since 1995, when teacher centres have been established all over the country, including the periphery (the Ministry of Education,

1994; Amichai, 1999, 2000; Gilad and Goore, 1999; Goore, 2000), different versions of programmes for principals' professional development had been developed. Chen and Tobin (2000) investigated such programmes, and identified three mechanisms that had proven to strengthen the process of principals' empowerment:

- a. The "Fan" mechanism: principals searching for the opinions of other participants in the group regarding a certain problem, and choosing the initiative that seems innovative. This mechanism was found as strengthening a professional companionship and the sense of influence of all participants.
- b. The "High Mountain Air" mechanism: the leader chose a prestigious model as an external example for a probable solution and involved the other participants in his choice and its outcomes.
- c. The "Supportive Networking" mechanism: principals spread a social network of key functionalities expecting them to assist in realising their vision. These functionalities became part of all participants' networks, spreading their influence and strengthening their efficacy.

Whilst Chen and Tobin's (2000) starting point for investigation was searching effective models for the broadening of principals' professional horizons, Tal and Avidov (2000) regarded clients' centrality in the principalship context as more relevant. They addressed two components of principalship as guiding effective programmes:

- a. The component of managerial functions: capacities such as decision-making, conflicts solving, control and assessment, coordination, management of time, staff-meetings, pedagogic initiatives, and projects.

- b. The component of networking: the capacity to operate internal and external communication, staff-development, forming and maintaining social and organisational cohesiveness, and development of mechanisms for staff-support. (p.26)

In addition, they referred to the development of principals' efficacy through the development of their interpersonal capacities. The model that Tal and Avidov (2000) offered was designed to expose the principals to a variety of situations, thus opening 'windows of opportunity' for a group of principals, guided by an expert, for learning and self-reflection. Programmes for development of professionalism aim to improve trainees' functions in their roles. However, Baker (1994: p.1) has pointed that although "the National Conference for Appraisal Coordinators and administratorsbelieved monitoring and evaluating headteachers appraisal was necessary" many budgetary and methodical obstacles has still caused delays in administrating such processes.

All programmes discussed so far were conducted in the conventional form of instructors and learners meeting face-to-face. The development of virtual channels of Information Technology changed the possibilities of such programmes, as will be discussed in the next section.

2.5 Distance learning and training

This section discusses aspects of e-learning and e-training; it is shaped around six themes. It starts by defining some key concepts, providing a base for a discussion. It goes on to refer to changes in the perception of learning, and their implications for learning environments and the role of instructors of this kind of learning. Next, it discusses the function of the learners; the issue of evaluating e-learning and e-training is the last part. All the themes mentioned above relate to the programme of this study,

which was conducted mainly virtually. Summing up this section leads the reader into the chapter on methodology.

2.5.1 Definitions in distance learning and training

This part presents basic definitions concerning distance learning in order to facilitate a common discussion and avoid misunderstandings in discussing aspects of distance learning and training. The terms are relevant to my research.

Yates and Tilson (2000, p.7) have referred to distance education as "an educational process in which for the majority of the time the learning occurs when the teachers and the learners are removed in space and/or time from each other". While this definition presents distance education as a solution to certain situations, Parraton (2000, p.13) viewed it as an additional option for "an organisational activity, based on the use of teaching materials, in which the constraints on study are minimized either in terms of access, or of time and place, pace, methods of study or any combination of these".

McConnell (2000) compared learning in face-to-face groups to Computer Supported Cooperative Learning (CSCL). He (McConnell, 2000, p.72) has based the comparison on a certain project within a course of MA studies, referring to numerous components. He has concluded that "some (differences, T.R.) may be regarded as 'positive' aspects of CSCL, some as 'negative'" (p. 72), as would be demonstrated later. The expansion of information technology brought about the development of a variety of technological environments.

2.5.2 Technological environments for e-learning

This section describes some technological environments that were utilized in the programme I conducted and researched, explaining the possibilities that each of them facilitate.

The differences that distinguish between technological learning environments and traditional classrooms raise questions of access and immediacy. In traditional classrooms the status of teachers and learners is clearly defined; this is not the case in virtual classes such as the environments of my programme, whereas the setting seems to be vague, therefore, there is room for questions as follows:

- a. "Where" does the learning occur?
- b. "When" does the learning occur?
- c. How does the teacher interact with the learners?
- d. How do the learners learn?
- e. How do the learners interact with the teachers and with other learners?

These questions led to the first distinction between two main kinds of virtual settings that I used in my programme, i.e. synchronized and a-synchronized environments. Ventura (2002) explained what synchronized environment meant:

The "Synchronous Model" creates a duplication of the model of cooperative Learning. A group of people gathers at the same time, forming a web-event, using facilitating technologies, an interaction among the participants and/or between them and external experts. The interaction can be by chatting or voice messaging. The instructor can use visual aids like presentations, or demonstrate computer applications. (Ventura, 2002, p.87, author's translation)

In the synchronized event of the programme, which took place on 22 November 2000 (as presented in the appendices), I used a simple environment in which I was the external expert and the participants accessed the virtual class from their own computers. There were no presentations and no voice messages, and the interaction was in writing and reading.

Ventura also explained the characterizations of a-synchronized environments (2002):

The a-synchronous model is a duplication of self-learning. The learners access the materials at their time of convenience, participate, and continue in accordance with their individual pace. The learning materials could be of any kind. The interactions among members are indirect: they can respond to one another, but it is not necessarily done at the same time. (Ventura, 2002, p.87, author's translation)

The forums that took place in my programme were based on this kind of environment.

My interest in these virtual environments concerned their appropriateness for programmes of professional development. Sivan (1998) and Ventura (2002) differentiated between the degree of compatibility of these two forms of learning for children's and adults' learning. They valued synchronous environments as suitable for children, who were less experienced in self-learning and needed immediate responses in order to encourage their learning.

As for a-synchronized environments, they considered they suited adult learners (Sivan, 1998, p.2002) who were more experienced in self-regulated learning. Ventura (2002) also identified the potential of

environments that had been designed for a-synchronous collaborative e-learning:

- a. Learning occurs anytime and anyplace: the course is accessible to all its participants, always and everywhere.
- b. A rigid group-timetable. While individuals learn at times and places of their convenience, they are obliged to a fixed itinerary: there are time limits for forums and other activities.
- c. Learning materials can be diversified, enabling individual learning. It does not imply necessarily technologically complicated materials.
- d. Accessibility: learners can access their peers and the moderator. It results in two parallel processes: Deliberations that are part of the course, mainly moderator-directed. Self-approach of learners to the moderator, and/or other learners.
- e. Forming mechanisms of collaborative learning, turning the learners to an additional source of knowledge.
- f. The moderator's role is facilitating learning and not managing it. (p:87-88, author's translation)

The a-synchronous environment of the forums in my programme fully coincided with these conditions: whilst there were no rigid definitions of each participant's learning and access to the forums, timetables were pre-decided and presented at the beginning of each session. The learners' accessibility to the learning materials, to the site, to one another and to me was absolute throughout the programme. I did my best to overcome my "teacher's inclination" to take charge, and limited myself to the role of a moderator.

The programme consisted of face-to-face sessions, as well as virtual ones. I therefore had to clarify the differences between them. Similarly, McConnell (2000) has distinguished between such programmes and events of face-to-face learning. Some of the characteristics he has mentioned were relevant to my programme, and were incorporated into it:

- a. People from geographically distant sites are able to meet, without travelling..."
- b. "Time and money saving, though not calculating the cost of the programme's setting."
- c. "Meetings are continuous in nature.....meetings can take place over a defined time space..."
- d. "Interactions... are not instantaneous or immediate".
- e. "People can participate when they want to, not waiting for permission or proper time".
- f. "There is time flexibility around the clock".
- g. "Communication usually...happens in a slower, more sporadic fashion".
- h. "There is a permanent record of the group's work"...
- i. "Participants can access electronic resources and databases"...
- j. "Social presence, process and product...often differ from face-to-face meetings".
- k. "The opportunity to work cooperatively...is enhanced..."
(McConnell, 2000, pp.64-65)

These characteristics emphasized the responsibility of the learners to the process and success of the learning, and at the same time raised a question: could everyone in the group adjust to distance learning and benefit from it?

Anderson and Sprank (2000) have distinguished between two kinds of audiences for basic education at a distance. The first type of audience emerged from the unlimited nature of the media usually used in distance learning and its potential availability to everyone who could access it. The second type of audience was more specified, relating partially to my research. Anderson and Sprank (2000, p.51) described them as "specific audiences referring to those people who actually take up the opportunities for basic education which are offered". Although most participating principals were not Internet experts, they chose to take

advantage of the learning opportunity that my programme offered them, absorbing, as a by-product the use of the virtual environment.

However, comparing these principals to Anderson and Sprank's (2000) second kind of audience, also raised two differences:

- a. The audiences: while the definition referred to basic education, the programme was planned as part of principals' professional development.
- b. The openness of the programme: during the programmes, others than the participants accessed it after being invited to do so by one or more participant, who, by doing this, demonstrated a professional development expressed by involving others in their managerial actions.

Nevertheless, this definition gave me some confidence that the principals could function in the virtual environment of my programme.

The "distant" environments brought about some changes in the course of learning, most of which could be titled under the concept of "flexible learning" (Collis and Moonen, 2001, p.9). Collis and Moonen (2000) identified five visible dimensions positioning them on continuums from the fixed end to the most flexible one. I present all these dimensions, detailing just the parts that were relevant to the programme for principals' professional development:

1. Flexibility of time: ...tempo/pace of studying
2. Flexibility related to content: topics of the course, sequence of different parts of the course... key learning materials...
3. Flexibility related to requirements: Conditions for participation

4. Flexibility related to instructional approach and resources:...social organization (face-to-face, groups, individual)...learning materials (instructor, learners, library, WWW)...instructional organization of learning (assignment, mentoring)
5. Flexibility related to delivery and logistic: time and place where contact with instructor and others...occur...methods, technology...delivery channels... (Collis and Moonen, 2000, p.10)

The programme I was planning for the principals was based on such flexibilities. It intended that "People from geographically distant sites are able to meet, without travelling..." (McConnell, 2000, p.64). These flexibilities (Collis and Moonen, 2000, p.10), attempted to provide an appropriate answer to the principals' need to belong to a group of 'strangers', facilitating, at the same time, both for them and for me, a flexible access, and some channels of communication. However, it raised a certain need for adaptation to perceptions of teaching and instructing that had not existed before.

2.5.3 Implications for perceptions of learning

This part discusses some social and psychological aspects of learning when carried out through virtual channels.

McConnell (2000) claimed that there were beneficial outcomes for distance learning. He indicated the high potential contribution of the learners' former background and knowledge to processes of choosing cooperative learning. Cooperative learning was usually characterized by:

1. Designing active learning.
2. Respecting personal knowledge as well as 'formally acknowledged knowledge'.

3. Relying on different kinds of knowledge, including personal and experiential.
4. Creating egalitarian relationships of tutor-learner.
5. Developing the learner's ability of self-assessment by acquiring proper mechanisms. (Author's summary p.111)

However, McConnell (2000) warns that CSCL could not occur unless careful attention was paid to the formation of a learning group. Such a group would function successfully only in appropriate environments. He (McConnell, 2000) saw the relationships between learning styles and learning environments, since they were facilitating mutually each other. Thus, he identified changes in the environments of learning, distinguishing between traditional learning environments and non-traditional ones that could facilitate cooperative learning under different conditions. Thus, he has described environments that were:

1. Encouraging learners to take initiatives, facilitating multi-lateral dialogues and allowing flexible degrees of control.
2. Enhancing social aspects of the classes, enabling grouping, and providing tools for mutual collaboration, support and challenge.
3. Reducing or avoiding competitive situations, mainly by appraising individuals' development compared to themselves.
4. Demonstrating concern for learners' variety.
5. Offering situations for experiential learning rather than through memorizing.
6. Emphasizing the importance of personal knowledge, confronting ideas and self-experience with former knowledge.
7. Developing different aspects of learners.
8. Basing learning on relevant problem-solving. (Author's summary p.111-112)

Having learnt about the advantages, I thought it would be wise to consider other criticizing voices. Aviram (2001), who had previously prophesied the movement of education from school to home in view of the

development of virtual channels, has now retreated. He has estimated that three factors decreased the future of distance learning based on ICT infrastructures: the first one was the disillusionment of modern educational trends; the second - the limitations of the virtual infrastructure, and the third was natural human tendency to socialize in situations of face-to-face.

Hecht (2002) has commented on the phenomena of dropouts from virtual programmes due to lack of a sense of belonging. He has named it "the digital solitude" (Hecht, 2002, p.47). He has also estimated that e-mailing and immediate virtual messaging could not fulfill the needs of members in the virtual learning communities to socialize.

In view of these contradictory views of learning through virtual channels, I realized that I had to fully consider many components if I wanted my programme to succeed. Whilst face-to-face learning groups provide natural conditions for the development of social relationships that support interactions of learning, in a virtual context such interrelations depend on the facilitator and the participants in the programme. The roles of both of them will be discussed in the next sections.

2.5.4 The role of the moderator

This section addresses the role of instructors in web-based programmes, their relationships with the learners and their influence on learners as well as on the process of learning.

The change of learning environments demanded a change in the role of the tutor. Traditional tutoring could not prepare the facilitator for conducting web-based training sessions. McConnell (2000) has divided the

virtual tutor's tasks into two time frameworks, each one demanding different skills: the first was a pre-programme period that demanded that the tutor would set up the conference and prepare the participants towards the virtual event. The second time framework was happening during the programme; the moderator's role consists of traditional tasks and new ones that are typical in virtual settings.

While the moderator in a conventional setting needs to possess skills of working with people, virtual environment require that the moderator has the capacity to create a positive and supportive group culture online, allowing participants to use the medium in ways that they thought appropriate. Considering the lack of interpersonal direct connection, this task is demanding.

This explains the replacement of the role-definition from 'tutor' to 'moderator' (Sivan, 1998; McConnell, 2000) or 'facilitator' (Crawford, 2002). Crawford has discussed the role of the facilitator, identifying three main tasks:

- a. The basic task of the facilitators is 'maintaining' the conversation: The facilitator keeps the conversation going. They wind up if the topic is waning and bring forward other ideas. A bit like the needles on the knitting they're holding onto the threads. (p.441)
- b. Elevating the participants' involvement in the process of learning and deliberating, encouraging them to tell about their own experiences as a platform for the group learning, thus demonstrating professionalism: "Engages participants in this process of becoming and adds and fosters the personal experience of engagement. The research has shown that this type of intervention by *other leaders and professionals* was clearly valued and part of the reason they felt part of a community. (pp.440-441)
- c. Create an open ambience, making the participants feel at ease, and maintain this atmosphere in order to ensure continuity and stability: There needs to be somebody 'who knows' and who has a

role as leader to take participants gently into the community and make them feel welcome - part of the community. They need to be obviously keen on the system and dedicated to making it work. An enthusiast. The facilitator provides continuity, encouragement and a sense of mediation/legitimation i.e. a sort of independent guarantor that the site is bona fide and therefore 'proper'. (pp.441-442)

These detailed descriptions of the facilitators' roles, and their requirements, explain why Crawford regards this role as indispensable. In order to be able to accomplish the tasks of such a role, new instructors' capacities are needed. Salmon (2000) has emphasized the significance of virtual teachers' needs, while in the traditional processes of learning, students' needs were considered more important.

What could I learn as I was designing the programme for professional development of principals, considering its technological platform, and planning my relationships with the prospective participants both individually and as a group?

- a. It was crucial to elaborate the experiences, ideas and knowledge of the participants in the virtual learning settings (forums, assignments and face-to-face sessions).
- b. The tutor's views or opinions would not carry a directive nature. Choosing the mode of virtual tutorials meant departing from the traditional version.
- c. Participants' self-reflections were important in the 'learning-settings' as well as in the interviews. Therefore, I would encourage the participants to express freely their insights, attitudes and opinions and to present difficulties, internal conflicts, and hesitations, turning these into learning opportunities.

However, students' needs and capacities in virtual environments mattered as much as those of the teacher did. The next section discusses these needs.

2.5.5 The aspect of the participants

This section discusses the unique web-based learning situations from the point of view of the participants. It identifies groups of populations, "types" of learners and tries to define the differences in their learning behaviours in view of the variety of environments and assignments.

Mor (2001), Peled (2001) and Zion (2001) have described programmes for children who could not attend schools regularly. This could easily apply to senior citizens or groups of professionals that are geographically far away from one another. However, since this study focused on principals, I shall limit myself to adult learners.

Adult learners and trainees are accustomed to traditional learning situations. This means situations of 'togetherness' in space and time dimensions, and using all senses as part of relating to one another and evaluating one another. The dynamics of human interrelations in virtual environments has proved to be significantly different. In order to demonstrate it I will depend on two sets of definitions: Salmon (2000) and Crawford (2002) identified some types of learners in virtual environments. Salmon (2000) differentiated between three types of distance learners:

- a. "Swimmers" - those who dared to access and use the virtual environments needing no assistance.

- b. "Wavers" - those who needed more assistance as a pushing drive at the beginning, and some support to maintain their participation.
- c. "Drowners" - those who would always find reasons (excuses?) for not having succeeded in maintaining their activity in the net.

Whilst Salmon (2000) chose to base the definitions of participants on their domination of the technological environment, and their functioning within it, Crawford (2002) chose to base her definitions on their contribution to the processes, combining it with their attitudes. She based it on the LPSH experiencing, defining five types:

By definition everyone is a **newcomer** at some stage!...

Addicts - "tend to be confident with ICT and able to integrate quickly into a known community. Their motivation may be quite altruistic in that they are willing to spend time in cyberspace..."

Thinkers may eventually become addicts, but the research had many examples of (them saying, TR): 'I get support just reading the conversation.'

...**Sceptics** are newcomers who have often been subjected to some sort of technological breakdown on the way to using conferencing...following quote is typical: 'Recently had trouble logging on. Not being able to log on so not bothered'.

Dippers...tend to be less altruistic than other users, and will only really become involved when they need some sort of response from other leaders. ... summed up in the following comment: 'On tap there are other educational professionals'... (Crawford, 2002, p.440)

In addition to these specifications of the participants' adjustment to the virtual interaction and their attitudes, Hecht (2002) has noted that e learning depended on its populations: he assumed that populations of teen-agers and young people would tend to interact more actively than would mature people. Hecht (2002) has also identified education as an encouraging factor when it concerned virtual interrelations. Knowing who

might be potential users of virtual programmes, and how they would adjust, the question of probable success and failure still stands.

2.5.6 Evaluating virtual learning

This section discusses the theme of assessing virtual programmes. The issue is a complicated one, and much of it is experiential. Difficulties are discussed and some models are demonstrated.

Teicher and Lieberman (2002) have noted that the evaluation of programmes for professional development has been considered as a complicated issue for itself. They identified one of the reasons for this complexity as the tendency to mix two different issues:

- a. Training assessment - that is conducted by a systematic gathering of data that are measured in order to evaluate whether the aims of the training have been achieved. It could relate to a variety of factors: the trainees' participation and persistence, their understanding of learned issues, the climate of the learning group and others.
- b. The evaluating of the effectiveness of training - that is conducted by gathering data in order to assess whether the trainees' performances have been improved as a result of the programme.

What would be the implications of these two questions for assessing virtual programmes?

Thorpe (1993, p.167) opts for the latter option, choosing to address evaluation as "...*a recognized process*' of judging the effects and the outcomes of a learning process". However, when describing the methods

and the tools for gathering information, as well as when referring to its analysis and presentation, there was a similarity to assessing face-to-face programmes, addressing mainly the assessment of individuals in the programme.

Weller (2002) has addressed the fact that virtual programmes for professional development were originally designed in order to facilitate new forms of group learning. Therefore, he (Weller, 2002, pp.116-117) noted, "if an educator wants students to engage in the collaborative process and give it the attention it requires, then it needs to be linked to the formal assessment of the course."

Unlike Thorpe (1993), Weller (2002) related to the specific traits of online programmes, identifying the capacity to conduct some automatic assessment, but refraining from over-estimating it. He pointed at multiple-choice quizzes and some imaginative creative software as providers of evaluative data. Other examples that Weller (2002) referred to were connected to forms of computer-friendly interactions and performances. However, none of these could provide answers when it concerned professional performance, as Teicher and Lieberman (2002) had defined. Was there a specific problem in assessing virtual programmes?

Hecht (2002) identified some possible difficulties:

- a. The difficulties to develop an index as well as methodologies of assessment in the Internet research, including the inability to imply statistical significance to the gathered data.

- b. An un-established finding that "each weekly hour of internet use increases the depression level of the user by 1%" (Hecht, 2002, p.46), that still affected researchers.
- c. The inability to build a formula that would indicate the cost-effectiveness of virtual programmes.

Crawford's effort to evaluate the "use of virtual learning" (2002, p.431) proved the most relevant to this research. Some of the questions that she has asked, coincided with some of the questions of my research:

- What value do educational leaders place on using online conferencing?
- What is it about working online that changes environments and the experience for those who take part?
- What is the role of the facilitator/moderator in working and learning online? (p.432)

The first question regarded the fourth research question, about principals' tendency to adopt virtual communication tools into their practice. Crawford's second question coincided with the first research question, concerning the effectiveness of the programme, and her third question coincided with my self-evaluation and reflection on my facilitating / moderating role.

In order to evaluate virtual programmes, such as the one I have conducted, both quantitative and qualitative instruments were recruited: accesses were measured; a telephone survey was conducted, as well as an online questionnaire. Apparently, the mode in which the programme had been administered did not cause radical changes in the research tools. The main difference was the capacity to receive a high percentage of

responses in a relatively short space of time, using the online channels for some of the data gathering.

2.6 Summary

The chapter provided theoretical background and research information regarding the main issues of the research. It began with a description of the main developments in the perception of the role of school and education from the 1960s until the end of the previous century. Each "movement" - for effective schools, for autonomous schools and for self-managed schools, brings its influence to bear on the perception of the principal's role.

The emphasis on learners' achievements focused the principals' role mainly upon responsibility for it, broadening into accountability. This raised the concept of educational leadership, that seemed to take over in the professional literature as well as in its jargon. Leadership was discussed, in comparison to management, realizing that leading schools meant practising both, as demonstrated in some observations and interviews that were presented. Naturally, the question of preparing prospective principals was discussed next.

A discussion about principles of preparing headteachers and some historical perspectives, was followed by the description of the main contexts for such programmes in three countries:

- a. The USA - leadership vs. management.
- b. The UK - competence vs. theoretical enhancement.
- c. Israel - pedagogy vs. management.

The next theme regarding professional development of principals followed some of the programmes for professional development of in-service principals. This raised the issue of apprenticeship and mentoring. A variety of local programmes in some countries, including from Eastern Asia were presented. Programmes for principals' professional development started spreading into innovative forms such as distance learning. Thus, the next topic concerned distance learning and training.

In order to achieve a uniformity of terminology, it started with definitions of basic concepts in the area. It went on to describe several virtual learning environments, pointing at the advantages and difficulties that were involved in each one. The implications of virtual environments for the learning itself, as well as for the moderator and the participants in such programmes, were presented.

The unresolved issue of evaluating virtual programmes was discussed, reaching the conclusion that the research tools for virtual programmes were very similar to those for traditional face-to-face programmes.

Having discussed the theoretical aspects of the study, the basis had been laid for the beginning of the research itself. This is described in detail in Chapter 3, the methodology chapter.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter leads the reader into the methodological issues of this research. It is structured around seven key themes. The first one presents the origins of the research, thus establishing its context and my roles in the research, as an instructor and a researcher.

The second part presents briefly the five research questions, discussing the components that are relevant to the research questions in each one of them.

The third part discusses the study's position within the main approaches of research. It presents briefly the positivist and relativist schools of research, identifying points of strength and weakness, and the criticism they arouse. It further explains the appropriateness of a qualitative approach for this research, and the attempt to match the methodology of the research to its nature.

The fourth part deals with methodical issues, presenting the roles of action research and case study in this study, explaining their appropriateness as well as the measures I have taken to overcome their potential risks.

It then goes on to present the tools used; interviews, observations, and document analysis. It explains the role of each tool and the measures taken to ensure the most effective use of them.

The fifth part addresses the procedure of the research. It describes the participating principals: the way I approached them and some of their characteristics; a brief description of the types of educational organisation they lead, the populations they serve, their seniority and gender, leading to the description of the beginning of the programme.

The sixth part concerns the analysis of the research, based on two dimensions:

- a. The time dimension: it presents the phases of the research as developed during the research.
- b. The organising categories: I identified three categories that would organise the findings - presentation and analysis. These categories were openness, involvement and the effect of the programme; they are also presented and explained.

The seventh part addresses the issue of credibility, describing the means that I have taken to ensure validity and reliability. This part also attends to ethical aspects; these are discussed, adding to the research's trustworthiness. A summary leads to the fourth chapter that explains in detail the structure of the presentation of findings and the analysis.

3.2 The background of the research

This section identifies the sources that have initiated this research: my experience in training primary principals and in using information-technology. It also describes the appropriateness of a web-based programme for principals under certain competitive circumstances. Next, it presents the technological environment of this research, explaining the reasons for its choice.

Since 1992 I have been conducting professional development programmes for primary principals. In such programmes, the participating principals usually belong to the same geographical area, and work under the same supervisor, mostly heading schools in the same municipal area. I learnt during informal talks with primary principals that the geographical and social proximity created a competitive situation that prevented them from sharing problems and discussing solutions with one another. In this study I sought ways to overcome this difficulty, offering the principals an uncompetitive framework, thus avoiding possible intimidation from one another. My familiarity with technological environments at my workplace led me to seek unthreatening channels of communication for primary principals.

Since 1994, I have been working at the Centre for Educational Technology (CET). The pedagogic ideology of this institution emphasizes the need to respond to pupils' heterogeneity. Therefore, it engages itself with the design of flexible learning opportunities including information-technology environments. My experience with some of these interactive technological environments, led me to appreciate the use that I could make of it when working with primary principals who were not working in the same geographical area. It seemed intriguing to conduct a mainly web-based programme for professional development, while avoiding the limitations mentioned earlier. Thus, at the beginning of 2000, I began to plan a one academic year programme that would include mostly virtual sessions along with some face-to-face meetings.

In March 2000, I asked for technological advice at CET regarding a suitable infrastructure. Experts of the relevant department introduced me

to an interactive information-technological environment called SCHOOLINK. It was a combined intranet-internet environment, but it seemed easy to handle even by technological novices. The department also assigned one of its tutors, named Sara, to provide the participants with technological guidance in order that they could acclimatise themselves and learn to master the use of the new technology. Eventually, Sara technologically maintained the web-site of our programme. Her educational and technological experience contributed substantially to the research, as she was, on several occasions, a co-observer.

SCHOOLINK enables only the conduct of written virtual sessions. The participants could access the site, using personal passwords, thus securing privacy. The site facilitated various types of communication: it had a 'virtual room' where all participants could 'meet' at a certain time and 'talk' simultaneously. It also provided a platform for 'forums of discussion', where I introduced issues, inviting the participants to address them during a defined period, at a time and place that were convenient to them. Participants could also correspond with one another, openly and privately.

Technologically, it was possible to introduce computerised and videoed presentations. However, it seemed that the principals, most of whom would probably be technology-novices, would find it difficult to handle a complicated ICT environment. Sara and I prepared ourselves for a substantial training in the environment's use. Having fulfilled the preparatory steps, I set out to start the programme, thinking about the issues that might be of interest, in order to define the research questions.

3.3 Research Questions

I planned the research in order to investigate the feasibility of a programme for the professional development of primary principals regarding instrumental, social and technological aspects. The research questions as presented below, with a short explanatory paragraph on each one of them, reflect this intention. These questions have guided the data collection, and have directed the stage of findings' presentation and analysis:

1. **How effective was the researched programme?** This question leads to an examination of the programme's capacity to change managerial behaviours. Can a mainly web-based programme change principals' former attitudes and encourage them to adopt new ideas and practise them? Can such a programme assist principals in improving their management, deepening their leadership and practising innovative patterns in their role? The principals' self-perception and my fieldnotes on my visits to schools would be the main source of evidence in examining such effectiveness.
2. **Can such a programme form an active and worthwhile support group for its participants?** The virtual nature of the programme was intended to help the participating principals to overcome phenomena of the competitiveness that characterised principals who led schools that were geographically close to one another. Friedman (1997) regarded principals' feelings of 'solitude' and 'isolation' as important causes for burnout. I believed that virtual channels could provide principals with opportunities for supportive collegiality. In

order to investigate this I intended to investigate the intensity and substance of interrelationships during the programme.

3. **To what degree are synchronized vs. a-synchronized sessions effective and user-friendly?** The programme utilized two kinds of virtual meetings: synchronized meetings whereby participants "met" one another virtually at the same time, and a-synchronized discussions where every principal chose the time and place of participation. I attempted to establish an understanding about the user-friendliness and, as a result, the effectiveness, of each kind of virtual session, thereby establishing their comparative quality.

4. **To what extent, in what ways, and how effectively do participants utilize virtual tools as managerial communication systems, following such a training programme?** Within the day-to-day school management, principals need to maintain communications with authorities, colleagues, subordinates, and others (parents, for instance). The research investigates if principals who have participated in a virtual training group tend to develop and apply similar channels in order to facilitate communication within their professional role.

5. **Is there an ideal proportion of face-to-face and virtual sessions in such a training programme and, if so, what is that proportion?** I sought to find out if a web-based training programme needed the support of face-to-face meetings, or whether it could exist only on a virtual basis. The programme consisted of virtual and face-to-face meetings and I wanted to evaluate whether there was an 'ideal' proportion between the two, and, if so, what it was.

3.4 Methodological perspectives

This section discusses the key methodological considerations in planning and conducting the research. It begins with an examination of the main research approaches: the positivistic and the relativistic streams, including points of strength and weakness of each approach. It ends with a discussion that positions this research within the scope of interpretive research.

3.4.1 The positivistic approach

Historically, the positivistic approach preceded the relativistic one (Cohen and Manion, 1998). It stemmed from a 'scientific' approach, and researchers usually linked it to quantitative methods (Drew *et al*, 1996). The term served research programmes that relied on measurable and replicable data and procedures, thus enabling verification (Cohen and Manion, 1994). Cohen and Manion (1994) have estimated that this kind of research expressed the researchers' ambition to bring social science research closer to natural science research. These involved ascribing measurable terms to research questions, as well as to the tools of collecting data, presenting and analysing it.

Cohen and Manion (1994) have also noted that the advocates of the positivistic approach assumed that social phenomena were cause-result structured. Such links were of interest to the researchers, who aspired to present their conclusions in a persuasive form that could satisfy any scientific criteria.

Drew *et al* (1996, p.31) described positivistic research using a graphic figure: they drew two continuums, perpendicular to each other. The

horizontal continuum presented the research environment while the vertical continuum presented the gathered data. They described the environment as strictly controlled, and the continuum of data included a variety of resources and findings expressed in numerical measurable terms. The variety of different quantitative researches depended on the inflexibility of the research environment combined with the measurability of the data. This resulted in quasi-laboratory investigations, which included mechanisms of control, whose function was to define sets of independent and dependent variables, enabling structured research questions. Researchers who based their investigations on such assumptions counted on validity and reliability being as close to a natural science design as possible. Likewise, Mouly (1978) considered quantitative research as a path to achieving a 'truth'. He expected to establish or exclude a pre-assumed hypothesis in social science, as done in natural science, claiming a need for a consistent classification in any research.

However, Cohen and Manion (1994) acknowledged that differences did exist: when presenting, as an example, a set of pre-post tests that investigated attitudes towards minorities, relating to a certain educational programme, they concluded that "possible uncontrollable intervening factors or occurrences, could have affected the subjects of the research"(pp.165-166). Thus, human factors and social relationships were not always definable and measurable (Johnson, 1994; Cohen and Manion, 1994).

The programme that this study examined lasted from May 2000 to December 2001. During this time, "possible uncontrollable intervening or occurrences" (Cohen and Manion, 1994: 165-166) could have happened,

causing disturbance, because it depended on significant human relationships that could become complex. Therefore, I turned to the other school of methodology.

3.4.2 The relativistic approach

The relativistic school of thought is also known as naturalistic and interpretive. Researchers tend to link it to qualitative methods (Johnson, 1994; Drew *et al*, 1996). The relationships between theory and practical research are different than in quantitative approaches (Bogdan and Biklen, 1992). Whilst quantitative researchers set out from the theory to the practice, searching to test the theory, qualitative researchers set out from an observed practice, aspiring either to explain it through existing theories, or form new theories (Gibton, 2001).

Schraatz (1993) has claimed that by using statistical calculations, quantitative research represented only the dominant voices. This reduced other voices, "regarding them as irrelevant 'noises'" (p.1). The interpretative approach enabled researchers to make use of all the voices: the frequently and loudly heard as well as the tacit. Thus, the voice of the participants was valuable. I have regarded all the evidence that I have obtained of the principals as valuable; their presences as well as their absences have been considered as significant. An absence from a session was worth looking into, given that my approach was people oriented rather than 'cause-result' oriented (Sabar, 1999).

My research was interested in the participants' professional development, if and as affected by the programme: changing managerial patterns, absorbing information-technology, and the relationships that participants

developed with one another. It sought to "discover participants' typical behaviours and interpret them" (Sabar, 1999, p.18). In addition to the ten subjects, I, too, became a subject as I took an active part as the programme's instructor. Therefore, my reflection was as significant as the participants' were.

When I planned the data gathering, I was not looking for an absolute truth, as I realized there was no such thing because truth would be what each participant perceived to be true. Stake's (1978) distinction between 'explaining' obvious phenomena and 'explaining' tacit ones referred to such situations: the knowledge that researchers formed through the data became their understanding of the observed occurrences. I had to access the participants in the sessions, conducting a follow-up of their actions, and experiences in their daily work, in order for me to understand the changes that they had gone through. A qualitative approach formed a suitable framework for such a research, opening more than one way for it. Having established this point, I tried to characterise this methodology.

Drew *et al* (1996) have noted the significance of a natural environment for the layout of qualitative research. The design of qualitative research calls for a natural setting and does not allow a distortion of its conditions. The research's environment represents a multitude of interactions, making them the phenomenon to be researched, in accordance with Sabar (1999, p.25): "...observing the phenomenon as a whole and striving to interpret it while reconstructing reality from the point of view of its participants". What were the practical implications of such a design?

Bogdan and Biklen (1992, p.2) regarded such practical implications as "an umbrella term to refer to several research strategies that share certain characteristics". I made these characteristics into a checklist that I could use to assure the quality of my research:

1. Data collection is descriptive, have been termed soft ...and not easily handled statistically...
2. Research questions are not framed by operational zing variables, rather they are formulated to investigate topics in all the complexity
3. People conducting qualitative research may develop a focus as they collect data; they do not approach the research with specific questions...
4. They also are concerned with understanding behaviour from the subjects' own frame of reference...
5. They tend to collect data through their sustained contact with people in settings where subjects normally spend their time... (Bogdan and Biklen, 1992, p.2).

The research took place between May 2000 and December 2001, facilitating lasting relationships of several kinds. The connections between the principals and me were a complex mix of trainer-trainees and researcher-subjects relationships. I believed that a qualitative approach could examine closely these relationships. I aspired to understand the sub-texts of the tacit strata of these relationships. I made an effort to reflect, in my behaviour as an instructor as well as a researcher, my sensitivity to human dimensions and experiences that derived from people's variety, and express its legitimacy, hoping it would enable me to form a better understanding of the researched reality. The next step was establishing the approach of the research.

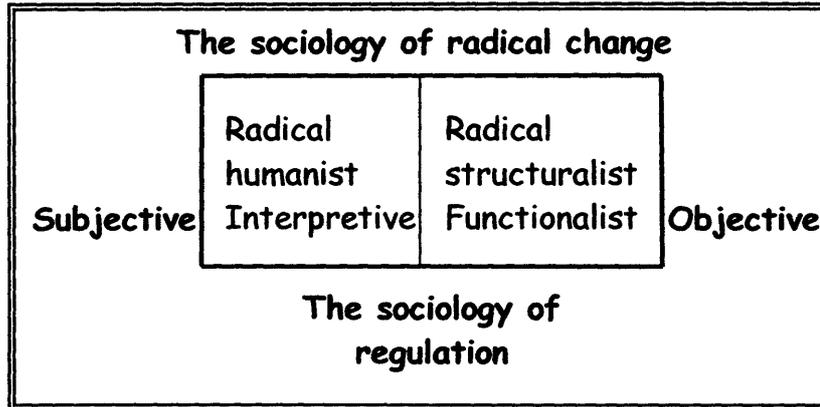
3.4.3 The approach of the research

The distinction between positivism and relativism is not necessarily as dichotomist as it may seem. It is true that these approaches represent different sociological perceptions. But, as Oakley (2000) noted:

While researchers in one camp think they are studying the real world, which consists of things it is feasible to try to find out about, those in the other dispute the idea that there is a single reality to be known, and regard the pursuit of 'hard data' as impractical and unachievable. What for one side is a set of 'facts' is for the other a complex and impenetrable kaleidoscope of heavily constructed social meanings. (p.25).

While I was concerned to learn about "Interest, meaning, interaction, intersubjective life-its character and the process of its creation, rules of the game and the maintenance of social life..." (Ribbins, 1995, p.255), I also thought I would need to engage in some measurements. For instance, in order to appraise persistence, I counted accesses to various forums and noted principals' participations in the face-to-face sessions. The difference between these quantitative actions was that I did not make do with these measurements, but pursued their meaning from the viewpoint of the relevant subjects, asking them about their reasons and/or explanations.

Oakley (2000, p.226) presented Burrell and Morgan's (1980) display of four paradigms for the analysis of social theory:



Burrell and Morgan (1980) in Oakley, 2000, p. 226

I ascribed a high importance to the participants' descriptions and self-perception. Therefore, within Burrell and Morgan's (1980) paradigms, as presented by Oakley (2000), I positioned the research as being subjective, interpretive, and minded towards the sociology of regulation. This position affected the methodical perspectives of the research, as well as its emphases.

3.5 Methodical perspectives

This section discusses the methods I employed in my research. It discusses three methods: action research, case study and document analysis, presenting their appropriateness in this research, as well as some criticisms concerning them.

3.5.1 Action research

This part discusses the method of action research. At the beginning, it defines it, and then explains its uniqueness within the school of qualitative research and the criticism it arouses. It also explains the relevance of this method to my research.

When I planned my role in the research, I considered Robson's (1993, p.446) view of action researchers as "... practitioner-researcher is someone who holds down a job in some particular area and at the same time carries out systematic enquiry which is of relevance to the job", because: training the principals and researching the programme's effect. Burns (2000), Murray & Lawrence (2000) and Zeller Mayer (2001) pointed out the opportunity that action research's framework offered to practitioner-researchers. However, at the same time, they criticised this method warning that a practice-research combination could become a source for contamination, as well as the possibility that it could endanger the practice. This critique alerted me during the research and I was aware of both the advantages and the risks.

Burns (2000, p.445) believed that action-research was about "the application of fact-finding to practical problem-solving in a social situation with a view to improving the quality of action within it". I did not regard my action-research as such: my programme did not intend to solve problems but to enrich three repertoires: broadening principals' managerial behaviours, opening new channels of professional communications and introducing ICT technologies. Cohen and Manion's (1994, p.86) definition of action research as: "... a small scale intervention in the functioning of the real world and a close examination of the effect of such (an) intervention" coincided with my intention to practise, experience and understand an innovative experience for the professional development of primary principals.

Being the researching instructor presented me with an ethical dilemma. My first aim was to try an alternative programme for the professional

development for primary principals, using technological environments. My second aim was to investigate this experience. These two aims put me in problematic situations: as a trainer, I tended to adopt a directive attitude towards the trainees, while as a researcher I sometimes detached myself, refraining from expressing explicit opinions. Was I harming the training process, violating my obligation to the principals, who looked for their own interests, by keeping my researcher's objective stand? Yossifun (1996) chose to practise as a researcher rather than as a counselor in a similar situation; I chose to transfer the responsibility for their progress to the principals.

This kind of a dilemma formed the basis for Murray's and Lawrence's (2000, p.18) critique of action research, referring to it as "controversial theoretical perspectives and philosophical outlooks of practice and research" and as risking both. They broadened the ethical aspect by presenting a possible irreconcilability of the basic theoretical and philosophical aspects of practice and research. This irreconcilability aroused an apprehension that the report of such projects would be practice-oriented rather than research-oriented. Therefore, they doubted the practitioners' ability to function as researchers, suspecting they might interpret marginal anecdotes or occurrences as significant thus diminishing the research's value.

I was aware of this dilemma and therefore looking for other opinions. Lomax (1994) acknowledged the difficulties that Murray and Lawrence (2000) had presented as part of the process rather than its destructive power. She has contradicted their criticism, regarding the value of action research because it relied on the practitioners' expertise in the area they

chose to investigate. Robson (1993) supported these views, finding an advantage in being an insider who knew the context of the researched field, thus overcoming probable errors. Moreover, Robson (1993) appreciated that combining practice and research with each other could result in enrichment for both.

Qualitative educational research enabled much interpretation, relying on the feelings and views of the participants and the meanings that they ascribed to certain situations. I chose to conduct my research addressing certain problems in a given setting, concentrating on understanding the researched events rather than attempting to achieve scientific generalisations.

Sagor's attitude (1993), identifying action research's potential in assisting practitioners who chose to research their own practice, trying to reach a better understanding of their course of action and improve it, suited mine. Robson (1993) also appraised action-researchers' intentions to improve their practice as more significant than that of scientists who aspired to decode certain phenomena. Having sharpened my sensitivity to pitfalls and taking measures to avoid them, I rechecked my research plan using principles proposed by Zellermyer (2001):

- a. *Collaboration* - there is a researcher-participant cooperation in the procedure of data collection and in its analysis.
- b. *Reflexivity* - the personal interrelation of the researcher and the participants facilitate a constant view of a possible gap between aims and their realization.
- c. *Dialecticism* - it is legitimate to change the research questions throughout the process of the research, under circumstances that call for it.

- d. *Risk* -that the research might draw away from the theoretical model, thus receiving a "day-to-day" character rather than an academic one.
- e. *Pluralism* - interpretive analysis facilitates a comparison between the 'idealistic' perception and the different insights of the participants regarding its realization.
- f. *Exchange* - a change of the practice. (p.328)

While I considered Zeller Mayer's (2001) principles in regards with the collaboration between the participants and myself, I also considered principles that Elliot (1997) chose as guidelines for qualitative research:

- a. The researcher directs the investigation towards materializing an educational ideal.
- b. The research's intention is to change a certain practice.
- c. The process of data collecting is unconcealed for the researcher and participants.
- d. Exposure of latent theories, beliefs and attitudes that the participants take for granted.
- e. Sharing the research with the participants. (p.75, author's translation)

My research coincided with these principles:

- a. I intended to research, through the web-based programme, whether it could provide opportunities for the professional development of principals.
- b. The virtual nature of the programme could lead to a change of practice.
- c. The intention of the programme, as well as all stages of data collecting were transparent to all the participants during the whole process.
- d. The programme facilitated opportunities for the participants to express educational and managerial beliefs.

- e. The documentation of the programme presents a significant amount of sharing and collaboration in the course of the researched programme.

These principles will be clarified in this chapter, as I describe the programme for the professional development of principals, as well as the research.

Fearing that my instructing role might dominate the researching role, I relied upon Winter (1989), who has suggested that practitioner-researchers adopted four principles of action, in order to avoid diminution of their researching abilities:

- a. Forming a deep understanding of the problem before beginning the data-collection;
- b. Basing conclusions on facts rather than on interpretations;
- c. Making sure of their ability to develop further enquiry
- d. Improving the researcher's practice in view of the research's result, thus forming a constant cyclic process: conducting a training session (face-to-face or virtual), analyzing its documentation, interviewing the participating principals, conducting the next session.

I followed these terms hoping, at the same time, that the subjects acted likewise with regard to their managerial practice. In my interviews, visits to the schools and written materials, I sought evidence for such improvements. Letting the programme develop naturally and going through the cycle of planning, acting, observing and reflecting (Kolb, 1988; Robson, 1993), were the methodological principles that I adopted in order to

overcome methodological obstacles that the action research may have produced.

Robson (1993, p.440) has referred to another conflicting aspect of the dual role, researcher versus instructor, using the term "inward looking" as a source for the poor quality of action-research. He found that similar critical comments applied to non-educational organisational units that sought to conduct self-improving processes through action research. In developing this view Robson (1993) has identified four elements that could demonstrate the weakness of the practitioner-researcher compared to an external researcher: lack of time (given that practice is a time consuming process), lack of researching expertise, lack of confidence that results from lack of expertise, and being an insider thus risking being biased.

In order to overcome these threats, I meticulously documented the whole programme. This documentation served the purpose of my research as well as the participants' interests. I dedicated myself to it from May 2000 until December 2001, conducting the interviews and leading the process, paying careful attention to methodological aspects. I delayed other aspects of the research, like writing, until the programme was over. In addition, I made myself available for the principals to approach me, at any time, with any problem. Some did, others did not.

Besides attending to the action research method, I had to find a satisfactory way of dealing with the small size of a group that consisted of only ten subjects. The case study method seemed appropriate under these circumstances.

3.5.2 Case study

This section discusses case study, its methodical principles, and relevance to my research. In addition, it presents the criticism and advocacy of this method, and the steps that I have taken to overcome this criticism.

The triangle formed by the relationships between the practitioner-researcher, the subjects, and the research, justified the use of the action research method. Likewise, the size of the group justified the use of the case study method. The data that was obtained from every participant deserved meticulous handling. Designing procedures of data gathering and analysis raised the potential advantages of case study, as a guiding method. This method has its benefits and its pitfalls.

I adopted Bassey's (2002) definition of case study to start the discussion:

An educational case study is an empirical enquiry which is:

- Conducted within a localistic boundary of space and time (i.e. a singularity)
- Into *interesting* aspects of an educational activity, or programme, or institution, or system,
- Mainly in its natural context and within an ethics of respects for persons,
- In order to form the judgment and decisions of practitioners or policy-makers,
- Or of theoreticians who are working to these ends, and
- Such that sufficient data are collected for the researcher to be able:
 - a. To explore *significant* features of a case,
 - b. To create *plausible* interpretations of what is found
 - c. To test for the trustworthiness of these interpretations
 - d. To construct a *worthwhile* argument or story
 - e. To relate the argument or story to any relevant research in the literature
 - f. To convey *convincingly* to an audience this argument or story, and

- g. To provide an audit trail by which other researchers may validate or challenge the findings, or construct alternative arguments (p.58)

I regarded this detailed definition as a guideline to my research, preferring Bassey's (2002) definition to that of Yin (1994) who viewed it as a research that investigates a contemporary phenomenon within its real life framework, in a situation where the boundaries between the phenomenon and the context are blurred. In my research there were no boundaries between the phenomenon and the context. This complicated the research's methods and demanded that extra attention was paid to the data and its analysis, facilitating "a potential capability of conducting in-depth researches, using the case study method" Yossifun (2001, p.266).

Bassey's (2002) definition clarified the components of case study. However, Hitchcock and Hughes' (1995) identification of the key points of case study added a realistic colour to Bassey's (2002) somewhat formal definition:

- a. It is concerned with a rich and vivid description...
- b. It provides a chronological narrative of events...
- c. It blends a description of events and the analysis of them...
- d. It focuses on individual actors or groups...
- e. It highlights specific events...
- f. The researcher is integrally involved in the case
- g. An attempt is made to portray the richness of the case in writing up a report. (p.317)

In addition, Johnson (1994) argued, as did Sabar (1999), that case study allowed the researcher to utilize various research-tools. Johnson (1994) considered case study as a contemporary method, because at the stage of presenting the findings, the researched phenomenon was still occurring. This did not comply with my research, because as long as the programme

lasted I did nothing but documenting and transcribing the obtained data. Considerations regarding findings' presentation and analysis did not start until the programme was over, serving the interests of both the research and the programme:

- a. The research: I wanted to create a distance between the 'instructor self' and the 'researcher self', thus minimizing concerns about the quality of my 'inward looking' (Robson, 1993). I also wanted to create a time gap between the programme and its analysis, using the time to form various perspectives.
- b. The programme: The programme was demanding and its preparation as well as its documentation was time consuming. I felt my main obligation was to the participants. Dedicating time to analysis would have cost the subjects' time, and could bias the process.

Positivist researchers criticise the case study approach (Sabar, 1999), arguing that it represents most strongly the weakness of interpretive research, being conducted by inexperienced and probably biased researchers. This argument coincided with the critique of action research that I discussed earlier. Instead of arguing with these findings, I chose to present components defined by Yin (1994) and Bassey (1999) as guidelines to my work throughout its different stages, thus confirming the value of the research, within the limitations of its scope:

Table 3.1 Comparison of Yin and Bassey's characterisations of case study

	Yin (1994)	Bassey (1999)
Research Questions	Defining at least one study question, of the nature of "how" and "why", rather than informative questions.	Identifying the research as an issue, problem, or hypothesis that enables the discovery of new knowledge.
"Flexible" focusing	Focusing accurately on the issue or problem from the first stages of the research, acknowledging that under certain circumstances, additional study may develop during the research.	
Question-tools accord		The uniqueness of each case study permits the compatible use of a variety of means when collecting and storing data.
Analytical Approach	Dividing the analysis into units - that define the basic researched problem and the substance of the case. A case may be an individual or a situation. Defining the case leads to the crystallization of the research question. The next stage is defining the participants and the physical boundaries (mostly time and place) of the research.	Generating and testing analytical statements a step that leads to a categorisation that facilitates understanding, analysing, and generalizing. Interpreting or explaining the analytical statement - presenting the value of the research. The "why" and "how" are the keys to such interpretations and explanations.
"Logical" Interpretation	Forming a logical linkage between data and the propositions; Defining criteria for interpreting the data.	Interpreting or explaining the analytical statement - using "why" and "how" as keys for interpretations and explanations.
Writing the Report		Writing the case report, keeping the reciprocal connection between the nature and the type of the research and the report.
Publishing		Finishing and publishing, after getting reflections from interested readers

I applied some of these characteristics to my research. The following examples demonstrate it:

- a. Research questions: While trying to establish a "new knowledge" (Bassey, 2002) about the feasibility of virtual programmes for professional development of principals, the research questions attempted not only to learn about phenomena, but to investigate their sources and outcomes (Yin, 1994).
- b. Analytical approach: In order to facilitate the presentation, interpretation, analysis and generalisation of the findings, I followed them, looking for elements that enabled to distinguish between developmental dimensions (as presented in 3.7.1) and create analytical categories (as presented in 3.7.2).
- c. "Logical" interpretation: The interpretation joined together the analytical nature of the research questions with the developmental dimensions and categories.
- d. Writing the report: The process of writing and redrafting was almost as longitudinal as the research itself, because of the constant effort to link both of them into one unit.

An additional means for strengthening the validity of my research was creating a chain of evidence (Yin, 1994, p.144):

- a. I verified different evidences by turning to others. Thus, some interviews verified others.
- b. By conducting the interviews at the principals' schools I was able to observe evidences that verified parts of what principals' told me in their interviews.

A strong source of criticism of the case study approach by positivists is the issue of external validity. Yin (1994) assumed that in order to establish generalisations, researchers ought to be able to conduct repetitive researches. However, this could not be done in my case, as there was no way to reconstruct the same conditions or to repeat the research with the same participating principals, even within similar settings.

3.5.3 Research tools

This section discusses the means of data collection: interviews, observations, and document analysis. The discussion seeks to explain the options I considered and the choices I made.

3.5.3.1 Interviews

This part presents the value of interviews as a research tool. Later, it discusses the procedures and timetable for the interviews used in this research.

I relied heavily on interviewing as a tool for data collection. An interview is "...an interchange between two or more people on a topic of mutual interest..." (Kvale, 1996, p.11). Cohen *et al* (2000, p.268) identified various aims that interviews could serve, some of them relevant to my research "to evaluate or assess a person in some respect....to gather data, as in surveys or experimental situations...". Drew *et al* (1996, p.173) regarded interviews as not only the "most commonly used method", but also, "when conducted properly, potential contributors to research". There are several kinds of interviews.

Johnson (1994) and Sabar (1999) distinguished between structured and unstructured interviews. Sabar (1999) defined a structured interview as one that consisted of pre-phrased questions within defined boundaries. Sabar (1999) considered this type of interview appropriate for quasi-experimental research settings as they enabled quantitative analysis.

The interviews that I conducted (the first, second, third, fourth and fifth interviews, pp. 367-376) could be regarded as specialized (Johnson, 1994). According to Johnson (1994, p.47) define such interviews as "...individually tailored ...Aiming to acquire complementary information, which rounds out data already available from other sources". This suited my aim to accommodate myself to the variety of participants and validate their testimonies by comparing them with one another and with their own successive interviews.

My role as an interviewer was important, as, beside the research's perspective, I was part of the social setting of the practice-research. In order to avoid bias, I planned the interviews keeping in mind the information I was looking for, but at the same time leaving room for unexpected developments. In order to achieve valuable data, and as part of my sensitivity to the subjects, I designed sets of flexible questions (Johnson, 1994), focusing on their relevance to the research questions.

I took handwritten detailed notes during the first four interviews (pp. 367-374), writing them up afterwards. I had previously obtained the interviewees' consent; later, I e-mailed to every interviewee the transcript, asking for their comments and approval. When interviewing for the fifth time, I tape-recorded and transcribed the data (Cohen and

Manion, 1994). These measures were taken in order to ensure the accuracy of the data obtained in the interviews. It also enabled me to compare versions of the same episodes from various participants, thus creating a chain of evidence (Yin, 1994) and providing trustworthiness. I added my personal fieldnotes immediately after my visits, making use of observed evidence and 'nuances'. I conducted the interviews at the principals' respective schools, expecting to reveal, during my visits, first-hand evidence. I undertook and conducted the first four interviews with every participant, dating each one meticulously:

The first interview (pp. 367-368) took place between May and August 2000, before the programme started.

The second interview (pp 369-370) took place between 15th January and 15th February 2001.

The third interview (pp. 371-372) took place between 10th March and 30th April 2001 (The length of time was due to the three week Passover vacation).

The fourth interview (373-374) took place between 15th May and 15th June 2001.

In addition, I conducted telephone interviews (31.5.2001, pp. 400-404) with four of the principals immediately after a face-to-face session concerning school marketing (talking to Abe, Rachel, Ann and Solomon on 31.5.2001). The interviewed principals were still on their way home. I did it "in conjunction with other data collection methods" (Fiedler, 1994, p.286)

as I thought it was the right time to collect participants' genuine attitudes and impressions of this particular session. I thought that the telephone interview could be complementary to other face-to-face interviews, gaining advantages without any risk (Fiedler, 1994).

The interviews lasted between 45 and 60 minutes; however, the transcripts did not reflect this. There were two kinds of 'time consuming' interruptions: 'instrumental disturbances' resulted from the fact that I interviewed the principals at their workplace during work time. Urgent telephone calls, unexpected school events and other natural occurrences interfered with the interviews. Although the principals ordered their secretaries to avoid such disturbances, they did occur. 'Social disturbances' strengthened in each interview: the principals, coming to trust me, took advantage of my visits to consult, presenting and sharing their experiences, dilemmas, satisfactions and difficulties. I thought it was proper to comply with these needs. In addition, they offered hot or cold beverages, thus creating a traditional ceremony. I felt it was right to take part in this 'happening', thus maintaining informal channels of communication.

At the end of the programme, I felt I needed to conduct *a fifth interview*. I conducted it, with all ten participants, between 15th November and 15th December 2001 (pp. 375-376). Again, the interviewees consented to be interviewed; in addition, the transcripts were e-mailed to them the day after the interviews, asking for their comments or corrections. They did not comment on them, thus expressing an agreement to the written versions. Although this made things easier for me, I sometimes wondered if some degree of respect was involved. During the face-to-face sessions I

stressed my willingness to receive comments or objections, but have received none. I also obtained data through observations, as will be discussed in the next section.

3.5.3.2 Observations

This part starts by discussing briefly the value of observations as a research tool. It considers several modes of observation, and goes on to describe the observations used in my research, and the choices I made.

Johnson (1994, p.52) describes the nature of data that can be collected through observation: "... to record behaviour...to provide an accurate description of a situation; to gather supplementary data which may qualify or help interpret other sources...", identifying four conditions that define an observation as valid for research purposes:

- a) Serves a formulated research purpose
- b) Is planned systematically
- c) Is recorded systematically and related to more general propositions rather than being presented as an interesting description
- d) Is subjected to checks and controls of validity and reliability. (p. 52).

Johnson (1994), Cohen and Manion (1994) and Sabar (1999) differentiated between structured and unstructured observations. I tried to conduct observations that would provide significant data. The research settings consisted of face-to-face and virtual sessions. However, it was complicated to form useful documents of each of these settings: I was the instructor in most face-to-face sessions; therefore, I had to use a co-observer. This demanded a detailed observation schedule. The design considered the research questions in order to make the data useful. As I was unable to conduct all the observations, I recruited Sara, the technology instructor,

as a co-observer. Her presence did not impose on the group because the participants knew her. I did my best "to participate actively in the group observed" (Johnson, 1994, p.56). Sara did her best "to observe without becoming a member of the group" (Johnson, 1994, p.56).

This combination provided the opportunity to compare our recordings. I could also see myself as a participant observer. In participant observation, "...the observer is part of the observed population, taking part in its routine activity, writing it down as approximately to its occurrence as possible..." (Sabar, 1999, p.52). Such an observation is affected by the observer's role in the process, as well as by the relationships that develop between the observer and the observed (Johnson, 1994; Sabar, 1999). Although the observed participants were aware of my dual role, they maintained a relatively neutral unbiased attitude (Johnson, 1994; Sabar, 1999). Therefore, my observations could serve as a source of data, even under these special conditions. Overcoming the obstacles in observing the face-to-face sessions, I found that observing the virtual sessions was more complicated.

From the first steps of designing the observations, I discovered that the research's unique circumstances caused two types of problems. While face-to-face meetings could be a source for recording obvious and latent behaviours, virtual meetings limited the scope of the observed phenomena, since there was no 'visibility'. As for the methodical point of view, there was much accumulated experience in observing face-to-face meetings (Williams, 1996) but no instructions concerning observations of virtual meetings. The lack of such 'knowledge' initiated innovations in observing virtual sessions.

The fact that all participants were aware of the observers did not decrease the importance of the observers' position and the way they were introduced. Sabar (1999) referred to the way the observed perceived their observers, and the way they presented the observations that they intended to conduct. In this research, my roles were clearly defined. However, the role of the external observer could have been less clear. For instance, external observers could tell the observed subjects what were the particular behaviours that they intended to record, or leave it unknown (Sabar, 1999). The observers' decision to share it, might bias the subjects' behaviours. Here again, the acquaintanceship between Sara and the group made it unnecessary to add more information about her observation as they accepted her naturally. The only unknown part remained that of observing virtual sessions.

I had anticipated observing virtual sessions to provide significant information about the participants' attitude towards the training programme and their sense of commitment to it. The participants were functioning in a relatively new technological environment. They were, therefore, likely to find it difficult to adopt new styles of interaction with one another. The technological infrastructure did not enable communication through body language, voice interpretation, or facial expressions. Thus, this strengthened the importance of the written word.

Participation and absence reflected two aspects, their involvement in the programme and their willingness to engage themselves in new media with significant others. Frequencies of approaching the forums could be indicators of both factors, as well as their reactions to others' opinions.

Observations could become a meaningful source of data to stand beside the interviews and document analysis.

3.5.3.3 Document analysis

This section begins by identifying the necessary conditions under which a document analysis is of academic value. It goes on to describe the types of documents this research analysed.

Sabar (1999) indicated that documents might vary in their academic value. This called for clear criteria that would enable comparing documents with one another. Johnson (1994), Cohen and Manion (1998), and Sabar (1999) identified some criteria for establishing the value of documents for the researcher:

- a. *Authenticity and credibility* - The originality of the document, its originality and the intention of its writer, testify to its value.
- b. *Representativeness* - Does the document represent an established reality, or an incidental occurrence? This requires more documents in order to validate each document. Another way to validate documents is to confront them with evidence derived through relevant interviews and observations (Johnson, 1994; Sabar, 1999).
- c. *Meaning* - that was assured through a similar understanding that any reader would obtain when reading a certain document (Johnson, 1994).

At the beginning of the programme, I could not foresee the nature of the documents that it would produce. These documents kept accumulating during the programme: for example, the transcripts of virtual sessions, some e-mailings and texts produced as parts of some workshops. All these

provided evidence of processes that occurred at the participants' schools, during the programme.

I hoped that using the technological infrastructure might create an additional channel of unofficial communication among the participants. This could provide authentic manipulation-free materials (Johnson, 1994). As it turned out, principals did not use these channels on their own initiative, doing it only when their tasks called for it. However, this formed one more documented resource for analysis.

The three main sorts of resources: interviews, observations and document analysis, provided data that reflected the process of the complete training programme. Triangulating the data provided validity and reliability as needed with interpretive research.

3.6 The procedure of the research

This section discusses the development of the research. First, it describes the ways that I found the principals and approached them, gaining their consent to participate in the group and in the research. Secondly, it presents the participants that formed the research population, characterising them. Thirdly, it describes the procedure of the programme and the research.

3.6.1 The population of the research

This section describes the way that I located and approached the members of the group, and the agreements that we reached. It also provides some general information about each participating principal.

At the beginning of May 2000 I received a potential list of participants from acquaintances like supervisors and managers of LEAs. I telephoned those principals, telling them how I had obtained their names, and describing the programme generally. These preliminary telephone conversations also addressed the technological aspect of the programme, presenting its use as a crucial condition for participation. Another factor that I emphasized was that the programme would be researched for my doctoral thesis. All principals agreed to meet me. Between May and August 2000, I conducted a preliminary interview (the first interview, pp. 367-368), with each of them, intending to establish trust relationships and learn about their priorities and needs as principals, as well as mapping their computer skills. All principals expressed an interest, some even enthusiasm and excitement.

All the principals who joined the programme were functioning as such at the time of the programme. They did not represent, in any way, a sample of the population of primary principals in Israel. The only criterion for recruiting them was their readiness to share the 'adventure' voluntarily, dedicating time and committing themselves to a consistent participation. They varied in seniority, the sectors and sizes of schools they headed, the character of their locations and gender. Eight headed primary schools, the ninth headed a Science Centre, and the tenth headed a Pedagogic Centre. Both centres provide their services to primary school principals, teachers, and pupils, thus they knew much about their reality. Heads of these educational institutions are considered as headteachers in the educational system of Israel. This was the reason that I decided to include them in the programme.

Although the principals agreed that I use their names in the publication of the research, I decided to present them using other names, so they would not be identified by others. The participating principals were:

Abe -a first year male principal of an extreme orthodox primary school, in a small town whose inhabitants are traditional and/or orthodox.

Vivian -a second year female principal of a religious primary school, in a tiny town that is very remote from the centre of the country.

Rose - for 15 years female principal of a religious primary school in a small northern town.

Solomon - for five years male director of a science-centre that supports primary and secondary schools.

Kira - for eight years principal of a small K-6 school in a small remote rural settlement, south of the Dead Sea.

Rona - for six years principal of a primary school in a town stricken by poverty and unemployment.

Rachel - for nine years principal of a primary school in a new neighbourhood in a northern town that is regarded poor.

Laila - for two years director of a pedagogic centre, that functions in a small low socio-economic scale town, in the far southern part of the country.

Betty - for three years principal of a primary school in a town that, although remote in the north, has a reputation as a resort town.

Ann -a first year principal of a K-6 school in a southern town regarded as well established, but which is changing its character, becoming a centre for Russian and Ethiopian emigration.

Having identified the participants and obtained their consent, I could start the procedure of the programme.

3.6.2 The procedure of the programme

This section describes the history of the programme, starting on 11th October 2000. It describes the various kinds of sessions and details the timetable. It also says something about the interviews that I wove into the procedure, preparing data for the research.

On 11th October 2000 I met the group for the first time at CET; Sara joined us. We conducted a session of familiarisation with one another and with the web-site that would be used in the programme. I asked Sara to be the observer for the part that I conducted, and I acted as an observer when she taught them to access the infrastructure and use it. The observation was planned ahead (observation of the first F2F session, 11.10.2000, pp. 378-382). At the end of this meeting I thought it was worth trying to use our web-site.

On 25th October 2000 the first forum (the a-synchronized discussion about Naveh School, pp. 383-390), was presented on the web-site. Kira, one of the participating principals, presented "her" difficulties, seeking her colleagues' advice. The 'story' of her school was presented on the web-site and the participants could access it, address it or ignore it at their choice of time and place, through the Internet.

On 22nd November 2000 at 22:00, the group convened again, this time virtually, on the web-site, in 'our' chat-room for a synchronized session. It turned out to be the first and only disastrous synchronized session; the

participants' lack of experience in simultaneous function frustrated them. They asked me not to repeat synchronized sessions, which I accepted. Unfortunately, that night the documentation system of the web-site failed, and there was no record of the experience, except for the e-correspondence of some principals, asking me not to repeat it (principals to Tova, 24.11.2000-28.11.2000, pp. 391-392).

Between October 2000 and August 2001, the principals participated in eight forums (as seen in the itinerary of the research, pp. 363-365), fulfilled a virtual assignment ("the futuristic school", 10-24.1.2000, pp. 395-396) and prepared questions towards a meeting with an expert in educational assessment. All activities were presented on the web-site.

During the same period, i.e., between October 2000 and June 2001, the programme offered six face-to-face meetings (as seen in the itinerary of the research, pp. 363-365). I conducted three more interviews with every principal in their own schools (the second, third and fourth interviews, pp. 369-374). During December 2001, five months after the end of the programme, I conducted a fifth summarizing interview (pp. 375-377) with all principals, thus concluding the research. The 'heroes' of the research were the principals.

The process of the programme provided the framework for the analysis.

3.7 Analysis

This part presents the categorising process I used when presenting the findings and analysing them. It discusses the organisation of the data and the categories that I formed in order to present and analyse them.

3.7.1 Developmental dimensions

The presentation of findings and their analysis are organised within the framework of two dimensions: the time dimension, which is important in view of the researched programme's length, and my dual role. The research was longitudinal. For heuristic purposes I will identify and describe six stages:

- a. *Genesis*: Between May and August 2000. This was the period of acquaintanceship: I interviewed, for the first time, every principal, and started planning the programme. The participants could decide about their participation.
- b. *Familiarization*: Between 11th October 2000 and 30th November, the first face-to-face meeting. During this period, we practised, for the first time, one face-to-face session, one forum, and one synchronized session with one correspondence following it.
- c. *Instructor-Centred*: At this stage the participants did not initiate independent activities regarding implementation of ideas and forming interrelations with their colleagues but responded to instructions.
- d. *Participants-Centred*: The stage at which participants initiated various activities on their own.
- e. *Independence*: Between June and December 2001 there were no formal activities of the programme, which had ended. Therefore, the participants initiated all activities. I had no information about its impact, until-
- f. *Reflection*: Between November and December 2001, when I conducted the fifth interview (pp. 375-377), enabling the participants and myself to reflect upon the programme and my instructional role within it.

3.7.2 Categorisation system

Three main categories seemed appropriate for the presentation of findings and analysis. I did not plan these categories before I started the research. They emerged from viewing the findings:

Openness: The degree of the principals' readiness to be open towards their colleagues, to potential changes, and to me.

Involvement: The programme could bring about four types of involvement:

- a) Involvement in the programme: decisions about the frequency and intensity of the participation of the principals were up to them. They could choose whether to participate in the various activities. They could withdraw at any given time, as was agreed at the time of the first interview. Frequency and intensity could form indicators for relevance, interest and satisfaction.
- b) Involvement with other participants in the programme: the programme provided opportunities for reactions to one another's opinions and stories.
- c) Involvement with other participants outside the programme: It referred to independent cooperation with one another. These reactions and cooperative actions could reflect the effectiveness of the programme and its capacity to form a professional support group.
- d) Involving staff members and 'others': the choice of principals to break through the boundaries of the programme and involve 'theirs' in ideas and probable changes was their own. Doing it could reflect the programme's effectiveness. The use of virtual channels when doing it could reflect on the degree of transference in the use of

these channels from the programme to the participants' real world.

Having structured the research, I had to ensure its value.

The effect of the programme - that was to be seen after it came to its end, in three dimensions:

- a) Changes in managerial behaviours of the principals.
- b) Forming collaborative work and joint ventures, thus presenting the formation of support groups.
- c) Acquiring the use of ICT as part of their managerial tools.

3.7.3 Validation and reliability

This section details the steps I took to try and ensure validation and reliability, within the framework of the qualitative research.

Validity and reliability establish the academic value of any research. I chose to follow interpretive researchers concerning generalisation. The qualitative approach acknowledges the value of various versions when interpreting a social reality. They assume that researchers are capable of presenting its rich general description (Arieli, 1989). Yossifun (2001) expects qualitative research to render an understanding and interpretation of the situation rather than a generalisation of prophetic nature. She therefore chooses to look, within a qualitative context, for evidence of *trustworthiness* as a replacement for *validity*. Because of my study's innovation, I chose Bassey's (1995, p.97) definition of generalisation as "an overall statement, which brings together a number of individual statements. If a finding arises from the study of one set of events (i.e. a singularity) then a generalisation is a statement which collates the findings from a number of sets of events (i.e. several singularities". Bassey (1995) strengthened my view, challenging common assumptions about the

significance of generalisations in educational research. He contradicted "the traditional expectation that educational research should provide generalisations which could be useful to teachers"(p.88). Still, I wished to establish validity in my own research.

Miles and Huberman (1994) perceive validity as a process of examination and deliberation of questions and generalisation, rather than a strategy for institutionalisation of rules that relate the findings to the "real world". Thus, they (Miles and Huberman, 1994) and Yin (1994) present a need to look for construct validity that consists of internal validity. Yin (1994) defines internal validity as coherence between patterns and construction of interpretation and analysis. Guba and Lincoln (1985) add the concept of trustworthiness as a qualitative research's external validity.

Researchers achieve external validity when findings they present are consistent with theoretical literature or with the findings of other researches in the same domain. Guba and Lincoln (1985) and Yossifun (2001) refer to external validity as transferability. The coherence among various findings and repetitive evidence, from different sources, strengthened this research's trustworthiness. Chapter 5 will discuss the issue of transferability. Still, there is the question of reliability.

Reliability is achieved when repetitions of the research yield similar results (Nachmias and Nachmias, 1998). The settings of qualitative research, and of this specific research, are not reproducible. Therefore, reliability in qualitative research is obtained by as many repetitions as possible of the use of research tools (Yossifun, 2001). That means staying as much as possible in the researched field. Yossifun (2001) claimed that

the more researchers stayed, the more expert they became, improving their skills and crystallizing their findings. I believed that the multitude of interviews, observations, and analysed documents would achieve a high degree of validity and reliability. My role in the research aroused ethical issues.

3.7.4 Ethical considerations

This section attends to ethical aspects of the research, balancing between commitment to the participants and to the study. It describes the measures I have taken in order to establish the ethics of the research.

Ethics in a social research setting can be seen mainly as the dilemma between the researchers' obligation to informants and their commitment to the truth. In order to address ethical aspects, I took the following steps:

First, I asked for the participants' consent. Berger and Patchner, (1994) and Dushnik and Sabar (2001) note three conditions that validate consent.

- a. Letting the subjects have full information about the whereabouts of the research. This condition may cause some concern; the degree of informant's knowledge about the research, without endangering it, is delicate. An enthusiastic informant may bias the research out of good will. In my case, it presented no problem: my own information was limited, as the process developed gradually during the researched programme.
- b. Getting the subjects' free will consent (Berger and Patchner, 1994; Dushnik and Sabar, 2001). Not representing any formal authority, I did not practise any compelling influence. Thus, the principals joined

the programme of their own will. Upon approaching the principals, I took care, in accordance with Berger and Patchner (1994), to tell them about the training programme and the general aim of the research, to present the potential benefit of the process, making sure they did not feel threatened, and assuring their ability to withdraw, at any stage of the programme-research.

- c. To provide the subjects with information about probable causes for damage that their participation could bring about. In this case, there would be no potential harm about which I had to inform the principals.

However, I did not tell the principals all the details of the research, as I wanted to avoid any biased answers or behaviours. The principals did not read the research questions. I informed them of its framework, the kinds of documentation, and the records I would use and the role of the co-observer. None of them asked to limit the use of data derived through the communication with them. Accepting the subjects consent to the description of the findings adds to the validity of the research (Miles and Huberman, 1994; Maykut and Morehouse, 1994; Yossifun, 2001).

The principals and I addressed the issue of anonymity. Fine (1990) and Sabar (1999) have expressed an apprehension of damage to the ability to evaluate the research because of the anonymity of its subjects. A further issue involved consent to publication. I knew the participants' identity and, after having met in the first face-to-face session, they knew one another. I asked them if they were willing that their names would appear in the research report. All of them expressed a preparedness to reveal their identity. Still, in view of the small whole population of primary school

principals in Israel, I thought that such a revelation could become a matter of 'gossip' rather than of professional interest, and decided to retain the participants' anonymity, by changing their names. This brought about the matter of confidentiality.

Berger and Patchner (1994) have emphasized the need to take care that information concerning the informants, stays private. In this research it was crucial in view of my professional relations with some of the principals' supervisors. I committed myself to not discussing any information regarding the principals outside 'our community'. Thus, all the principals agreed to be open and honest within the programme's boundaries, knowing that no information would 'leak' outside it.

The lasting close proximity between the subjects and me could have caused another problem. Dushnik and Sabar (2001) have expressed their concern regarding this issue in a longitudinal research. Yossifun (2001) also described difficulties that lasting relationships between researchers and subjects may cause. They have noted that the researchers not only observe the subjects' behaviour, but also interpret it. Although I became a source of guidance for the principals, I maintained strictly professional relationships with them, avoiding personal favouritism, thus adopting Punch's (1994) recommendations that researchers use the least possible influence, in order to avoid contamination of the research. I therefore ignored requests to judge and evaluate directly informants' behaviours and attitudes, keeping my professional obligation without harming my researcher's position. Finally, yet importantly, Murray and Lawrence (2000) addressed ethical aspects of this method, in view of a probable developing affinity between practitioner and subjects.

The closing part of this chapter summarises the main issues.

3.8 Summary

This chapter addressed a variety of methodological and methodical aspects. It started by presenting the cause for this investigation, and describing its initiation. This description established my dual role in the process of the programme for principals' professional development and its investigation. The background of the research and its technological infrastructure were discussed.

The research questions that were phrased in broad terms followed, establishing the relevant issues, but still leaving room for probable changes. An explanation followed every question. This led to the choice of the methodological stream of the research.

The methodological discussion presented briefly the positivist and relativistic schools of thought. The choice of the latter was then presented and argued. The location of the research within this school was discussed, following some paradigms.

Next, the discussion focused on two methods that led the research. The first method is action research, which derived from my situation as a practitioner and a researcher. The second method, case study, was the result of the small size of the researched group that consisted of ten participants. The methods dictated the tools for data collection. Three sources for data collection - interviews, observations and document analysis - were discussed, presenting the choices I made regarding each one of them.

The chapter continued by describing the procedure of the programme, starting with a presentation of the subjects. In doing this, I emphasized the fact that they did not form any kind of sample, discussing their organisational features, and the ways I approached them. A general and particular discussion of every research tool followed, and the itinerary of the research concluded this part. While discussing this, I had already planned the presentation of findings.

Next, as an organising tool for the presentation of findings, I presented developmental organising factors and categories, describing their nature. There were three developmental phases and three categories. The categories derived from participants' frequent behaviours, expressions and actions that related to the research questions. When I discussed them, I related to their capacity to strengthen the solidity of the data, in order to make the analysis valuable.

The borders of possible and expected generalisations, in view of the scope of the research, came next. At this point the chapter discussed innovative aspects of the research, particularly in the field of educational management, suggesting further research for the future.

Finally, the chapter attended to ethical aspects, relating to the tension that exists between my obligation to the truth and my concern for the subjects. This short concluding summary presented an appropriate entrance to the fourth chapter, the presentation of findings.

CHAPTER 4

THE STRUCTURE OF THE PRESENTATION OF THE FINDINGS AND THE ANALYSIS

4.1 Introduction - A guide to the structure of findings and analysis

This chapter discusses the way that the findings and analysis will be presented. It is shaped around five main topics that provide the framework of the research and an understanding of the programme for professional development of primary principals.

The first part is a brief reminder of the research questions, followed by explanations for each one of them. This is relevant because these questions formed the direction of the research, as well as its organisation, display and analysis of the findings.

The second part is a brief reminder of the procedure of the research. It describes the initiation and first steps of the research, and the programme for professional development of primary principals. It presents the time framework of the research and discusses the way that the presentation of the findings and the analysis are integrated.

The third part reminds the reader of some initial facts about the principals, concentrating on their length of service in their present role and their technological skills. It also attempts to relate these variables to each other. In addition, information about their schools and the communities are provided, as collected in the first interview (first interview, between May-August 2000, pp. 367-368). This is an addition to the principals' description (see 3.6.1, pp.132-134).

The fourth part describes the process of planning the programme for primary principals' professional development. This programme is the framework of the 'action' in this action-research. The themes of this programme derived from two sources: the principals' preferences, as expressed in the first interview (first interview, between May-August 2000, pp. 366-367) and my former experience working with principals. The relevance of these themes to the context of educational management is discussed. This leads to the next part.

The fifth part relates to the presentation of findings and analysis and explains two organizing dimensions. The first dimension is the 'developmental element' that divides the study into six stages: *Genesis*, *Familiarization*, *Instructor-Centred*, *Participant-Centred*, *Participants' Independence* and *Reflection*. Every two stages were grouped into a single phase as follows: 'Origins' (*Genesis* and *Familiarization*), 'Actors' (*Instructor-Centred* and *Participant-Centred*) and 'Review' (*Independence* and *Reflection*). Each stage and phase is explained.

The second dimension includes the 'functional elements' that were relevant to the analytical presentation of the participants' functioning in the various phases. Three elements have been identified 'Openness', 'Involvement' and 'The programme's effect'. They are discussed and related to the phases, each one is appropriate for a different phase: Openness (to the programme, to 'others' and to change) is identified as significant for 'Origins'. Involvement (in the programme, with others and involving 'outsiders' in the programme) was significant for the 'Actors' phase. 'The Programme's effect' (in terms of management, professional relationships

and acquiring technology) was identified as significant for the 'Review' phase.

The concluding summary of the chapter leads the reader to Chapter 5. This chapter will discuss in detail the first phase of the research - 'Origin'.

4.2 The research questions - leading lines to the research

The research questions, as presented earlier, were shaped in order to enable an evaluation of different effects of the programme for professional development of primary principals, and to learn about the potential of virtual programmes for professional development in the context of educational management. I am presenting them again briefly in order to relate them to the terms that have been elaborated in the last two chapters (the literature review and the methodology:

1. How effective was the researched programme?

This question led to an examination of the programme's capacity to change managerial behaviours, trying to establish an understanding about the feasibility of the programme in assisting principals to improve their management, deepen their leadership and practise innovative patterns in their role. This effectiveness will be evaluated in the different phases of the research, using the relevant categories.

2. Can such a programme form an active and worthwhile support group for its participants?

This question led to an examination of the feasibility that the programme expanded the boundaries of principals' opportunities for professional collegiality. The principals function in a competitive reality;

the programme offered an opportunity to develop professional relationships with colleagues from remote areas. The research has intended to find out whether such relationships would develop. The development of the phenomena of 'openness' to one another and 'involvement' with one another, in the phases of the research.

3. To what extent are synchronized vs. a-synchronized sessions effective and user-friendly?

This question attempted to examine the user-friendliness of synchronized and a-synchronized sessions for the principals who participated in the programme. This question may prove to be critical for future web-based programmes of the professional development of principals.

4. To what extent, in what ways, and how effectively do participants utilize virtual tools as managerial communication systems, following such a training programme?

This question attempted to learn whether participants in the programme had assimilated the use of virtual vehicles to facilitate their communications within the framework of their professional role. This aspect may reflect changes of managerial behaviours as well as the development of effective and innovative channels for the practice of 'openness' and 'involvement'

5. Is there an ideal proportion of face-to-face and virtual sessions in such a training programme, and, if so, what is that proportion?

This question attempted to either establish the feasibility of a preferred proportion between virtual and face-to-face sessions, or learn about developmental changes in the principals' attitude towards this issue. The significance of this research question, as well as the third question is for future web-based programmes for the professional development of principals.

Given the qualitative nature of the research, my approach was descriptive rather than judgmental. Its purpose was not to assess the performance of the principals, or evaluate whether they have integrated information-technologies in their work, but to evaluate the embodied potential of a programme that was mainly web-based, as perceived by its participants. Therefore, when I planned steps and sources for data collection for the research questions, I did not necessarily look for "objective" information; instead, I ascribed importance to the participants' views and impressions. However, the research questions that represented my initial interest in conducting the research shaped its procedure.

4.3 The procedure of the research

In this part I will discuss the main events that constructed the programme and the research. I will describe the time boundaries of the research and the types of activities that I have conducted. Then, I will describe the structure of the presentation and analysis of the data.

The research was longitudinal, beginning on May 2000 and lasting until December 2001. In 3.6.2, I have described at length the procedure of the research, starting with the first interview and ending with the last activity that occurred in November-December 2001 when I conducted the fifth

and final interview with each participant (face-to-face with all principals, between November-December, 2001). The programme for professional development lasted from the first face-to-face session that took place on 10th October 2000, until the seventh forum that ran between 20th June 2001 and 1st July 2001. All its activities are detailed in the itinerary of the programme (p. 363-365). The programme was documented and translated in order to facilitate the research.

The programme provided various sources of data, as described in detail in 3.5 discussing methodical aspects. At its conclusion I had completed five interviews with each participant plus four telephone interviews, documentation of five face-to-face sessions and eight virtual forums. In addition, the data included some e-correspondence of principals that had contacted me that way.

The themes of the programme were derived from two main sources: the principals' preferences as expressed in their first interview (face-to-face with all principals, between May-August 2000) and my personal experience working with principals in other programmes. Question No. 6 in the first interview was: "What seem to be your three main tasks as a principal? Why do you consider them important? Do you feel qualified and sufficiently prepared to carry them out? What are you doing in order to prepare yourself and your staff to succeed in dealing with them? What do you still lack, and how will you fill it, considering these tasks?" (the first interview, between May-August 2000, pp. 367-368).

Question no. 11 for the same interview was: "What would you expect to gain from participation in a group of principals? A support group?"

'Managerial prescriptions'? Shared experiences of success and frustration? Something else - what?" The fact that I chose to consider the principals' views reflected the collaborative spirit and the sharing nature that I ascribed to the programme, building it in accordance with the 'clients' needs.

Nevertheless, I considered my former experience as valuable in deciding upon possible themes. Given this, the programme was structured around the following themes (presented not necessarily in order of importance):

1. Integration of technological innovations
2. Relationships with parents (forum)
3. Staff development (in face-to-face and a forum)
4. Learning materials (in a forum and correspondence)
5. Visions for future education (virtual assignment)
6. Being a principal in the 21st century (forums)
7. Educational evaluation (a presentation and questions on the web site, and a face-to-face session)
8. Marketing (a face-to-face session).

Managerial tools, working relationships and decision-making were interwoven in these themes intentionally, emerging frequently during the activities. The processes we went through before choosing these themes are further discussed in detail in section 4.5. There were ongoing reciprocal relationships between the programme and the research: the development of the programme, as well as the accumulating data, affected the presentation and analysis of these findings.

As a first step in planning the presentation of the findings and analysis, I have sorted out the data that I had collected. In view of its large size, I had to plan how to produce a manageable, reader-friendly final report. Therefore, I planned to separate the findings' presentation from their analysis. However, while I was structuring a conceptual framework for the data presentation, I realized that findings and analysis are inseparable in qualitative research. Miles and Huberman (1994) confirmed this understanding.

Miles and Huberman (1994) identified stages of qualitative research, using them to describe "analysis as consisting of three confluent flows of activity: data reduction, data display and conclusion drawing verification" (1994, p.10). They identified similarities between these three flows to analysis. How could these definitions contribute to my decision regarding the separation or integration of findings and analysis?

Data reduction refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field-notes or transcriptions. As we see it, data reduction occurs continuously throughout the life of any qualitatively oriented project....A display is an organized compressed assembly of information that permits conclusions drawing and action. The dictum 'you are what you eat' might be transposed to 'you know what you display'... the qualitative analyst is beginning to decide what things mean - is noting regularities, patterns, explanations, possible configurations, casual flows, and propositions (pp.10-11).

During the research I had experienced the considerations involved in the processes of selecting, focusing, simplifying, abstracting, and transforming the data that appeared in my transcriptions. This necessarily led to data reduction. I learnt from Miles and Huberman (1994) that these stages continuously occur throughout the life of any qualitatively oriented project (p.10): "...A display is an organized compressed assembly of information

that permits conclusions drawing and action. The dictum "you are what you eat" might be transposed to "you know what you display"" (p.11). As for "conclusion data and verification", Miles and Huberman appreciated "the qualitative analyst is beginning to decide what things mean - is noting regularities, patterns, explanations, possible configurations, casual flows, and propositioned" (p.11).

Looking back at the patterns that I tentatively structured in order to present the data, I realised that when I had started to display the data I had also started its analysis since this involved, "drawing conclusion, as well" (Miles and Huberman, 1994, p.11). Realising that this discussion bound together the presentation of findings and analysis strengthened my choice to combine the two in an integrative chapter. Having reached this decision, I still had to decide on a suitable way to present a study that was longitudinal.

The duration of the research, as well as the volume of the findings, joined the "developmental dimension", as presented in 3.7.1. The data that had been accumulated consisted of 54 transcribed interviews, the forums, the e-mails and the observations. These could have formed a sizeable volume. It was clear that all of this data would be relevant to the analysis at some point. I began to write the first version of the 'Findings and Analysis' but discovered that the first draft consisted of 50,000 words, and realized that its future readers would be unable to follow such a lengthy account unless it was structured in a very clear manner. Therefore, I had to find a way of presenting it in a form that would be manageable both for the reader and for me as a researcher and writer. Thus, I have chosen to present the findings and analysis in accordance with the developmental

dimensions, dedicating a separate chapter to each phase of the research: *Origins, Actors and Review*.

Now that the layout of the findings and analysis had been set out, it is time to describe its components in detail, starting with the principals.

4.4 The participating principals

This part describes the principals who formed the researched group. It is based on the first interviews that I conducted with every principal between May and August 2000. The presentation includes their seniority, experience, technological skills and expectations of the programme. This interview (pp. 367-368) started the research.

In the first interview, I asked the principals about their preparation before they had assumed their principalship: "Did you participate in preparatory courses or studies as part of getting your qualification as a principal? What were these programmes? Do you feel these studies prepared you towards your role as a principal? In what way/aspect?" (p. 368).

I also looked for the issues they were focusing on: "What seem to your main three assignments as a principal? Why do you consider them important? Do you feel qualified and prepared enough to carry them out? What are you doing in order to prepare yourself and your staff to succeed in dealing with them? What do you still lack, and how will you accomplish it, considering those assignments?" (p. 368).

The third question I asked was about their technological skills and access: "What are your computer-communications skills, experience, and infrastructure?" (p. 368).

These three questions gave me some information about their professional development and provided the information demonstrated in Table 4.1.

Table 4.1: Profile of the participants

	Name	G	S	Sector	Location	Technological Skills	Expectations of the Programme
1	Abe	M	1	O	Small town	None	Gaining a whole-school perspective
2.	Vivian	F	2	NR	Tiny town	None	Creating teachers' motivation
3.	Rose	F	15	NR	Town	None	Managing old fashioned teachers
4.	Kira	F	8	NS	Moshav*	Experienced	Relationships with parents; managerial skills
5.	Rona	F	6	NS	Town	Medium	Becoming a pedagogic leader; keeping high standards; marketing
6.	Rachel	F	9	NS	Town	None	Sceptical about the programme; correcting school's reputation (marketing)
7.	Betty	F	3	NS	City	Medium	Improving educational environment; staff development
8.	Ann	F	1	NS	Town	None	Repairing relationships with parents; improving climate; pedagogic leadership
9.	Laila	F	2	PC	Tiny town	Medium	Maintaining a collegial principalship
10.	Solomon	M	5	SC	Town	Medium	Understanding principalship in order to approach colleagues

(Key:

1. The column titled *G* means - gender.
2. The column titled *S* means - seniority in principalship.
3. The column titled Sector refers to the sort of school they led: there are, within the formal Israeli educational system three main sectors: the National-Secular, titled in the table as NS; the National-Religious, titled in the table as NR, and the Orthodox, titled in the table as O.
4. PC = Pedagogic Centre.
5. SC = Science Centre.
6. The column titled Technological Skills characterized the participants within a framework of three types: None, for those with no skills at all; Medium for those who used some word processors or other "Office" tools, and Experienced for those who were skilled users of the Internet.

*Moshav is a rural agricultural settlement. Kira's Moshav was of a high SES (Socio-Economic Status).

The data that the table presents was obtained in the first interview (first interview, pp 367-368). I then characterized the principals by relating seniority in principalship and technological skills to one another. This characterization was done in order to try and establish, at the beginning of the research and later - as an outcome of the programme - two possible relations:

- a. A relation between seniority in the role of principalship and adjusting to technological environments.
- b. Former technological experience and adjusting to technological environments.

Dividing seniority into two groups (1-7 years; 8-15 years) and technological skills in three groups, I received a profile as shown in Figure 4.1.

Figure No. 4.1: Principals' distribution by technological skills and seniority.

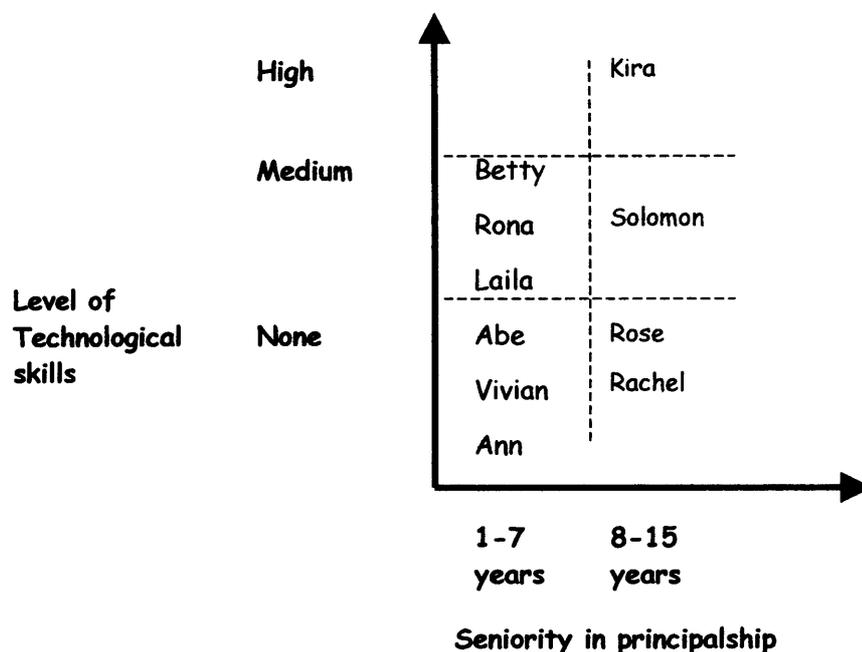


Figure 4.1 shows that at the time of the first interview there was no connection between the principals' seniority in principalship and their technological skills. There were technologically novice principals among old-timers as well as among the younger ones.

However, the principals' experience in principalship could affect their ability to realize the usefulness of information-technology as a managerial communicating tool and benefit of its advantages, as noted by Weindling (1999). He identified six stages of principals' socialisation into their role. The length of their service in the role was identified as the determining factor. I tried to categorize the principals who participated in the programme according to this:

1. Preparation prior to headship - None of the participants in the programme was at this stage.
2. Entry and encounter (first months): "the first few days and week are a critical period when the new head's notions of headship meet

-
- the reality of a particular school. It is time of 'surprise' and the importance of sense-making is highlighted..." (p. 98).
3. Taking hold (three to 12 months): The newcomer strives to 'take hold'and the new heads begin to challenge the 'taken for granted' nature of the school...They develop a deeper understanding and their diagnosis of key issues during this stage was used to decide priorities (p.98).
 4. Reshaping (second year): After a year in post most heads felt more confident and were beginning to feel they could take off their 'L' plates! They have experienced a complete annual cycle of school events and learnt about the strengths and weaknesses of the staff. ...The seeds planted in the previous stage now produced the implementation of major changes to reshape the school. (p. 99).
 5. Refinement (years three to four): ...During this stage further curriculum changes were introduced and a number of refinements made... (p. 99)
 6. Consolidation (years five to seven): ...a period of consolidation seems to occur after the heads have introduced most of their planned changes. However.....these required attention as their impact may hit the school during any of the stages. (p. 99).
 7. Plateau (years eight and onward): The...heads suggested that about seven years in one school was sufficient to see through the cohort of pupils and to have initiated most of the changes they wanted....Motivated heads who stay in one school until the end of their career can be a problem. (p. 99).

I could identify in the group that participated in the programme those who belonged to the different stages. Doing it, I refer to the time of the principals' first interview (face-to-face with all principals, between May-August 2000). The distribution is presented in Table 4.2

Table 4.2: The distribution of the principals according to Weindling's (1999) typology

Stage	Principals
0 - Preparation	None
1- First months	None
2 - Three to twelve months	Abe, Ann
3 - Second year	Vivian, Laila
4 - Years three to four	Betty
5 - Years five to seven	Rona, Solomon
6 - Years eight and onwards	Kira, Rachel, Rose

My attempt to relate seniority in principalship and technological skills failed when I used Weindling's (1999) typology as well as my own. Apparently, at least in this group of principals, no such interrelation existed. This emphasized the difficulty of planning a programme that would seek to answer different needs. I looked for anything that was common to some of them, regardless of their variety.

In addition to the principals' different backgrounds, I was able to identify similarities in some of their professional histories. I asked, in the first interview (pp. 367-368) what was the course of preparation that they had practised for their role: "Did you participate in preparatory courses or studies as part of getting your authorization as a principal? What were these programmes? Do you feel these studies prepared you towards your role as a principal? In what way/aspect?" (p. 368). In her first interview (first face-to-face with Kira, 13.8.2000), Kira "took the obligatory two-year course at the university. I learnt a lot about managerial models, but

almost nothing about coping with real-life principalship". Ann felt the same, recalling that: "This last year showed me that I learnt nothing about being a principal. I am often at a loss, not being able to recruit anything from my courses to my practice" (first face-to-face with Ann, 24.5.2000).

Betty, who was in her third year of principalship, was completing, at the time of the first interview (first face-to-face with Betty, 6.6.2000), a preparatory course. She testified that she had had acquired an ability to "tell you a lot about theories and models in management, with no reference at all to the daily practice". Rachel, who was already in her ninth year of principalship, when first interviewed (first face-to-face with Rachel, 16.8.2000), regarded all the travelling and time that she had invested in the preparatory course as fruitless. She "just received the diploma that enabled me to get the nomination. Only after becoming a principal did I start realising what it was all about".

Rona was heading her school in the sixth year at the time of the first interview (first face-to-face with Rona, 19.6.2000). She characterised herself as "a great believer in learning" thus she was the only one that "at the preparatory course, I encountered, almost for the first time, issues regarding managerial qualifications, and could reflect upon myself as a principal". She was the only principal who admitted she had gained an advantage from the preparatory courses. With the exception of Rona, the principals either did not take any such courses, or felt they had not benefited at all by the programmes they had taken.

I wanted to find out whether they had had opportunities to improve their practice by participating in programmes of professional development during

their work. If so, what were these programmes? Abe had been required to "participate in studies that are obligatory to all 'new' principals in the religious department of the Ministry of Education" (first face-to-face with Abe, 29.6.2000). What he was learning in these studies intended to serve the religious system he was part of rather than his professional needs because they: "Focus mainly on issues that are unique to the religious schools. The main goal we are preparing ourselves for is 'how to conduct our pupils in a way that will lead to a continuation of their studies in orthodox educational institutions'. This is very important, I admit, as this is our core-assignment. However, it will not improve my managerial skills" (first face-to-face with, 29.6.2000).

Vivian, who also headed a religious school, agreed with Abe: "Attending a second obligatory year in a course for religious principals, but it deals with religious issues rather than with managerial content, so it does not promote my headship in any way" (first face-to-face with Vivian, 20.8.2000). Was this phenomenon unique to the religious sector?

Kira was heading for the eighth year a school that has been identified with socialist perceptions and "take(s) part in the meetings that our supervisor organizes" (first face-to-face with Kira, 13.8.2000). In the same interview she said that neither she nor her supervisor relied on the contribution of these meetings: "She herself admits that the frequency and the duration of these meetings, added to the obligation to deliver formal messages, minimize the value of these sessions as supporters of our professional needs" (first face-to-face with Kira, 13.8.2000).

Ann was a first year principal; therefore, she would not miss the monthly meetings with her colleagues and her supervisor. However, in the first interview (first face-to-face with Ann, 24.5.2000) she did not regard highly the contribution of these meetings to her practice: "...So-called learning group of my supervisor and all the other principals that are her responsibility. However, these are mostly formal meetings, and she passes on to us the Ministry's messages". Rona had already been a principal six years at the time of the first interview (first face-to-face with Rona 19.6.2000). Unlike Ann, she believed she always benefited of any learning opportunity and improved her principalship consequently: "The concept of "change", when presented through academic analysis, made me realise where and when I might have worked correctly or wrongly, and later, start and plan ahead more sophisticatedly" (first face-to-face with Rona, 19.6.2000).

Laila and Solomon were exceptions in the group, as they were heading supporting centres for schools; may be this was the reason that they had not been required to complete preparatory courses or to join formal learning groups for principals. Laila could not learn in academic institutions because of her remote geographical location. Although Solomon felt the need to learn, he had done nothing about it. The fact that they were not belonging to any professional group and the difference between their heading role and other headships, have deepened their sense of solitude (Friedman, 1997).

All principals, with the exception of Rona, believed they would benefit from a programme that would focus on issues that they were concerned about during their principalship. They have expressed their inability to

squeeze such a programme into their schedule, and therefore have appreciated an opportunity to join a programme that would save the travels in order to attend it. This had strengthened my motivation to plan a programme that would be mainly virtual and contribute to their performance, as they could attend it in their respective homes or schools.

On the other hand, I learnt that the majority of the principals had been technologically inexperienced. Therefore, I doubted whether they would be able to participate in such a programme. I consulted again with colleagues at CET, mainly with Sara, who was assigned to introduce the web site to the group. Based on their previous experience in other courses, my colleagues reassured me, that the web site was user-friendly. I, therefore, decided to continue planning the programme, hoping that Sara's experience as a technology-instructor would prove effective and fruitful. The question remained: would the framework of the programme abridge the cultural, geographical and experience differences between the principals, facilitating each participant's professional development. Having found, in the first interview ((pp. 367-368) that the principals felt they could benefit of a course for professional development, I had to decide what would be the relevant themes for this group.

4.5 Planning the programme

This section describes the process of planning the programme for the principals' professional development. It presents their wishes, as expressed by them in the first interview (pp. 367-368), grouping it into subjects. It also discusses the themes that I have chosen for the programme, explaining why their choice.

I wanted to know what the participants thought about their needs for professional development. In the first interview (p. 368) I asked: "What seem to be your main three assignments as a principal? Why do you consider them important?" and "What would you expect to gain from participation in a group of principals?" The first question was open while the second one offered some alternatives. I gathered their answers and grouped them into themes, evaluating them from the perspective of my experience in the field.

The principals' preferences coincided to an extent with my ideas about the "proper" themes:

Staff development

Rona: "I would prefer to deal with organizational subjects, team building..."

Abe: "Raising teachers' commitment to school, 'making' them consider their work as a mission"

Ann: "To improve schools' climate"

Betty: "Would like to be able to develop the whole staff professionally, especially - the coordinators, who carry their roles technically"

Rose: Most teachers are about to retire, and it is very difficult to implement new methods and changes

Staff Development was a theme that I have been ready to accept: human resource management became a very complex issue in the light of the changes in the world of work (Bush, 1997). People's attitudes towards their jobs had changed from committing themselves to lifetime jobs to

legitimate frequent changes of workplace and role. Its significance for the principals' role could mean a constant need to recruit, prepare and train teachers, as part of their assignments (Riches, 1994; O'Neil, 1994; Coleman and Bush, 1994; Bush, 1997).

Middlewood (1997a, p.139) has identified selecting and appointing teachers as "the most important task that managers undertake". Coleman (1997) has differentiated between two sorts of principals' roles regarding managing teachers: investing efforts in acclimatizing new teachers and contributing to the development of experienced teachers, at the same time. The process of socialization included, beyond the formal information about the school's administrative procedures, "accepting the reality of the organization... dealing with resistance... learning how to cope with the amount of organization and job-definition...dealing with the boss...locating your own place in the organization..." (Coleman, 1997, pp.156-157).

Crawford (1997) has identified all these as possible sources for stress, noting that principals needed sensitivity and the capacity to practice flexibly. Beyond this sensitivity to human needs, their organisational needs have changed, as well:

Teachers and lecturers are not the only staff members who experience stress. All staff who work in schools...should note the Health and Safety Commission identification of work-related factors which contribute to stress. Apart from rapid changes these also include time pressures, poor student motivation, poor working conditions and low perceived status. (p.115)

Involving staffrooms in decision-making has been identified with principals' intentions to manage their staffs collaboratively. In the context of self-managed schools, it was imperative by definition. Chuckle *et al* (1998) have

looked for patterns of developing school-staff and its implementation. They have also measured the degree of staff involvement, concluding that headteachers who had aimed to establish positive changes in classroom practice should meticulously fulfil some conditions:

- a. Providing school staff with a full understanding about the multi-variables of the change.
- b. Acquiring a sense of collaboration and proprietorship by the staff members.
- c. Looking constantly for the connection between school's needs and the allocation of resources.
- d. Keeping consistent steps of evaluation and follow-up.
- e. Focusing on pupils' achievements as the main educational aim.

All of these seemed to justify that the programme would address the topic of staff development, as expected by the principals. Moreover, it would be worthwhile to see whether the participating principals would develop professionally in this respect.

The next required topic was *Relationships with Parents/Marketing*

Kira: "The most important assignment is to keep the school as a central social function in the community. However, here comes the next assignment, to learn how to benefit the qualifications of the parents"

Ann: "Some of them (Parents, T.R.) are disappointed for not being able to dictate anymore and they start getting aggressive...a dialogue must be developed with the parents"

Vivian: "The previous principal who was weak, allowed the parents full intervention in all aspects of school, even the pedagogic ones,

and I have to be the gate-keeper stopping the parents, exactly when I need them most"

Rachel: "Parents do not want their children to attend this school", asking: "how do we correct it? ...I do not think that I should market my 'goods' as in the marketplace"

Rose: "How do I conduct each one of them, and how do I recruit documentation to serve marketing?"

Rona: "I would prefer to deal with organizational subjects... marketing"

Murphy *et al* (1985) have assigned importance to the involvement of parents in schools' activities and policy, as has Middlewood who:

...aimed to show how the prescriptions for collaboration, particularly in contexts where competition continues to be valued, need to be accompanied by a thorough understanding of the essence of different forms of collaboration and the skills required to ensure that they are successful. (p.63).

However, Middlewood (1999) and Hall (1999) have presented examples showing that parents' involvement had imposed difficulties on principals. Although principals have realised the need to market their self-managed schools, they found it difficult to do it. Bush (1999b) indicated that:

The response to these economic pressures was to look for models from the private sector and seek to create self-managed units...The aim was to make schools...much more responsive to their clients by linking their funding to pupil and student numbers. This approach forces a closer relationship between organizations and their environments, a process described as 'resource dependency'. (p.4)

My previous practice with principals had drawn my attention to the difficulties of performing in accordance with these perceptions in their

daily routine, as well as similar hesitations on the part of parents. One argument that had been presented frequently by parents and local authorities was the school's need to adjust itself to the modern era. I wanted to learn whether the participants would benefit from the programme in this respect.

The third topic was *Approximating school to the 21st Century*

Abe: "Move my pupils as well as the teachers towards our technological age"

Rona: "Although I am an Internet ignorant, the possibility of getting into a virtual progress seems fascinating"

Owston (1997) has outlined two attitudes regarding the effect of Information Technology on education: on one hand he stated that:

The web is now causing educators from preschool to graduate school to re-think the very nature of teaching, learning and schooling. Claims have been made that the Web can free teaching and learning from the physical boundaries of classrooms and the boundaries of classrooms and the time restraints of class schedule...(p.27).

On the other hand he commented that: "Although there is, perhaps, some merits to these claims, they are expecting much from a tool developed only a few years ago..." (Owston, 1997:27), introducing knowledge technology to education seemed to emphasize unclear aspects.

The issue of performing a change in the relationships of teachers and learners is obvious: teachers can no longer be considered as the sole source of knowledge and information, while pupils can no longer be perceived as the 'ignorant receiver'. Brickner and Ron (1995) have noted that preparing students towards their future world could not ignore ICT.

However, the lack of teachers' and principals' experience proved to be an inhibiting factor for such procedures.

Sivan (1998) has identified three challenges for educational systems: responsibility for its entrants, responsibility to its graduates and responsibility for the process that the students were to experience during their stay at school. This process included a consistent burnout of teachers, teachers interacting with pupils and a lack of feelings of accomplishment. Sivan (1998) considered interactive learning systems, based on ICT, to be a solution to all challenges. I counted on the environment of the programme bringing its participants closer to ICT, providing them with a positive non-frustrating experience and an understanding of its merits. Keeping in mind the position of self-managed schools, I considered the marketing appeal of integrating ICT into schools, from a parental point of view. This led to the next topic.

Pedagogic Current Issues

Ann: "Must learn to know this school pedagogically",

Betty: "Need(s) to change the educational environment (here).
Entering school every day, I feel as if I entered my school as a young girl"

Laila: "I do not know enough about current movements in education".

Rona: "What seems very important - educational evaluation and assessment"

These requests focused my attention to the principal's role as leaders in processes of curriculum, learning environments and evaluation management. Bush (2000, p. viii) has estimated that curriculum management and "the

linked management of teaching and learning are at the heart of the educational process". Middlewood and Burton (2001) have concurred, noting that learning was always the main reason for the 'being' of educational institutions. Surprisingly, it appeared that only recently has managing the curriculum started to occupy a major role in the perception of school headship, partly replacing the intensive focus on administrative issues (Middlewood and Burton, 2001).

Middlewood and Burton (2001) have also referred to the development of the research and literature as catalysts for changing the role of principals. Middlewood (2001) has considered curricular management as critical in setting a school's vision. This could explain the seniority of curriculum managers and their proximity to principals as long as they carried this role: managing the curriculum proved to touch main issues of a school's practice, such as "target-setting, increasing learning time, providing additional support, changes in group organization, use of ICT, greater involvement of parents..." (Middlewood, 2001: p.119).

Curriculum has never been an isolated issue: within it, there is an ongoing mutuality of teacher-student interactions, and it has been tangent to the principals' need to conduct at least two kinds of evaluation: a constant follow-up of pupils achievements and a re-evaluation of their school's vision. In addition, it concerned the educational environments.

Briggs (2001) has considered the issue of educational environments, noting the centrality of principals in establishing them. Such environments, besides being vital for processes of learning, also determined the climate of a school and the boundaries of learning in terms of space and time

organization: would processes of learning occur inside and/or outside the classrooms? Would the environments facilitate introduction of knowledge and communication technologies into instruction and learning? What are the instruction strategies and learning styles that this environment will facilitate? How much of the resources and budget will support the development of educational environments? It is obvious that each aspect of the above cannot be decided upon, and conducted, without the decisive participation of a school's principal. Teachers' adjustment to styles of instruction in various environments make it necessary to take consistent steps for their professional development as part of handling and promoting changes. How would principals evaluate the processes that were occurring at school? This led to educational evaluation.

Although "the implementation of formal schemes of appraisal of performance in educational organizations is relatively recent" (Middlewood, 1997b, p.169), it has positioned itself as a central role of principalship. It refers to two purposes: "Improving individual performance and ...greater organisational effectiveness, the latter ultimately being in the organization's key purpose, i.e. pupil or student learning" (Middlewood, 1997b, p.169). However, my experience has shown that principals had difficulties in implementing evaluation into their headship for two reasons: lack of knowledge and experience, and teachers objecting to it. This led me to plan some deliberations and learning for the group.

The innovative and voluntary nature of the programme helped me to realise that I was not going to plan a one-subject systematic programme, but rather an eclectic one, emphasizing the development of channels of discussion no less than their topics. Through the first interview (pp. 366-

367) and my previous experience, I planned the framework of the programme, structuring it around the discussed themes. I knew that eventually, in view of the progress of the programme the framework for the presentation of findings and analysis would become clear.

4.6 Framework for findings and analysis

This part explains the dimensions that were used in presenting and analysing the findings. It includes two dimensions: developmental stages of the research and its categorization, and discusses the relationships between these two.

4.6.1 The phases of the study

This part describes the formation of the developmental stages of the research. It defines the time borders of the phases and the characteristics of each one of them

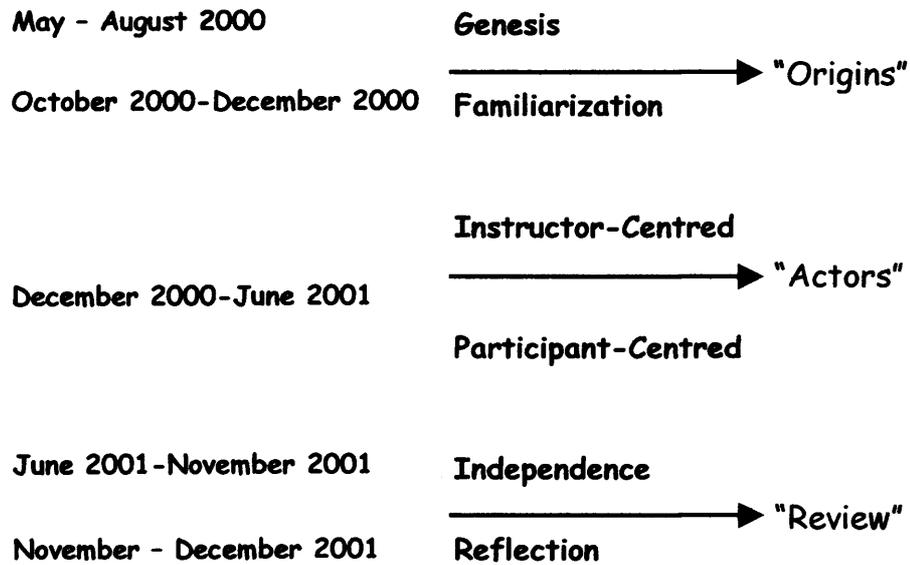
I entitled the period of the period of the first interview "Genesis" since it started the whole process of the research and the preparations for the programme. At this stage I met the prospective participants for the first time, offering them the opportunity to join the programme, indicating that it would be researched for my doctoral thesis, and interviewing them for the first time (face-to-face pp. 367-368). The following stage was "Familiarization". During this stage the participants met one another when they convened for the first time (pp. 378-382), and practised the virtual channels they would use during the programme. I entitled these two stages that had marked the beginning, "Origins".

In the next stage I, as the instructor, initiated all the activities. Therefore I entitled it "Instructor-Centred". It led eventually to the next stage, in which principals initiated their activities and relationships with other colleagues in the programme. This development differed from one participant to others: the principals chose with whom to communicate, what topics to discuss and in what way to do it. Therefore, I entitled this stage "Participant-Centred". Both stages formed the phase "Actors", implying the centrality of the involved persons.

After the programme came to its end, the principals were on their own; therefore, I entitled this stage "Independence". Coming back to interview them in November-December 2001 provided reflections of the participants about the programme and its influence. Therefore this stage has been entitled "Reflection". Both "Independence" and "Reflection" formed the phase "Review". This structure facilitated the organization of the data, providing tools for its reduction, presentation and the conclusion drawing (Miles and Huberman, 1994: 10-11).

Figure 4.2 displays the relationships between the development of the programme and the structure of the display of the findings and analysis.

Figure 4.2: From stages to phases



As indicated, the first phase of the programme was "Origins".

4.6.1.1 "Origins" - Initiating the programme and the research

Before describing the first phase, I would like to discuss my instructing and researching aspects during the programme and the research. I played two roles in the programme and in the research. Each role involved me in the process from a different angle, emphasizing varying aspects and interests. As long as the programme went on, I regarded myself as the 'instructor me'. As the research developed, I regarded myself as the 'researcher me'. Each role had its interests: the main issues that mattered to the 'instructor me' at the "Origins" phase were:

1. Learning about the participants' histories of programmes for professional development (Genesis).
2. Planning the programme, deciding upon its theme (Genesis).
3. Experiencing, for the first time, all kinds of instructional channels (Familiarization).

The main issues that mattered to the 'researcher me', at the "Origins" phase were:

1. Would the principals open up to me and to their colleagues (*Genesis* and *Familiarization*)?
2. Would the principals open up to new models of group learning and open up to new experiences, environments and technologies (*Familiarization*)?

"Origins" consisted of two time frameworks: "Genesis" that lasted from May 2000 to August 2000 (see the itinerary of the research, pp. 362-364) and "Familiarization" that followed it, lasting until after the second interview (December 2001). The first interviews that I conducted during "Genesis" gave the 'instructing me' an opportunity to acquaint myself with what I would describe as their professional environments, their aspirations and needs, and information technology skills. Another latent agenda was gaining their trust in order to enable the mutuality that was needed for the success of the programme. The 'researcher me' laid the foundation for the database and the information that I obtained from them was important, providing the directions in developing the programme. Generally, it was an uncomplicated stage.

I entitled the second stage "Familiarization". This included the first sessions of face-to-face, forums and chat-room. These sessions brought the participants together, both actually and virtually, familiarizing them with one another and with the technological infrastructure. The impact of such a familiarization, both in the interpersonal and person-technology relationships, varied from one participant to another. However, that may

be the first substantial buds of development were to be seen in the next stages.

4.6.1.2 "Actors" - The phase of developing personal style

This part begins by explaining what the developmental element of "Actors" includes. It details the meanings of its two stages: instructor-centred and participant-centred. It goes on to present and analyse data that has been gathered at this stage of the study. The changes in participants' behaviours will be demonstrated using an organizing table as a framework.

In contrast to the previous phase, the time boundaries of this phase could not be specifically and precisely defined. While the dates of beginning and the end of "Origins" were determined by certain events: first interviews, first face-to-face session and others, "Actors" was a dynamic phase and the transition from its first stage (instructor-centred) to its second stage (participant-centred) was individual.

At the beginning of "Instructor-Centred" stage, I took the initiative, proposing the activities. It was my role as the programme's instructor and the participants were learning to function in the situations that the programme was offering them such as forums and virtual assignments. They were also learning about one another and I was hoping, without being explicit about it, that they would start to interact independently of me. I was also expecting them to begin to initiate at their schools activities concerning some issues that they had acquired in the programme. The first, second and fourth research questions (see 4.2, pp.149-150) reflected these expectations looking for the programme's effectiveness, the potential development of interpersonal relationships, and the

absorption of ICT. However, I could not foresee if and when the participants would initiate their own moves. Nor was it expected that they would all do it at the same time.

The second stage of "Actors" was "Participants-Centred". At this stage different principals, at their own individual pace, started to demonstrate some initiative. This was seen through managerial behaviours and/or actions, forming relations with their colleagues and/or involving 'relevant others' who did not participate in the programme to look into some of its content or practice some of its operational ideas. I expected to find changes in the participants' behaviour during this phase; thus, I tried to adjust my instructional behaviour accordingly. In some aspects, the participants and me were occupying ourselves in distinguished activities during the phase 'Actors'. Table No. 4.3 presents a framework of behavioural patterns, of both the principals and me during the two stages of this phase, demonstrating probable expected behavioural alternatives.

Table 4.3 shows that during the phase "Actors" the participants demonstrated a great deal of professional "maturation". From behaviours of responsiveness, criticizing and avoidance, they moved into creative and collaborative relationships with their colleagues in the group.

Table. No.4.3: A framework of behavioural patterns.

	Instructor's behaviours	Participants' behaviours
Instructor-centred	Leading; encouraging; etc. initiating; catalysing,	Responding; realizing the practical implications of the proposed ideas in the programme; criticizing them and/or other participants; avoiding from acting/communicating... etc.
Participant-centred	Observing; responding; etc. listening; facilitating,	Creating work/social collaborations with colleagues in the group; using ICT; etc.

I chose to look at the participants' transition from instructor-centred to participant-centred through three perspectives, and in accordance with three research questions:

1. Principals materializing changes in managerial behaviours/adopting ideas and performing accordingly (with regards to research question no. 1, p. 367).
2. Principals forming thinking-teams/working-teams with colleagues in the group both within the sessions and outside them (with regards to research question no. 2, p. 367).
3. Principals using ICT in their daily routine (with regards to research question no. 4, p. 367).

"Actors" was the instructional part of the research, lasting until June 2001. The crucial question was whether its impact would show after it ended.

4.6.1.3 "Review" - Looking at the programme's effect

This phase started at a defined time, when the programme for professional development ended, the principals and I going our own ways. I refrained from contacting them and had no direct influence on any of them. Their being on their own 'inspired' the title for the first stage of this phase that I chose to entitle "Independence".

As I have pointed out, this stage had its defined time borders: it started immediately the programme ended in June 2001 and lasted until the end of October 2001 (the itinerary of the research, pp. 363-365), when I returned to all principals in order to conduct the fifth interview (pp. 375-376). During these months there were no formal sessions of the group. Actually, during this period, I detached myself from the members of the group, not knowing anything about their professional whereabouts. This phase occurred during the summer vacation. In Israel principals usually carry on working during most of July and then take their vacations, returning to school around mid-August or 20th August at the latest, to prepare intensively for the next academic year. In the Israeli context, this means negotiating issues of pedagogic budgets (teaching hours, teachers' manning, hiring and firing). Other negotiations with local authorities deal with financial budgets and maintenance. In the second part of August teachers assemble in work groups, planning the subjects to be taught, designing the educational environments of school's learning spaces both inside and outside the classrooms, and often learning together about new programmes that are scheduled to take place in the coming year.

The 'instructor me' stayed latent, having finished our formal working connections. However, the 'researcher me' was curious to find out to what

extent the programme for professional development we had all been involved in, had contributed to the principals' work. The first three research questions, about the effectiveness of the programme, its feasibility as a mean of forming professional support groups, and the inclination of principals to use ICT in their work, brought about these questions:

1. Did the principals identify ideas, insights and managerial tools they had acquired in the programme, and use them to improve their work?
2. Did the principals take advantage of their colleagues' professional capacities, in relevant areas, on their own initiative? Were the "experts" willing to assist their colleagues? How did this happen?
3. Did the principals take advantage of technological means, enriching their managerial tools and educational environment, more than they had done before?

I have entitled the last stage "Reflecting". At this stage I interviewed all principals for the fifth time (fifth interview, pp. 375-377). I gathered data about their communications with one another, joint ventures and supporting one another, where this had occurred among the participants. I looked for, and discovered, changes in their managerial patterns. I also intended to obtain the principals' reflections on the experience they had had in the programme. At this stage I found that both the 'instructor me' and the 'researcher me' wanted to find out if the programme had had any effect in that short period.

4.6.2 Categorization - The organizing elements

This part presents the categorizing system that I have employed in order to present and analyse the findings. It discusses the three categories:

openness, involvement and programme's effect. Each one is divided into its different segments and related to another period of the research.

Having established the phases defining each one's focus, I could identify behavioural categories for each phase. It facilitated a focused analytical presentation of findings. The categories I identified were: openness, involvement and the programme's effect. It continues discussing and explaining each category.

4.6.2.1 Openness

'Openness' refers to the way that participants were able to learn to collaborate with 'new' colleagues, acquire managerial patterns of behaviour and adjust to them. This includes openness to the programme as expressed in the participants' motivation to join the programme. Then it explains the significance of openness to 'others' and openness to changes. 'Openness' was a phenomenon that did not get very deep into actions or people. I refer to the first stage of the study - "Origins".

Openness to changes - This referred to the readiness of principals to change patterns of management. The programme intended to open the principals up to the possibility of adopting new managerial tools, including ICT technologies. This related to the research questions about the effectiveness of the programme and the degree to which they had adopted the use of technologies into their daily managerial routine.

Openness to "others" - This dimension referred to the second research question, about the probability of a virtual programme to form a support

group. It required that one was able to discuss one's difficulties, besides a readiness to listen, to tell, and to develop empathy with the others.

4.6.2.2 Involvement

'Involvement' referred to the depth and the scope of the participants' activity in the programme. It goes a step further than 'openness', meaning not only acquiring and acknowledging, but also adopting and acting in accordance with. 'Involvement' meant that what had started as openness became more profound in quality, thus characterizing the second and third phases.

This also involves a higher degree of commitment to the programme and its members. There were three forms of involvement: involvement in the programme, with colleagues, and involving 'outsiders' in the programme. For convenience of the analytic presentation, I chose to discuss it referring to "Actors".

Involvement in the programme - This aspect of the criteria was looking at the ways and frequency that principals acted in the programme, their attendance in the sessions and their contribution to the activities, ideas and development.

Involvement with colleagues in the group - referred to the cases where principals initiated relationships with other members of the group. The first steps of interaction were when the participants started to relate to one another in the programme. The second step was their involvement with one another outside the programme. It also included inter-school activities

and other themes that could have emerged on such occasions, their forms and frequencies reflected this sort of involvement.

Involving 'others' in the programme - the readiness of the participants to involve 'others' who did not participate in the group, in some of its topics. Such outsiders could be, for instance, any of school's stakeholders.

4.6.2.3 Programme's effect

By referring to the effect of the programme, I tried to assess its impact on the principals' practices after they had stopped participating in the programme. My intention was to find out whether there was an added value to the principals' managerial behaviours, which could be related to the programme. Fuchs (1995) identified four stages in such a process of change:

1. Preparation - begins even before the process starts; initiated either by an inner will or by outside factors or authorities.
2. Implementation - the process of clarification and setting the rules, where an understanding of the contents and the nature of the process and the expected change are established.
3. Institutionalization - a deepening of the understanding, until a change becomes a habit.
4. Results - the stage of self-assessment and evaluating the results of the change in order to draw conclusions for the future.

(Following Fuchs, 1995, p.28)

The phase of "Review" started immediately the programme ended; therefore, I did not expect to be able to trace evidence of behaviours for the fourth stage. However, I was looking for evidence of

institutionalization, i.e., an ability to understand and practise some of the changes. I expected to find such effects regarding three dimensions:

Adopting new managerial behaviours - during the programme we had addressed themes like staff development, marketing, evaluation, and relations with parents. I sought evidence of an influence of these discussions on the principals' practices.

The main sources would be the evidences that principals provided when answering the second question in the fifth interview. Seeking this information I asked: "In the process of preparing school towards September the 1st, were there steps when you made use of some insights you had developed throughout our programme? Would you like to discuss it? What was the situation? What use could you make of this learning? How did it help you? Was there something missing?" I hoped to be able to establish trustworthiness by creating a 'chain of evidence' (Yin, 1994), or by fieldnotes of what I would see at their schools.

Maintaining professional relationships with colleagues - my assumption at the beginning of the programme was that principals could benefit from colleagues who would not be perceived as competitors. In the fifth interview (fifth face-to-face interview, question no. 5, pp. 375), I asked: "Do you keep in touch with any of the other participants of our programme? If so - with whom? Why with this/these particular principal/s? What kind of connection do you maintain - sharing experience or views? Counselling? How frequently do you connect with each other/one another? Do you use virtual channels, like e-mail in maintaining these connections? If no - why? Do you not miss it? Would you like to initiate

such connections?" I sought to find out whether such relationships were established, and what were the subjects that brought principals to function and share with one another. Again, the only source of information could be the principals' interviews. I also knew that if there was such evidence, I could seek support by cross-referencing interviews.

Using Information Technology - my conviction of the potential added value of ICT to principalship was another stimulus for initiating the programme and basing it mainly on the Web. I wanted to know whether principals were encouraged to use it, which forms of ICT they used and on what occasions.

Again, I had only the fifth interview (fifth face-to-face interview, question no. 7, pp. 376): "Have you adopted any virtual tools from the programme? If so - what tools? When and under what circumstances do you use them - for personal or professional affairs or maybe - both? What is the added value you estimate that you gain by using them? If not - why? Is it because you find it difficult to use it? Is it a matter of lack of proper virtual means? Is it because you think that your experience in and out of our programme did not justify the effort needed for it?" I hoped I would be able to establish trustworthiness by observing schools on my visits in order to conduct this interview.

The phases and the categories that organized the analysis as presented so far are displayed in Table 4.4.

Table 4.4: The structure of findings' analytic presentation

Stages	Phases	Categories
Genesis	Origins	<u>Openness</u> Openness to changes Openness to the programme Openness to 'others'
Familiarization		
Instructor-Centred	Actors	<u>Involvement</u> Involvement in the programme Involvement with colleagues within the programme Involvement with colleagues outside the programme Involving 'others' in the programme.
Participant-Centred		
Independence	Review	<u>Programme's effect</u> On managerial behaviours On interpersonal-professional relationships Absorption of Technology
Reflection		

4.7 Summary

This chapter has presented the structure of the research from its initiation to the presentation findings and analysis. It started by locating briefly the sources of the research in my professional and personal background: my work with primary principals had taught me their unwillingness to open up and share with colleagues who headed schools in the same geographical area as they were in competition with these same schools in respect of parents' choice of school. Personally, I had experienced virtual communications, realizing there was a potential for professionally developing principals under certain conditions.

Next, the research questions were briefly presented and explained, noting their relevance to the research followed.

A description of the research that followed included its itinerary from May 2000 until December 2001, and its structure around the development of the programme for professional development. The programme's main three types of sessions are explained: face-to-face, a-synchronized and synchronized. The tools for data collection: interviews, observation and document analysis, are also briefly reprised.

Next, the principals were presented, attempting to find a connection between seniority in principalship and technological skills. However, neither Weindling's (1999) nor my typologies supported this effort. Some similarities between the processes of the principals' preparation towards their role were found: with the exception of one, all claimed that there was no previous effective preparation. Most also claimed that the professional support that supervisors provided was not sufficient.

The principals were also asked about their choice of subjects for the programme. The themes that emerged from their responses coincided with my views, leading to the choice of staff development, current pedagogy, learning environments, bringing schools closer to the 21st century and school-parent relations, including marketing. Each theme was discussed; educational researchers' views were also presented.

Next, the framework for the presentation of findings and analysis was discussed. It consisted of two dimensions: developmental phases and functional elements. I defined six developmental stages, which I joined

into three phases: "Origins" that consisted of "Genesis" and "Familiarization". The second phase "Actors" was a phase of participants' transition from the functional element characterized as "Instructor-Centred", where I initiated the activities, to "Participant-Centred" where the principals initiated activities independently. The pace and behaviours of this transition were individual. The third phase, "Review", also consisted of two stages: "Independence", where the participants prepared for the next academic year, and could do it using what they had acquired in the programme; "Reflection", including the participants' reflections on the effect of the programme on their functioning. Thus, the functional element that facilitated this phase's analysis was the 'effect' of the programme on its participants with regard to three topics: adopting different managerial behaviours and tools, interacting professionally with colleagues and adopting technological vehicles in their practice.

The significant functional elements were:

- a. Openness in the first phase.
- b. Involvement in the second phase
- c. The programme's effect in the third stage.

This presentation and explanation of the structure of the presentation of findings and analysis leads to the next three chapters:

Chapter 5 will describe the data that I have obtained with regard to the phase "Origins". It will discuss the findings using the category that has been found relevant to this phase - 'Openness'.

Chapter 6 will present the findings of the phase "Actors" and discuss them, using the different aspects of the category 'Involvement'.

Chapter 7 will discuss the data that have been gathered in the third phase - 'Review' - and discuss it in view of the category 'The programme's effect'.

The discussions in these chapters will lead to the summarizing chapter that will discuss the research questions in the light of the findings and analyses in Chapters 5, 6 and 7, thus completing the circle that started with these questions and led to the study.

CHAPTER 5
'ORIGINS' - THE FIRST PHASE:
STARTING THE PROGRAMME

5.1 Introduction

This chapter presents and analyses the data that I have obtained from the two stages of "Origins" - "Genesis" and "Familiarization". However, the chapter is not structured around the chronological development of these stages; the presentation and data analysis are structured around the organizing functional element 'openness' that has been identified as relevant to this phase. This functional element considers openness to changes and openness to others.

The first part of this chapter discusses the concept of 'change' in educational contexts. It presents a definition of this term, followed by some conditions that Fullan (1994) have considered as crucial for its subsistence. This part also presents typologies of changes, forming a model for a future assessment of the changes that this programme generated. This general view leads to the presentation and analysis of the findings of this phase.

The findings that concerned the participants' openness to change are then described and analysed. Changes are presented in the modes of communication that the programme has utilized; showing evidences of openness to change as reflected in a-synchronized sessions, the synchronized sessions and some e-correspondence.

The next discussion is about forms of openness to others as they appeared in the findings in the phase of 'Origins'. These include the participants' openness to take part in a different sort of programme; it then discusses the principals' openness to me, the instructor, and to one another. Relevant evidences are presented and discussed.

The summary that concludes this chapter leads the reader to the second phase of the research - "Actors".

5.2 Change in educational context

The beginning of this section refers to parts of the programme for the professional development of principals that engaged in aspects of change. The section goes on to consider generally, though briefly, the concept of change in the context of educational management. In doing so, it presents one definition of change, some of the assumptions about conditions that facilitate processes of change and some frequent models for introducing change. In view of the vast literature, I have limited myself to the aspects that were of relevance to my project.

The programme for the professional development of principals aspired to generate changes in various managerial aspects; therefore, part of the sessions focused on this issue. One example was a discussion that concerned staff-development; this forum intended to influence the views and practice of some of the participants. Another case was the forum about the school of Naveh (first forum, pp. 384-390), addressing pedagogical aspects of parental involvement and strategies of teaching small groups of pupils and principals' roles in leading them.

Another aim was to encourage principals to share their professional experience with colleagues instead of regarding them as intimidating. The fact that the participants functioned as principals in remote areas could facilitate such sharing relationships.

Beside the unconcealed agenda of the subjects, there was also the hidden agenda of getting used to virtual infrastructures and catalysing the participants' use of such environments. Even the way that the programme functioned was a change for its participants, as it intended to introduce new channels of communication to them. In Israel, teachers and principals are required to keep learning in various frameworks of professional development. Therefore, I thought it worthwhile to bind together the opportunity of creating professional relationships, through discussions that would address the context of educational management.

Fuchs (1995, p.22) has defined *Change* as "replacing constant behavioural patterns that have been embodied in people's work within an educational institution, by new and distinctive patterns" (author's translation). The programme that I conducted was meant to bring about some changes in its participants functioning: I expected that they would:

- a. Associate with 'others' (an issue that had already been discussed).
- b. Adjust to new forms of deliberation and participate in two modes of virtual sessions: forums (a-synchronic) and chat-rooms (synchronic).
- c. Acquire new ways of establishing professional acquaintanceships adjusting to the technological environments whilst doing so.
- d. Adjust to new habits of communications. Given the fact that it was a programme for educational leaders, I have referred to these

changes as educational ones, expecting them to occur within the participants' schools.

Fullan's (1994) eight principles for programmes of educational change guided me when I planned my programme:

Lesson 1: You can't mandate what matters...

Lesson 2: Change is a journey not a blueprint...

Lesson 3: Problems are our friends...

Lesson 4: Vision and strategic planning comes later...

Lesson 5: Individualism and collectivism must have equal power...

Lesson 6: Neither centralization nor decentralization works...

Lesson 7: Connection with the wider environment is critical for success.

Lesson 8: Every person is a change-agent... (p. 21-22)

The programme that I conducted and researched was voluntary not mandatory. Although I was flexible as far as the organizational aspects were concerned, the aims, I was determined in regard to the areas that I wanted to address. I certainly derived them from the participants' difficulties as described in the interviews and in the sessions, regarding these difficulties as sources for learning and improvement. I intended to lead the principals to initiate in their schools actions that would lead to solutions.

Although the programme was planned and conducted for the group, I tried hard to respect and address each participant from an individual perspective. This called for a high degree of involvement within an atmosphere of permission and autonomy. Looking at all these points, the question remains: how would the principals adapt to changes in the processes of communication and professional development in the context of the programme?

Yossifun (1996) has divided educational changes into three main groups:

1. Pedagogic changes - that happen in instructional strategies and materials, new technologies and professional development of teachers.
2. Disciplinary changes - that are seen in the curricula, subject matter, and themes.
3. Organisational, structural or managerial changes. (p.5, author's translation)

Fuchs (1995) and Yossifun (1996) have indicated that the dissatisfaction of authorities with aims, outcomes and products of educational systems generated changes and reforms. They have noted that this could explain the fact that when the Israeli Ministry of Education had initiated obligatory changes, principals did not raise much objection and tended to implement these initiatives (Fuchs, 1995; Yossifun, 1996). Chen and Eddie (1995, p.25) characterized 'top-down' reforms as an "enforced strategy for enhancing changes and reforms by authorities" (author's translation). They added that this enforcement was processed through regulations and budgeting. Insufficient results of these changes and the developing tendency of schools' autonomy and decentralization enabled the choice of change-agents made room for changes that were 'bottom-up'. They "were characterized by decentralized and collaborative patterns" (Chen and Eddie, 1995, p.26, author's translation).

My programme for the professional development of primary principals was a combined 'top-down' and 'bottom-up' initiative: I initiated it, decided the topics and the instructional nature. On the other hand, with the exception of Rachel who had joined the programme following a firm suggestion from her supervisor, all participants joined it of their own free will, and I planned and adjusted the themes keeping in mind their expectations and needs.

Watzlawick *et al* (1994) distinguished between changes of 'first order' and of 'second order'. They thus joined Cuban (1990; 1992) who had tried to figure out why certain reforms survive and change schools' practice, while others, although seemingly successful, do not change anything. Cuban (1992) tried to understand the difference between successful reforms that achieved their aims and others that did not, by examining their aims. Thus, Cuban (1992) classified two kinds of reforms: *Incremental changes* that were intended to improve and reorganize existing systems, and *Fundamental changes* that intended to change the structures, assuming this was needed. Cuban (1992) has presented the integration of kindergartens into the educational system, as an example for a successful fundamental change. I attempted to classify my programme using the theoretical frameworks of Watzlawick *et al* (1994) and Cuban (1990; 1992):

The programme addressed directly all three areas that Yossifon (1996) identified, seeking to affect them. What kind of changes was I trying to generate, considering these definitions for achieved changes? Was I expecting to generate changes of the first or second order? Did I expect to find evidence of incremental or fundamental changes? There was much in common with incremental and first order changes, as well as with fundamental and second order changes, I planned, on the basis of these identifications, a model that would enable an evaluation of the change, using both Cuban's (1990; 1992) and Watzlawick *et al's* (1994) classifications.

Figure 5.1 demonstrates an evaluative tool that I would be able to use in order to examine the extent and nature of the changes at the phase of

"Review" with regard to three aspects: changes in managerial behaviours, in the inter-relations of the principals with one another and the absorption of technology as part of the principalship.

Figure 5.1: A model for analysis of the programme's outcomes

	First Order	Second Order
Incremental	Maintaining the existing organisational framework, without demonstrating, after the end of the programme, any significant change.	Maintaining the existing organisational frameworks but demonstrating some institutionalized improvements.
Fundamental	Changing the organisational frameworks but not maintaining these changes after the end of the programme.	Changing the organisational frameworks and maintaining these changes after the end of the programme.

I decided to use this model to analyse the data that I had collected during the programme in order to evaluate the participants' openness to change during the first phase.

5.3 Openness to change in "Origins"

This section presents and analyses findings that demonstrate participants' openness to change in "Origins", addressing them from four aspects: the participants' openness to a programme that was different from any form that they had experienced before, their adjustment to a-synchronized channels of the programme, to its synchronized channels and to the use of e-mailing. A brief summary concludes the section.

5.3.1 Openness to a-synchronized interactions

The first face-to-face session of the programme that took place on 11th October 2000 (first F2F session, pp. 378-382) was dedicated to participants meeting one another and experiencing a first encounter with a virtual environment. This discussion will address their adjustment to these virtual environments.

Sara was the technological instructor for the group. She joined the first session in order to present the first virtual infrastructure (first F2F session, pp. 378-382) that was a-synchronized, i.e. facilitated discussions in a forum that the participants could access at their choice of time and place, within a defined period. At this session I was able to identify two groups of principals by their attitude to the forum's practice: I have labelled these groups as the 'hesitant group' and the 'optimistic-daring group'.

The hesitant group included principals who had no previous experience, did not refuse to start training in the site but expressed their apprehensions. The optimistic group included experienced and inexperienced principals who expressed a self-confidence in their ability to acquire the necessary skills in order to use the technological channels of the programme. Table 5.1 presents quotations (first F2F session, pp. 378-382) of principals' typical reactions in each of these groups (quotations from first F2F session, pp. 378-382).

Table 5.1: Groups at the first encounter with the infrastructure

The hesitant group	The optimistic-daring group
"I will need private tutorials" (Rose, p. 378)	"We do not even need that much time to familiarize with it" (Kira, 378)
"All of the others do not know anything about it" (Vivian, p. 379)	"You have to be more optimistic" (Abe, p. 379)

There was no apparent connection between seniority in principalship and belonging to any of these groups. Abe who was a newly appointed principal and at the same time technologically inexperienced demonstrated the lack of such a connection, when expressing his optimism: "You have to be more optimistic" (Abe, p. 379).

In a period of less than two hours apprehension was replaced by the joy of mastering the skills they were acquiring in order to be able to take part in a-synchronized sessions. Expressions that had demonstrated that 'technology phobia' vanished, making room for exclamations of satisfaction, like Ann, who was not ashamed to ask openly, in view of her success: "I do not believe it, I received Laila's message and managed to open and read it. How do I answer?" Soon, Ann was able to advise others following an exchange of mailing between others of the group:

Rose: "Can anyone send me a mail?" (p. 379)

Abe: "Be my guest, I just did!" (p. 379)

Rose (exclaiming): "Here it is! How do I answer?" (p. 379)

Ann: "It is easy! Press the reply icon and write." (p. 379).

Satisfaction replaced inhibitions. It seemed that the participants could take part in the programme. I felt relieved regarding the feasibility of the virtual components of the programme.

The first virtual experience demonstrated that difficulties and inexperience did not stop the principals from plunging into the use of unknown virtual vehicles. Some hesitant members of the group needed a little encouragement and more explanation to begin using virtual media. I asked myself whether they would behave independently from their own computers after this session. Kira, who was the most experienced participant, was the only one to address me immediately after this first meeting asking me to introduce the story of her school, Naveh, in the first forum, in order to obtain her colleagues' opinions and advice. While it did not surprise me from the technological point of view, it was an evidence of her readiness to trust her colleagues.

All participants accessed the first forum "Naveh School" (first forum, pp. 383-390); the forum was placed on the programme's web-site between 25 October 2000 and 15 November 2000. There were 39 accesses to the forum, including mine: I accessed the forum eight times, trying to make sure that it kept going, thus exposing my insecurity, this was my first experience in moderating forums, as it was their first as participants. The forum proved to be mostly stimulant, involving all participants without exception. The principals presented different attitudes (pp. 383-390).

Suggestions for improvements, for instance:

Betty: "Kira, I think you should consider a flexible framework of time, both during each day's routine and the annual order of learning. Pupils

can, in certain subjects, choose their framework of time. Of course you have to be cautious about the basic demands of the Ministry of education" (p. 384).

Solomon: "I want to offer some suggestions about turning parents' involvement into a partnership" (p. 385).

Criticism, for instance:

Rachel: "Sorry to say it, but somehow your problem seems at first sight, to be a '*rich people's problem*'. It is not really like that. You are dealing with a highly involved population, willing and capable of contributing. It is a merit to have such parents at your side" (p. 386).

Identification and partnership, for instance:

Vivian: "We are dealing with a similar problem: my school consists of 102 pupils and 12 teachers... My own question is about being mothers of children who are educated in the same school, due to lack of an alternative system" (p. 386).

Attentiveness, for instance:

Laila: "You know I am not heading a school as most of you do. I follow you, learning a lot. Not commenting does not mean I am not listening" (p. 389).

Considering the fact that it was the principals' first experience, we could regard it a success. Sara and I thought that the principals were ready for the next step - participating in a synchronic chat-room.

5.3.2 Openness to synchronized interactions

The first virtual experience was successful from the participants' point of view. They managed to access the web-site, express themselves and relate to their colleagues' opinions. Sara and I therefore decided it was appropriate to move to the next "virtual step" - participating in a synchronized session (chat-room). In the second face-to-face session on 13th November 2000, Sara taught the principals how to access the chat-room. The participants demonstrated self-assurance and I announced that on 22nd November at 22:00 we were going to engage in the chat-room conversation without any additional preparatory practice. All the principals received an instruction-manual, explaining how to access the chat-room. After looking at it briefly they did not express any hesitation. However, this lack of practice would prove to be a great mistake.

On 22nd November we intended to discuss the issue of parents' expectations of school regarding pupils' achievement. All participants managed to access the site; it seemed as if we were going to have a fruitful discussion. However, although the participants had accessed the chat-room simultaneously, the moment that the discussion started they got confused: the task of reading one another's opinions and responding to these was obviously complicated. At certain periods of time nobody responded, while at others some of them responded together, not completing their texts, and apparently not having enough time to read their colleagues' opinions. Therefore, in spite of its promising start, the experience proved to be the antithesis of the first virtual session.

The impact of the difference between a-synchronized and synchronized discussions showed: the principals accessed the forum at their time of

convenience and in accordance with their personal pace. The chat-room did not allow any delay or slowness. The principals had to be alert, read, think and respond simultaneously. Apparently the participants were not capable of this, which minimized the feasibility of this synchronic on-line discussion. Synchronized environments resemble face-to-face discussions in which everybody talks together. After the first frustrating 30 minutes of the session principals said they could not follow and intended to quit. Others asked everyone to slow down so they would be able to read and respond. After 20 minutes more, I decided to stop the discussion, hoping to be able to produce some reasonable understanding from its documentation. To make matters worse Sara contacted me a little later to tell me that the documentary system of the chat-room had failed, there was no documentation. Obviously, the experience was a failure.

I could blame the unsatisfactory preparation. Still, a brief preparation had been sufficient for starting the discussion in the forum where there was no immediate 'inspection' and the participants had to access it on their own, and it had worked.

Unlike the case of a-synchronized sessions, I could identify some connection between principals' previous technological skills and their readiness to practice synchronic sessions. Seven principals e-mailed their reactions. These reactions show that the reactions of the participants differed.

The main ideas that the principals have expressed are presented in Table 5.2, enabling me to identify different groupings. Table 5.2, is followed by the presentation of the groups that I could identify:

Table 5.2: The participants' reactions to the chat-room

Participant	Date	About the experience	Future perspective
Rona	27.11.00	It was doubtless an interesting, though frustrating experience	I can also tell you that if and when you want to try it again, I will go along with you. However, I would rather stick to the practice of the forum, which enables my participation when I am ready and free to do it.
Solomon	27.11.00	I can sum up the synchronized experience as an unpleasant though supportable one.	Unless it is essential for your research, please, do not repeat it.
Kira	23.11.00	I can still feel the deep frustration of last night. ... This was my breaking point. The topic was relevant, at least to me; still, even I, with my Internet skills felt I got lost.	However, there is no way I am going to experience such a "conversation", again, at least not for the time being.
Vivian	24.11.00	For me it was a steep falling from the heights of the enthusiasm in the forum, to the realization of my incapability.	Please, do not make me experience another frustration!
Rose	24.11.00	This was really an unfair test for novices like me.	Please, promise me there will be only a-synchronized virtual sessions.
Abe	28.11.00	I believe that I do not have to tell you that the synchronized meeting was not a meeting but a disastrous experience.	I hope we saw the last of it.
Ann	28.11.00	It took me a long time to 'recover' from our last meeting.	Please, do not make me experience it again!

The groups that I identified were as follows:

1. A reserved readiness to practice chat-room discussions: Rona and Solomon had some reservations; Rona, however, was the only principal who said she would be willing to try, if necessary, another experience of the same sort.
2. An explicit reluctance to practise chat-room discussions by principals who were technology-novices: Vivian, Rose, Abe, and Ann, made it clear, even if subtly sometimes, that she was not ready to repeat the experience. Kira asked not to practise it "for the time being" (correspondence following the synchronized session, 23.11.2000, p. 390), thus expressing a possibility of a future readiness.
3. Emotional reactions that expressed personal feelings of embarrassment, and a refusal to practise chat-room discussions again. Vivian (24.1.2000, p. 390) and Rose (24.1.2000, p. 390) stressed their embarrassment in front of their families and staff, besides the sense of frustration because of their technological failure, after they had succeeded in the a-synchronized session.

Only three "brave" principals admitted that they might dare and practise the chat-room again. These were Rona (27.11.2000, p. 392), Solomon (27.11.2000), who had been categorized as having medium technological skills, and Kira, who had been categorized as having high technological skills (see Figure 4.1, p.156).

The seven principals who reacted to the chat-room (correspondence following the synchronized session, pp. 391-392) did not provide a full view of what they felt after the synchronized session. Rachel, Betty and Laila did not approach me by e-mail. On Betty's 2nd interview (5.12.00) she

admitted: "I am certain about the least acceptable - the chat room. I read slowly, have to digest it, and I type very slowly, searching for every single letter on the keyboard. The chat-room is definitely not 'my cup of tea'".

Laila, in her 2nd interview (28.12.00), said: "I did not like the synchronized session. ... However, I have to overcome so many obstacles in order to attend the face-to-face meetings, I would rather have just the virtual ones. If this is the case, I am even ready to do my best and learn to participate in chat-rooms, as well". Rachel, in her 2nd interview (16.11.00) was certain: "One thing I am sure about: I am not ready yet for the synchronized meeting: I am slow in reading, thinking, managing the technology and writing. All these promise a huge frustration".

I could add these three principals to the others when trying to identify a certain connection between principals' technological skills and their openness to synchronized channels of communication. Table 5.3 presents this connection.

Table 5.3: Connection between previous technological experience and readiness for synchronized sessions.

	Technologically Inexperienced	Technologically Medium Experience	Technologically Experienced
A restricted readiness		Solomon Rona, Laila	Kira
A Reluctance	Abe, Vivian, Rose, Ann, Rachel	Betty,	

Unlike the case of a-synchronized sessions, there was a connection between principals' technological skills and their openness to synchronized

channels of communication, with the exception of Betty. The three "daring" principals, Rona, Solomon and Kira, had had some previous virtual experience, while none of the principals who experienced virtual sessions for the first time in the programme wish to retry this in the future.

I had to conclude that the principals did not demonstrate openness to synchronized interactions. However, I was soon to learn that even failure could bear positive fruit.

5.3.3 Openness to virtual correspondence

This section discusses the participants' adjustment to the use of e-mailing as an additional channel of communication.

Shortly after the failure of the synchronized discussion another virtual media prospered: in the days that followed the unsuccessful synchronic experience, seven principals e-mailed me their requests not to repeat the experience (correspondence following the synchronized session, pp. 390-391). The fact that they chose to e-mail their reactions rather than telephone or wait for the next face-to-face session was surprising: until that time Kira was the only participant who had used e-mail as a form of communication. We had supplied the principals with e-mail addresses but, except for the first face-to-face session when we were all in the same classroom, we never practised it. Therefore, it surprised me that, all of a sudden, e-mailing became authentic, relevant and useful. Table 5.2 (p. 203) sums up the participants' reactions to the experience of the chat-room (correspondence following the synchronized session, pp. 391-392).

Whilst not all participants demonstrated an openness to the idea of practising the use of the chat-room again it was encouraging to see that seven of them chose an alternative virtual channel of communication to react to it. Although the principals had not had a previous opportunity to practise e-mailing as a functional channel of communication, they detected the appropriateness of its use as a way of immediate response and made reasonable use of it.

Until this point I have addressed the participants' openness to the changes in forms of participation in the programme and communicating with one another, that the programme had demanded of them. These changes called for the acquirement of skills and practice of three virtual channels. I identified instances of openness to the new technological channels of communication. The degree of the principals' adaptation to technological vehicles would determine their ability to use them a means of communication.

The principals learnt to use three virtual channels of communication: a-synchronized sessions (forums), synchronized sessions (chat-rooms) and electric correspondence (e-mailing). I attempted to relate their adjustment to these channels of communication, during the phase of "Origins", to the parameters by which I had characterized them at the beginning of the programme: seniority in principalship and technological skills. I based this on the participant's profile as was presented in Figure 4.1 (p.157). This profile distinguished between principals who had been leading their schools for between one and seven years and others who had been leading them for between eight and fifteen years. It also identified three groups of principals referring to their technological skills, based

upon their own testimonies. Table 5.4 presents my findings, showing that seniority in principalship did not affect the adjustment of the participants to the virtual sessions.

Table 5.4: Principals' adjustment to virtual communication according to their seniority

	1-7 years Seniority	8-15 years Seniority
The Principals	Betty, Rona, Laila, Abe, Vivian, Ann	Kira, Solomon, Rose, Rachel
A-Synchronized Sessions	There were no differences between the involvement of senior and novice principals.	
Synchronized Sessions	Only Rona expressed her readiness to experience it again, while the others resisted it.	Only Solomon and Kira expressed their readiness to experience it again, while the others resisted it.
Electronic Correspondence	There were no differences between the involvement of senior and novice principals.	

How would their technological experience demonstrate affect their adjustment?

Table 5.5: Principals' adjustment to virtual communication according to their technological skills

	No Skills	Medium Skills	Experienced
The Principals	Abe, Vivian, Ann, Rachel, Rose	Betty, Rona, Solomon, Laila	Kira
A-Synchronized Sessions	Principals who had been skill-less, medium and high experienced principals adjusted equally.		
Synchronized Sessions	Refused to adjust and practice	Two principals (Rona and Solomon) expressed a readiness to practice, if needed	(Kira) expressed a readiness to practice, if needed
Electronic Correspondence	Principals who had been skill-less, medium and high experienced principals adjusted equally.		

As far as a-synchronous sessions and electronic correspondence were concerned, there were no differences between technologically non-experienced and experienced participants concerning acquiring skills for their use. As far as synchronic sessions were concerned, to some extent (in the limited cases of Solomon and Rona), technologically medium skilled principals did not resist the use of synchronic sessions; neither did Kira, who was the only experienced principal.

I would conclude that, in most cases, neither seniority in principalship nor technological experience, determined the participants' adjustment to the use of virtual channels. However, former technological experience could facilitate the use of synchronic sessions.

I used the typology put forward by Crawford (2002) in order to classify the 'technological behaviours' of participants in the programme for the professional development of principals in the first phase of the research. I used the participants' descriptions about their own virtual experiences as expressed in the third interviews. All the following quotes have been gathered in the third interview. Although the phase "Origins" ended after the third interview, I have relied on the third interview for two reasons: in the second interviews the participants were still impressed by their success in attending the forums. The third interview was accumulating their attitudes and adjustment from the beginning of the programme.

Ann (3rd interview, 21.3.01): "Not one that has to do with you: I did not have access to the Internet in those weeks. I read it after it was closed for discussion".

Abe (3rd interview, 14.3.01): "However, I purchased a PC for my own use at home. I connected it to the Internet...I now contact the forums through my own computer, a giant step towards more changes".

Vivian (3rd interview, 11.3.01): "I had a discussion with our Rabbi the day before that session, and he opened my mind to the benefits of just listening. I made up my mind to try it...and listen in the face to face meeting".

Kira (3rd interview, 22.3.01): "I have asked Orly (school's computers coordinator - T.R.) to build a school web-site. Once she finishes it, am going to hold open forums of teachers and parents. Later, I intend to open forums for pupils, as well".

Betty (3rd interview, 26.3.01): "I decided that the most effective way to get new perspective was to abstain from expressing myself, and just listen to the subject".

Laila (3rd interview, 19.4.01): "We...are thinking that maybe getting connected to one another through virtual medias, may solve some of our difficulties..."

Rachel (3rd interview, 15.3.01): "It is a painful question. I am struggling to access the site without being supported by my sons and husband. I cannot, yet, do anything beside it, by myself".

Rona (3rd interview, 16.4.01): "I know what it is going to be: I am going to mail it to every teacher in the e-mail, instead of printing it".

Rose (3rd interview, 16.3.01): "I do not know at this point what is the potential of computed communication".

Solomon (3rd interview, 25.4.01): "However, at this stage, when I am starting to form a sense of being a team, it would be wrong, I believe. I want to nourish our relating to one another's successes and difficulties, and to the centre's future development".

The classification of the principals regarding their adjustment to the use of virtual communication is presented in Table 5.6.

Table 5.6: Principals' adjustment to virtual communication according to Crawford's (2002, p.220) typology.

Type	Description of behaviour in technological environment	Principals
Addicts	Tend to be confident with ICT and able to integrate quickly into a known community. Their motivation may be quite altruistic they are willing to spend time in cyberspace...	Kira, Rona, Laila, Abe
Thinkers	May eventually become addicts, but the research had many examples of (them saying, TR): 'I get support just reading the conversation.'	Vivian Betty
Sceptics	... Are newcomers who have often been subjected to some sort of technological breakdown on the way to using conferencing...following quote is typical: 'Recently had trouble logging on. Not being able to log on so not bothered'.	Ann Rachel Rose
Dippers	...Tend to be less altruistic than other users, and will only really become involved when they need some sort of response from other leaders. ... summed up in the following comment: 'On tap there are other educational professionals'...	Solomon

As seen in Table 5.6 the principals have opened themselves, in various ways, to changes in the vehicles they use for communication. Their self-descriptions about the degree, manner and difficulties coincided with Crawford's (2002) typology. Now, that the participants have acquired a reasonable ability to access the programme virtually, I wondered whether they would open themselves towards the 'others' in the programme, as well.

5.4 Openness to 'others'

This part presents analytically three aspects of openness to others as found in the research at the phase of "Origins". The first is openness to the programme. The second aspect is the principals' openness to me, the instructor. The participant could perceive me as a change-agent, thus developing different sorts of reactions; this part describes and analyses what actually happened. The third aspect was openness to other participants in the programme.

5.4.1. Openness to the programme

The stage of "Genesis" lasted, as noted in 4.6.1 (p.172), from May 2000 to August 2000 (itinerary of the research, pp. 363-365). The only activity was the first interview of all of the prospective participants (first interview, p. 367-368). I regarded all the interviewees as 'open' since they had agreed to consider participating in the programme, when being informed about its virtual nature. However, in the interview (first interview, p. 367-368), I wanted to find what had motivated them to experience, voluntarily, in a programme that included other principals that they had not known before. I received different answers. Abe admitted: "This is my first opportunity to be a part of a training programme. Until now, I have attended many learning groups and I guess this is going to be learning in a different manner. That arouses my curiosity very much" (Abe, 1st interview, 25.6.00).

On the other hand, Kira declared in her first interview (13.8.00), that: "I am willing to join the group mainly because of the massive virtual part it will consist of." Rachel was honest, confessing: "I am in trouble, having no one to help me" (16.8.00). She later added: "We suffer, wrongly, I must

tell you, from a decreasing reputation. Parents do not want their children to attend this school. Maybe your programme is the answer to my prayer. I am ready to commit myself." (Rachel, 1st interview, 16.8.00)

Solomon had his own reasons for joining the programme. He was directing a science centre and principals were his direct clients. Apparently he had not been able to convince them to take advantage of his centre and collaborate with him, he therefore had another kind of agenda: "I want to be able to penetrate their (the principals', T.R.) heads ... in order to get involved in the principalship environment in my town and stop being the 'service provider'" (Solomon 1st interview, 14.8.00)

Betty was looking for a "friendly" group of principals. She explained that: "One of the reasons I asked to join this programme was the opportunity to discuss issues, especially the problematic ones, with 'strange' colleagues" (Betty, 1st interview 6.6.00). This explanation coincided with my previous experience that had indicated that principals refrained from sharing success and failures with colleagues of close geographical area. Although Laila did not demonstrate any insecurity as a principal, she felt a need for professional development. Therefore, she was willing to accept any style: "regardless of the style of training/instruction and the contents" (Laila, 1st interview, 17.8.00).

Rose was the exception, she had been a principal for 15 years, seemed very self-content, and reflected no wish or tendency to adopt any innovations. She proudly presented herself as a conservative learner who liked: "to listen to lectures more than any other way". However, surprisingly, she was willing to experience new styles: "I understand that your programme is

interactive and I am willing to try it", warning me that: "you have to bear in mind that I am inexperienced. I am not in the habit of talking a lot" (Rose, 1st interview, 5.6.00).

These testimonies demonstrated the heterogeneity of the prospective participants' motivations and interests. With regard to their participation in the programme, they expressed their wishes to:

1. Learn in new styles.
2. Participate in a virtual programme.
3. Establish connections with colleagues from geographically distant areas.
4. Understand principals' priorities in order to function effectively (Solomon).
5. Professional development.

In spite of the variety of the principals, they shared a willingness to cooperate with colleagues who would not be competing with them. This justified the *raison d'être* of the programme for the professional development they were about to join. However, it strengthened the dependability of the participants on their technological skills in order to be able to participate properly in the programme. All the same, it was essential that I established relationships of trust with the principals, in order to instruct the programme effectively.

5.4.2. Openness to the 'instructor me'

I was the first 'other' that the prospective principals met. I was a stranger to all of them with the exception of Betty, who had known me before. I introduced myself to all of them by making a phone call before arriving at

their schools. Actually, I encouraged them to ask me many questions, but they did not. Strangely enough, this did not strike me as remarkable until the time of analysis. I did not contact any of them to clarify this, as I believed that two years after it had happened I would not obtain significant answers, I also did not want to bother the principals again.

Generally, the principals had been hospitable on our first meeting, with the exception of Rachel. She felt that she had been forced by her supervisor to attend the programme, and therefore resented it and was reluctant to work with me. She told me straightforwardly in the first interview (16.8.2000): "I know that you were sent here, either as her (the supervisor's) spy, or her threatening messenger. She does not think much of me. My first intention was to welcome you and send you back to her".

Fuchs (1995) has defined a change-agent as "a person coming from outside the system (an external agent) or from inside it (an internal change-agent) whose mandate is formally to lead the staff in a process of change" (p.22, author's translation). However, Rachel was impressed positively, as she admitted in her first interview: "I liked your questions and the way you talked with teachers and pupils in our classroom visits showed me that you know exactly what school is about. This is why I agreed to join your programme" (Rachel, 16.8.00). Even so, to be on the safe side, she reserved her options: "I want to tell you that the moment I feel any internal objection, I quit" (16.8.00). Apparently, I was given, together with the programme and its other participants, a conditioned opportunity.

What Rachel had taught me was the relevance of Fullan's (1994, p. 21) first lesson about change: "You can't mandate what matters: the more

complex the change the less you can force it". Whether I chose to be a change-agent explicitly or not, Rachel had decided for me, and reacted in light of her decision. What was it like when I first met the other participants? I was lucky she was the sixth principal I had interviewed (see timetable of interviews, p. 366) but the first to be unwelcoming. All the others were, unlike Rachel, hospitable and cooperative in the first interview (pp. 367-368). Vivian opened up immediately seeking my advice "I would like to get your advice on this question: how do I recruit teachers to take charge, although I cannot promise any rewards. Otherwise, there is no way I can recruit them" (20.8.00). Even Rose, the most experienced principal with 15 years of seniority, expressed her traditional preference for listening to lectures but opened up willingly to me: "I understand that your programme is interactive, and I am willing to try it" (5.6.00).

In the first interview, Laila expressed her readiness to take advantage of as much as she could from the programme and from me: "The supervisor that match-made us told me you have broad educational and managerial experience and knowledge. I am willing to take whatever you offer regarding styles of training/instruction and the contents" (17.8.00). Apart from Rachel, there had been no difficulty in communicating with them, at the beginning. It was to be seen whether this openness would last. Situations of conflict create real tests for openness, as I had learnt from the case of the chat-room.

The objection to continuing the use of synchronized sessions demonstrated, within a natural framework, the 'openness towards the instructor me'. Seven principals objected immediately and openly to this kind of session. Moreover, they did not do it as a group; each one

addressed me directly, making a point of their dissatisfaction with the session. These seven, along with the other three participants, expressed the same attitude in their second interviews (the second interview, pp. 368-369). Whether or not they perceived me as a change-agent, did not threaten their capacity to contradict me openly. I expected that this kind of frankness would develop in their collegial relationships, reflecting the same degree of openness.

5.4.3. Openness to colleagues

Abe was not only open but also even looking forward to 'an adventure' with the 'others'. In his first interview he said: "This is my first opportunity to be part of a training programme. Until now I have attended many learning groups and I guess this is going to be learning in a different manner. That arouses my curiosity very much" (25.6.00).

Solomon's attitude, in his first interview (19.6.00), was very focused: he expressed his expectations in terms of his role as head of a science centre: "I want to be able to penetrate their heads and get involved in an environment in order to get involved in the principalship environment in my town".

Rose, a principal for 15 years, started the first interview on 5.6.00 without particular expectations but with good will: "The truth is that I do not know. I am willing to find out." While being interviewed she reported thinking: "Now that you have mentioned it, I would like to have a support group". Rona coincided, without being aware of others' attitudes, with one of my assumptions on initiating the programme: "I believe that such a group will become a 'support group'" (Rona, 1st interview, 19.6.00).

The first face-to-face session (observation no. 1, 11.10.2000, p. 377), was the first occasion that brought together all participants. At the beginning they were asked to prepare their personal identification tags; by doing this they showed their self-perceptions regarding their principalship and professionalism (Gunter, 1999). My aim in this was to enable each one of them to present themselves to the rest of the participants as they wished. On the other hand, I thought that the way they would choose to present themselves to their colleagues in their first face-to-face session could show something about their self-perception about their role, and the way they wanted the others to perceive them. It could also provide information about their attitude towards the programme they were about to take part in. Table 5.7 presents their tags, as prepared by them.

Table 5.7: The participants' identification tags

Abe	A teacher
Vivian	A principal - asking questions...
Ann	A starting embarrassed principal
Betty	Glad to be here
Rachel	A principal who has already seen everything...
Kira	A principal who is always seeking
Rona	The ever learning student
Solomon	The scientific angle of the group
Rose	Does experience count here?
Laila	...So glad to be here.

Two principals - Betty and Laila - referred to the 'social environment' in their introductions, playing the role of a new group member, and refrained from referring to their role. Rose and Solomon apparently tried to establish their status by presenting either a long experience in the role of principalship or a specific expertise. Rachel relied, like Rose, upon her

experience in principalship. Three members - Vivian, Ann and Kira - presented themselves as principals who were ready to broaden their horizons, with Rona expressing her desire to keep learning. Abe still perceived teaching as his main role. What would tie them together?

It seemed, at the beginning of the first F2F session, that not one of the participants was aware of what could be the implications of taking part in a virtual programme. However, the first step of the programme clarified their need to adapt to new technological environment. This need united the participants sooner than expected. I would have expected them to keep to themselves in a situation that threatened to expose their 'weakness' publicly. However, Rose - the principal who had earlier made a point of her seniority - was in a hurry to 'warn' Sara (p. 378): "You seem to be sure of yourself, but you don't know what kind of ignorance you have to deal with. I will need private tutorials." This caused different reactions. Ann agreed: (p. 378) "Me, too". Kira, on the other hand, relying on her experience, promised: "I want to say that my attitude is different. I have no doubts that we do not even need that much time to familiarize ourselves with it," (p. 378) and Solomon encouraged: "It is not that complicated". This was a first testing of one another. How would they react when "playing for real"? (p. 379)

There were two exercises in the first session: entering a forum and e-mailing messages. They were conducted humorously in order to decrease the tension and turn the participants' apprehension from the difficulty of the assignment to the virtual 'playground'. Eventually this attitude achieved its aims. The participants accessed a forum, discussing the topic of "my

favourite cup of coffee", and e-mailed one another messages, just in order to try it, apparently having great fun.

Summing up the session the participants referred to the experience of acquiring some technological skills rather than to their interpersonal encounter. Rose, who had been very unsure of herself at the beginning of the session admitted at the end: "I would not be sure about it. Anyhow, as far as I am concerned, I took a big step into the 21st century" (p. 381). Kira, who had been the most technologically experienced, complimented her colleagues at the end: "I am glad it went so fast and easy. I was afraid that virtual training would be time consuming and boring. I think you were all fine" (p. 380). Betty felt an urge to make a use of her acquired skill: "Tonight, at home, I am going to retrieve the e-mails that our supervisor sends regularly, without having to depend on my husband and children" (p. 382). As no one referred to the other participants, I noted to myself to ask the participants how they felt about their colleagues in the programme in the second interview.

The virtual part of the programme began on 25th October 2000 with the first forum (pp. 383-390). As far as openness to others was concerned, the theme of the forum was an indicator that the intention of creating a support group might be feasible. Kira offered to present some of her difficulties at school for a discussion and counsel. She headed a small school of k-6, 70 pupils in all, in a remote rural agricultural semi-communal settlement (Moshav). The school was the only public establishment; therefore, all parents were deeply, and to Kira's mind, too much, involved in its different aspects. The size of the classes was small, a cause for didactic and social concern as well.

Kira's story had been published briefly on the message board of the site on 24th October 2000. It said: "Here is Kira. You already know that I reside and lead the primary school in Naveh. We are in the furthest periphery. The school serves 70 k-6 pupils and all its teachers live in our Moshav and parent children who learn at the same school. I find much blessing in the parents' wish to be involved in every aspect of school but, sometimes, I feel suffocated and even paralysed. The fact that the learning groups are small, although being a source for jealousy in the eyes of others, seems problematic both pedagogically and socially. I am willing to 'buy and try' any ideas that you can offer me. Thanks a lot, Kira."

This message inspired much activity in the forum, as discussed in 5.3.1. All principals participated without an exception: Ann and Laila accessed the forum once but others accessed it more frequently as did Abe (6), Rona and Rachel (4 accesses each) and Rose (3) (see accesses to the forums, p. 405). I analysed their reactions; they seemed to cluster around four types, as follows:

Identification - Vivian discovered similarities to her own case: "We are dealing with a similar problem: my school consists of 102 pupils and 12 teachers. The proximity of all parents makes them feel ownership seeing themselves free to express their ideas about every pedagogical aspect" (p. 386).

An appreciative understanding - Rachel commented: "It is obvious that your remoteness and small size creates a problem. However, knowing you and your school, I assume you utilize these obstacles and turn them into points of strength" (p. 383).

That attitude turned later into:

A hidden criticism - when Rachel said: "Sorry to say it but somehow your problem seems, at first sight, to be a rich people's problem" she must have compared the socioeconomic situation of Kira's school to her own. She then explained the merits of the situation: "It is not really like that. You are dealing with a highly involved population, willing and capable of contributing. It is a merit to have such parents at your side" (p. 386).

Advising - almost everyone took this approach. Some of them commented on pedagogical aspects, Rose, who had presented herself as the least technologically competent, was surprisingly the first to access the forum, she said: "Small schools should consider reorganization of learning groups: forming these by analysing students' capacity and interest, rather than age-criteria" (p. 383). Betty followed her and developed the idea: "Kira, I think you should consider a flexible framework of time, both during each day's routine and the annual order of learning. Pupils can, in certain subjects, choose their framework of time" (p. 384).

Others addressed the painful issue of parental involvement and advised, like Solomon: "I want to offer some suggestions about turning parents' involvement into a partnership:

1. The 'expert' parents should be invited to staff meetings where they will suggest their ideas, indicating the responsibility they are willing to undertake.
2. You should generate meetings that will allow the parents to raise their disagreements and express their ideas. Maybe some of the problems they are causing will be solved that way.
3. You should deal directly with the issue, calling parents to define the borders of their involvement." (p. 385)

Boyd (1999) acknowledges the tensions between schools and their social and political environment, offering "three incorporated imperatives" as analytical tools for dealing with such tensions:

The productivity imperative demands more efficient use of resources and more effective performance; the accountability imperative supports the productivity imperative by introducing measurements of results and consequences for performance; the community imperative arises from increasing recognition that better results are only likely when both the internal and the external communities of schools are engaged and aligned to foster educational achievement. (p. 285)

With regard to interpersonal results, this forum started a relationship between two principals, Kira and Vivian. Kira headed a school in a secular agricultural community with a high socio-economic status while Vivian headed a religious school in a small town whose residents were of low socio-economic status. These principals, who otherwise were not likely even to know one another, let alone become friends professionally, because of the different backgrounds of the culture and goals of their schools, have started a relationship from this forum.

In the context of the professional discussion that has started to form between the principals, I was not sure what it signified. Preedy (1999, p. 145) presented "various arguments (that) have been put forward for the development of collaborative arrangements". She indicated some of those arguments; the third could apply to the principals who participated in the programme:

A set of arguments is concerned with the school as a '*learning organisation*'. Co-operation with others is an important component of learning for individuals, groups, and the organization as a whole. While much valuable development work takes place within schools acting autonomously, working with other schools in a learning

network, drawing on external experiences and perspectives, can provide an important stimulus for change. (Preedy 1999, p.146)

The developing relationship concerned the second research question that was looking at the feasibility of forming a professional support group of principals who shared a mainly web-based programme for the professional development of principals. It seemed that such a collaboration of principals, who not long before had been strangers to one another, had formed already at this early stage of the programme.

I wondered whether there was anything that principals could learn from one another in these first sessions. Rose, who had been a principal for 15 years, must have already reached the stage of disenchantment (Day and Bakioglu, 1996); therefore she would be expected to find "seeds of disillusion and loss of commitment...feelings of stagnation and loss of enthusiasm" (Ribbins 1999, p.86). Weindling (1999) might have added that the stage of 'Plateau' when "motivating heads who stay in one school...can be a problem" (Weindling, 1999, p: 99). Rose's principalship could be characterized by the emergence of stable patterns, preventing her from establishing new modes of interaction and 'newly acquired' colleagues. In spite of my expectation, following these researches, Rose demonstrated, on her second interview (18.12.00), a growing interest in her colleagues and in the discussions: "I am still learning the others. You must have noticed that I am not participating as frequently as the others." She also thought that she could take advantage of her colleagues' experience: "I think that some of the members can teach me a lot, while others still have a long way to go". She was hoping "to feel part of the group" realizing its importance "because, naturally there is much need for a support group". (Rose, 2nd

interview). Were others, positioned in other stages of principalship, feeling the same?

Solomon was in the stage of 'consolidation' (Weindling, 1999) thus he must "have introduced most of the planned changes" (Weindling 1999, p.99). However, he was still incapable of establishing the professional status of his science centre in the town. In the second interview, Solomon demonstrated satisfaction with his colleagues: "I cannot start telling you the degree of convenience I feel in the group. There is no suspicion and I feel that I am welcomed, as any other participant. Quite a relief! I already feel that I have gained professional colleagues." (Solomon, 2nd interview, 24.12.00). Apparently, he was expecting that his colleagues in the programme would acknowledge his expertise, and even take advantage of it.

Ann and Abe were in their first stage, where "the initial arrival stage requires considerable learning on the part of new heads" (Weindling 1999, p.91). Ann headed a "general" school, while Abe headed a religious one. How did they feel about their colleagues at the phase of Origins? In his second interview Abe said: "I find the other members very intelligent. Most of them are much more experienced than I am and I find myself listening a lot and learning even more. The opportunity to discuss Kira's problems at school openly was fascinating. I have never experienced it before. The principals were willing to reach out, so now I know that, if I am in need of advice, I have colleagues I can approach" (Abe, second interview, 25.1.01).

Although Ann felt "very introvert and the experience of opening up in front of strangers is strange to me", she appreciated: "The others were all fine persons, some of them impressively capable principals, I believe.

However, at this time I can exchange views but not open up personally to them" (Ann, second interview, 22.11.00). Obviously both felt unthreatened and accepted, appreciating the opportunity to benefit from the experience of their colleagues.

The participants raised an additional point in regard to the second question in the second interview, that was: "How do you feel about your colleagues in the group: are you willing to share experiences with them, to discuss issues with them? Do you have any reservations about any of them?" (the second interview, p.369). Were the participants unanimously satisfied? They indicated their views, which I could be grouped into three main aspects:

- a. Professional - what did the principals think about their colleagues, regarding principalship that was a common denominator.
- b. Personal - what were the principals feeling towards one another
- c. Social - How did the participants regard the social environment in the sessions?

Table 5.7 presents their views. For instance, Rona and Solomon were self-minded and task-minded, and did not attribute any importance to their colleagues as far as the social aspect was concerned. All other principals appreciated that they would be able to benefit from all three aspects. However, it should be noted that the distinction is not always sharp; they are presented in Table 5.7 using quotes taken from their answers to this question in the second interview (p. 389-390).

Table 5.8: Participants' views about their colleagues in the group, as presented in the second interview (pp. 368-369)

	Professional	Personal	Social
Abe	Much more experienced than I am	willing to reach out	Opportunity to discuss Kira's problems was fascinating
Vivian	She offered to maintain relationships between our staffs.		
Ann	Some of them impressively capable principals.	I can exchange views but not to open up personally to them.	They are all fine persons,
Betty		I feel free to express myself, and like to listen to all of them.	I never believed that I would feel so soon as part of a group
Rachel	I feel I am privileged to be part of this group	It was nice to be part of it.	
Kira	I decided that if we were going to be a professional group, I might as well start enjoying it, immediately.	I think that presenting my difficulties openly in the forum speaks for itself.	The reactions in the forum, and telephone calls that I received later, proved it.
Rona	I think that the group is diversified, and it makes it interesting. And I am sure that eventually there will be professional relationships inside and outside the sessions.	I have no reservations,	
Solomon	I already feel that I have gained professional colleagues.	There is no suspicion, and I feel that I am welcomed.	
Rose	Naturally there is much need for a support group	They all seem very friendly and not menacing at all.	I hope to feel as part of the group
Laila	I feel it is refreshing to be a member of a professional group	I discover new aspects in some of them.	...Colleagues, who do not put you on trial, do not judge you,

Summing up what principals had said about their colleagues in the group, I confirmed that it was right to attribute much importance to participants' perceptions in the research, as I had done. Abe added his personal point of view to the quotations in Table 5.7: "I find myself listening a lot, and learning even more... I know that if I am in need of advice, I have colleagues I can approach" (2nd interview, 25.1.00). Adding it to other things he had said in the same interview provided a summation of his views of the sessions' contributions:

1. A positive general impression of the participants.
2. An opportunity to take advantage of other participants' experience.
3. An appreciation of Kira's openness in discussing her school.
4. An impression of the others' readiness to reach out.
5. A feeling of belonging to a group of people he could count on.

Did the others share his views?

Kira was the 'daring' participant. She had volunteered to present her difficulties in the first forum to a group of practical strangers. She (2nd interview, 14.1.01) did not regret this decision afterwards, explaining: "I met the other principals in the first face-to-face session and decided that, if we were going to be a professional group, I might as well start enjoying it, immediately". She believed that her decision justified itself: "I must tell you I was right to do so. The reactions in the forum, and telephone calls that I received later, proved it."

For Vivian the involvement in the forum was a step of openness although she admitted it had been an effort to carry on participating. She made the effort since (2nd interview, 4.2.01): "I feel that if I miss any meeting I might somehow lose the possibility of becoming part of the group". Why

did she think it was worth the trouble? "After the forum about Naveh, I called Kira in order to express my deep identification with her and she offered to maintain relationships between our staffs. We are taking the first steps towards it. I learn to know all the others as well" (4.2.01). Actually, she practiced what Abe had perceived as 'belonging' and 'reaching out'. Was that reaching out welcome?

Although all principals participated actively in the forum about Naveh, and expressed satisfaction afterwards, some reservations still clouded the positive reactions. Some were still getting to know their colleagues, such as Rose who admitted that in the sessions she was "...still learning the others" (18.12.00) rather than expressing her views. Although she had presented herself almost showing off her experience she now admitted: "I think that some of the members can teach me a lot" but she needed more time until being able to "...feel part of the group". She also acknowledged the need for a support group "naturally there is much need for a support group". Her general impression was promising: "I do not have any reservations about any of them; on the contrary, they all seem very friendly and not menacing at all" (2nd interview, 18.12.00).

Others found it difficult to associate with their newly acquainted colleagues due to their own shyness, such as Ann, who expressed her personal reservations (2nd interview, 22.11.01): "I am very introvert and the experience of opening up in front of strangers is strange to me". However, it did not bias her positive impression of the others, both personally and professionally: "They are all fine persons, some of them impressively capable principals, I believe. However, at this time I can exchange views but not open up personally to them" (22.11.00).

Unlike her, Rona was eager to use the opportunity and converse with colleagues of a previously unknown sector. She admitted that she had been expecting the session, and therefore was not disappointed; she emphasized the importance of the opportunity to interrelate with principals from different sectors (2nd interview, 8.1.01). "I think that the group is diversified and this makes it interesting. For instance, I rarely have an opportunity to discuss anything with principals of the religious sector, let alone - the orthodox" (8.1.01). She welcomed the session, expecting the development of a professional discussion, sharing Abe's perception of the participants' experience being a source for learning: "I have no reservations and I am sure that eventually there will be professional relationships inside and outside the sessions" (Rona, 2nd interview, 8.1.01).

No relations were found between seniority in principalship and openness towards me or towards one another. Rose, who had been a principal for 15 years, and Ann, who was a beginner principal, were apprehensive. On the other hand, the openness of Abe and Vivian (both beginner principals) equalled Kira's willingness to open up about her difficulties, and Rona's eagerness to approximate to other principals. Rona and Kira had been heading their schools for six and eight years respectively.

This discussion of the 'Origins' phase has focused on the principals' 'openness' to the programme and to one another. It should be summarised before examining other aspects in the next phase.

5.5 Summary

The chapter has presented the phase of "Origins" in the perspective of the category of 'Openness'. Two main theoretical frameworks organized

the discussion: Fuch's (1995) definition of educational change and Fullan's (1994) eight 'lessons' of change.

However, as the focus of the chapter was the programme's "success," I was looking for a model that would enable me to organize data to check the extent and nature of the programme's effect. Thus I tried to provide answers to the first research question about the effectiveness of the programme. I used two classifications to deal with it:

1. Watzlawick's (1994) distinction between changes of '*first order*' and '*second order*'.
2. Cuban's (1992) distinction between *Incremental* and *Fundamental* changes.

The relevant findings for openness have presented and analysed the three forms of virtual channels that they had been exposed to:

1. A-synchronized interaction (forum).
2. A synchronized channel (chat-room).
3. Virtual correspondence (E-mailing).

At the phase of "Origins", the programme included one successful a-synchronized session, one unsuccessful synchronized session and one set of spontaneous e-mails. I looked for connections between the participants' openness and their seniority in headship, or otherwise, their technological skills.

All the principals, regardless of their seniority in their managerial role or their previous technological capacities, participated actively in the a-synchronized session. The discussion was about Naveh School, whose

specific difficulties had been presented by its principal, Kira, who was one of the subjects. The principals regarded the discussion as relevant and did not regard the virtual arena as an obstacle. The principals' openness to the use of the forum was full.

The second virtual experience was a synchronized discussion that failed. I analysed this failure depending on two sources: seven e-mails and three interviews that reflected the principals' attitudes. Again, I looked for a possible connection between the participants' seniority or their technological skills and their readiness to try the synchronic practice once again. Unlike the case of the a-synchronized sessions, no connections were found between seniority and openness to synchronized sessions. However, unlike the case of the a-synchronized sessions, I could establish some connections between the principals' technological skills and their openness to synchronized sessions: all the technological novices were not ready to try the synchronized sessions again. The common agreement of all principals was about the undesirability of synchronized sessions.

The use of e-mails as an additional channel of communication between the principals and me emerged without any encouragement or excessive practice. The naturalness of its use demonstrated that the principals had absorbed it, making it a part of their communication tools when necessary.

The presentation and analysis of 'openness to the programme' followed, discussing the different reasons for the participants' decision to join the programme, thus establishing their 'openness' to a different kind of learning and relating to others. The principals expressed their wishes to:

1. Learn in new styles of management.

2. Participate in the programme because of its virtual nature.
3. Establish connections with colleagues from geographically distant areas.
4. The need to contribute to their own professional development.

Another aspect of 'openness' was 'openness to others'. It consisted of two aspects: openness towards me (the instructor), and openness with one another. I distinguished between these aspects although we were all previously strange to one another. The reason for this distinction was my status as an instructor. To a certain degree the participants could perceive me as a change-agent, although I had not presented myself as such. I learnt this during the first interviews (the first interview, pp. 367-368) with all participants that took place between May 2000 and August (the itinerary of the research, pp 363-365). These interviews demonstrated that, with the exception of Rachel, all participants chose the programme without sensing any apprehension of my interference in their practice. Rachel had joined the programme because of her supervisor's firm 'encouragement' and reserved the right to quit it at any moment.

When I examined 'openness to others', I carried in mind the fact that the programme had brought together ten principals who were strangers to one another. Its initiative was external and they started having no interests common to all of them. It also imposed on them new channels of communication, forcing them through rapid changes. Opening to one another and a readiness to adjust to the virtual environment was crucial if they were to benefit from the experience. Moreover, the first session could have caused the participants to dissociate themselves as most of them were in front of strangers in a situation that exposed their

technology-ignorance. However, this did not happen. On the contrary, the innovative experience erased differences between experienced and inexperienced principals. They all coped with the technological environment as well as with the need to adapt to a strange group of principals. Seniority was not a differentiating factor. Was it the same regarding their difficulties?

The participation in the first forum demonstrated four kinds of relating to Kira's difficulties and to one another:

1. Identification that brought some of them closer.
2. An understanding that formed empathetic relationships.
3. A hidden criticism that paved the road to candid openness.
4. Advices that enabled some participants to use and demonstrate their professional experience and others to learn from it.

The capacity to identify, feel empathy, advise and be advised, as well as the openness to criticise from a collegial point of view, promised that the openness to one another would develop throughout the programme. The same applied to the first opinions that the participants had about one another.

The participants testified that in the first session they had defined some opinions about their colleagues in the group and classified them in three groups: professional, social, and personal. No participant expressed reservations or hesitation about continuing to be active in the group. A mutual feeling of belonging to a group of people they could count on was gradually developing. No differences were observed regarding the feeling

of belonging, behaviour and reactions between principals in distinctive stages of their principalship.

At the end of "Origins" these evidences showed their openness to one another and to changes:

1. Participants thought they could exchange views and experiences openly with their colleagues.
2. Participants valued their colleagues personally, professionally and socially.
3. Participants experienced communications with one another, and were ready to use them.

Whilst 'openness' was a behavioural product of "Origins", I expected it to deepen and broaden into 'involvement' in "Actors".

CHAPTER 6
'ACTORS' - FROM INSTRUCTOR-CENTRED
TO PARTICIPANT-CENTRED

6.1 Introduction

This chapter discusses the second phase of the research, "Actors". The first section establishes the second phase as a continuation of the first phase "Origins" and its development. Then this section presents the two stages of "Actors": "Instructor-Centred" and "Participant-Centred", explaining the meaning of each. The section goes on to detail the functional element of this phase that was 'Involvement'. I identified two main types of 'Involvement' in this phase; thus, the next two sections present and analyse these types.

The second section discusses 'involvement in the programme'. It presents evidence with regards to the extent, persistence and nature of the principals' involvement in the programme, and analyses it, referring to relevant literature. The discussion also addresses the connection to the first phase, concerning changes in the programme.

The third section discusses the development of 'participants' involvement with others', explaining its significance. This kind of involvement contains four aspects, each one of them is discussed in a sub-section: the first sub-section discusses 'involvement with one another within the boundaries of the programme'. It describes styles of relationships that have developed between participants within the framework of the programme and analyses them.

The second sub-section describes 'relationships that the participants developed with one another outside the framework of the programme': it examines what has bound them together, in what ways have they benefited from one another and what channels of communication they have used. The third sub-section discusses cases where the participants chose to involve 'others' who have not taken part in the programme. These 'others' were staff members and functionaries in the school community.

The discussion of each type of involvement relates to the contribution of such an involvement to the professional development of the participants. It also concerns the degree and manner of integrating information-technology by the participants, as channels for communications.

The interest in the professional development of the principals leads to examining examples of principals' behaviours when moving to the 'participant-centred' stage. While each type of involvement is summarised in detail, the closing summary presents general conclusions, leading the reader to the next phase - 'Review'.

6.2 The phase of "Actors" - a development of "Origins"

This section describes the phase "Actors". The discussion begins by forming a connection between this phase and its precedent - "Origins". Then it presents the two stages of the second phase, characterizing them. It also discusses behaviours that are relevant to each stage of this phase, describing through them the development and transformation from the first stage to the second one. The discussion is structured around the functional element of *involvement* as described in the introduction of this chapter.

The second phase was entitled "Actors" because the participants in the programme for professional development of principals were the significant actors in this part. This phase started after the second interview had been conducted and lasted until June 2001, when the programme came to its end. I instructed the programme, but there were opportunities for initiatives of the principals, that I mostly encouraged and welcomed. The development of both the programme and the research depended on what the principals would do, and how they would act on their own.

At the beginning of "Actors", the participants had already experienced all three forms of the programme and had come to know one another. Participating in the programme gradually became part of their routine activities. I believed that their familiarization with the technology facilitated their capacity to take advantage of the programme and of the experience of one another. At the beginning of the phase, I still initiated all activities and relationships between the participants. Therefore, I entitled that stage 'instructor-centred'.

Gradually principals started to initiate their own activities within their schools, and chose, individually, partners for communications, advice and joint ventures they believed would prove to be profitable. I entitled this stage 'participant-centred'. The pace of the passage of participants from the stage 'instructor-centred' to the stage 'participant-centred' was individual. The variance of the paces appeared in all four types of involvement mentioned in the Introduction to this chapter. Equally, the manner by which every participant shifted from the first stage to the second, conducting self-initiated actions and relationships, differed from one participant to the other.

The passage of principals to the stage of 'participant-centred' could signify a process of their "liberation" from my centrality and a start of their own actions, demonstrating an involvement of any kind. This could eventually provide answers to those research questions that regarded the effectiveness of the programme, its feasibility to form a support group for its participants and the degree that they tended to adopt the use of technological environments as part of their practice.

The framework of the programme provided its participants with the acquaintanceship, the first topics of discussion and the opportunity to find points of mutual interest. These were the bases, as the programme kept developing, for its participants to initiate communications and activities outside its framework. Such communications and activities characterized the second stage of 'Actors', when principals cooperated with one another outside the sessions of the programme; therefore, the first type of involvement would refer to the programme itself.

6.3 Involvement in the programme

This part considers the extent and character of the participants' involvement in all kinds of activities within the programme. This discussion relates to both stages of the phase: the 'instructor-centred' stage as well as the 'participant-centred'. I attempted to understand the participants' behaviour using evidence that I had obtained through documented activities and testimonies of the principals' in the interviews.

In 5.3, (see p.196) I discussed the openness of the participants to the changes that they had found in the nature of the programme for professional development in the first phase. I expected that this openness

would facilitate their involvement in the programme in the second phase. The best evidence of being involved in the programme was the participation of the principals in its sessions. It was easy to take an account of such participation in face-to-face sessions. However, it proved more difficult in virtual sessions, where the participants could access the forums of discussion, reading others' opinions without adding their own. There was no way to document such accesses. I hoped that the strangeness and innovation of the virtual channels of the programme had faded by this time as the participants had had a chance to practise them, and the virtual proceedings of the programme had become a routine.

I will discuss first the participants' involvement in virtual sessions. It was my hope, from the instructor's point of view, that the participants would be involved in the virtual sessions, starting to benefit from them. I looked for relevant behavioural patterns, asking: were the participants "appearing" consistently in the virtual sessions? And how often and in what ways were they active?

I found that the forums differed from one another in terms of the participants' access to them. I displayed the participants' presence in the forums in Table 6.1 and then used the interviews to understand the meaning of this data. I examined two parameters: the number of participating principals in each forum and the intensity of their participation in them, displaying them in Table 6.1.

Table 6.1: Participation in the forums

No.	App. No.	Forum's Title	Forum's Dates	No. Of Participants**	No. Of accesses**
1	5	Naveh	25.10.00 - 15.11.00	10	39
2	6	Staff Development	30.11.00 - 20.12.00	4	7
3	7	The bookless school	7.3.01 - 21.3.01	7	23
4	8	About the programme's assignment	15.3.01 - 1.4.01	9	30
5	9	Questions towards educational evaluation	15.4.01 - 20.4.01	9	11
6	10	Being a successful principal in the 21 st century	15.5.01 - 1.6.01	10	24
7		Farewell	20.6.01 - 30.6.01	10	11

** without counting my accesses

In view of the obvious differences between various forums I tried to identify probable causes for low/high participation. As seen in Table 6.1, all ten participants took part in three of the forums (1, 6, 7); forums number 3, 4 and 5 involved most of them. However, the low participation in the second forum about "Staff Development" aroused the concern of the 'instructor me' as well as the curiosity as the 'researcher me'.

The 'instructor me' was concerned because it was the second forum and the gap between the intensive participation in the first one and the second one bewildered me. Furthermore, most participants had indicated in the first interview (see pp. 367-368) their interest in the subject of staff-

development. Abe thought that: "The second assignment that I have in mind is raising the teachers' commitment to school, 'making' them consider their work as a mission" (Abe, 1st interview, 29.6.00). Rachel described another difficulty, telling that: "My deputy is the toughest problem in my school, believe me. I wish I could send her away, but she has been here from the beginning, she is netted in the municipality and I am stuck with her, unfortunately" (Rachel, 1st interview, 16.8.00). Rachel accessed the forum once and Abe twice.

However, Ann, who had aimed at "repairing human interrelations of all school participants with one another" (1st interview, 24.5.00) as one of her main tasks, did not participate in this forum at all, providing no explanation. This aroused my curiosity. There appeared to be an inconsistency between the interest that the principals had demonstrated in issues of staff development and their participation in the second forum.

The 'researcher me' was interested in another point of view: the reasons for principals' participation and/or abstention in a forum that had been planned in accordance with their expressed needs concerned me. The participation in the programme was voluntary; therefore, I thought it would be inappropriate to ask the "missing" principals directly about their absence from the forum. I did not want to undertake the role of classroom teacher checking up on the pupils. However, on several occasions, I took steps to find out about principals "not having been there", getting several kinds of answers. For instance, at the end of the second forum, I decided to send the following message: "Dear all of you! Although most of you had expressed on our first interviews a wish to address the issue of working with coordinators/motivation etc., there was almost no response to the

forum on staff development. How come? Pls., remember to be brief in your emailing. Tova" (20.12.2000).

My first lesson was not to expect necessarily satisfactory answers. For instance, Rona was apologetic: "Dear Tova! You know I am usually an attentive participant. My baby daughter was sick and, besides going to school, I did not leave her bedside. She is recovering, thank God! Yours sincerely, Rona" (23.12.2000).

Solomon's response taught the 'instructor me' as well as the 'researcher me' a lesson: "Dear Tova! I felt that I had not had a chance to think over the face-to-face session regarding the same issue; I think we should have kept the forum going for a while; it might have worked. Hope you are fine! Solomon" (21.12.2000). Solomon had reminded me that learning and deliberating were time-consumers. I made a note to myself to remember it for the future. However, these responses did not facilitate any understanding about what characteristic of a forum made it attractive.

Successful forums were as useful a source for learning as unsuccessful ones. The "Bookless School" (7.3.2001-21.3.2000) generated an intensive discussion. Before opening the forum I distributed an article about a certain school whose teachers had given up the use of books written as learning materials. Instead they chose to prepare, by themselves, learning materials that they considered appropriate. They also made the learning time more flexible. The article described how the teachers had chosen to teach the biblical stories: the story about King Solomon's judgment was taught in light of a contemporary case of a neighbours' dispute over a dog. The forum invited the principals to relate to this kind of innovation. The

forum was mostly interactive. Table 6.1 shows that seven principals participated, accessing it 23 times. They related to one another, developing a debate and presenting pros and cons for the argument. It also brought about an "incident" with Rose.

I considered the corresponded dialogue that developed between Rose and myself as significant and therefore decided to present it fully, here, remembering that she had been heading a National-Religious school for 15 years. Although Rose did not access the forum, she e-mailed a furious message: "Dear Tova! I want to tell you openly that I am very disappointed with the choice of article about the 'bookless school'. This is why I did not participate in the forum. You know very well that there are three National-Religious principals in the group: Abe, Vivian and me. Why did you have to present this article, knowing it might disturb us? I thought you considered all of us as part of the group, and here you are presenting an article we have no moral right to even read, let alone relate to. Out of curiosity, I entered our site and saw your last request to the participants. I hesitated but, out of my deep respect for you, I have decided to write honestly to you about it. I guess that the other two religious principals did not participate as well. Please, understand us. Yours truly, Rose" (23.3.2001).

Never intending to hurt her feelings and regarding development of agreements, within the forum, between religious and non-religious participants, I e-mailed my answering message: "Dear Rose! First, I owe you an apology. Regardless of the initial intentions, I need to apologize for not being sensitive enough. Please, bear with me.... As for the forum and our group: we have learned to appreciate our mutuality, openness, and heterogeneity. Moreover, I think that the variety of our group's members

is one of its biggest merits. Presenting the article was meant to raise the issue of the roles educators regarding learning materials, different organizational arrangements, and so on. The issues of learning materials and the principals' roles were discussed in the forum. You know that, during this year, close professional relationships have developed between Kira's and Vivian's staff. While Kira directs a school of deep Labourite beliefs, Vivian leads a National-Religious school, as you do. Lately they have managed to bring together their pupils on the web and in personal meetings that were very satisfactory to all participants. Again, I feel the need to offer my apology, but still urge you to enter the web and read the development of the forum, thus participating passively. Who knows - you may find some interest, after all. *Expecting to see you on the next forum, active as ever...* Yours truly, Tova" (23.3.2001).

Her reply, which took me by surprise, was not delayed: "Hi Tova! I have decided, against my first reaction, to access the forum. I was amazingly surprised by the way that the forum developed. I regret that, having read about the way that school treats the teaching of the Bible, I got so angry that I did not find in me the interest to understand what the article was really about. If nothing else, I gained a lesson in tolerance, and if nothing else - it is a very significant profit. I do not intend to relate to the topics of the forum now, but I want to thank you again for drawing my attention to its contents. Yours truly, Rose" (24.3.2001).

I was curious to see if any of this would arise in our next interview two days later and it certainly did: "Well, there is no way I can avoid it: I am afraid I made a fool of myself, not entering the forum and attacking you. Is it forgettable?" I did my best to wipe it off the agenda: "Let us distinguish between the two things you have mentioned. You have the right

to be opposed to any of us or to our ideas, including me. It is acceptable and sometimes even advisable. I recommend that you have faith and approach the discussed topics with an open mind and tolerance, as we should all do. As for forgetting: what were you talking about? Now, seriously, these are the real authentic interactions in our group. Feel free the next time to do the same, just check thoroughly before opposing" (Rose, 3rd interview, 26.3.01).

I hoped that the incident was over, with no casualties left behind. However, I learnt a lesson about the difference between virtual and face-to-face sessions: virtual settings enabled participants to abstain without presenting explanations or standing up for their opinions. Unlike face-to-face sessions, where abstention could raise immediate demands for further explanation, virtual sessions were "shielding" its participants.

Having realized the significance of abstention in virtual settings, I continued looking into participants' involvement in the programme. Ann used technical difficulties as a reason for not participating: in her third interview, on 21st March 2001, I asked her: "You have not accessed, even once, the forum about the Bookless School. Was there a specific reason?" Ann responded: "Not one that has to do with you: I did not have access to the Internet in those weeks. I read it after it was closed for discussion" (Ann, 3rd interview, 21.3.01). For the sake of good order I offered: "Next time, if you choose to call me, maybe we can find a solution", trying to offer assistance without making the participant feel guilty.

Another reason for abstention proved to be irrelevance. I did not have to question Solomon in order to get his reason as he commented: "The

Bookless school, on the other hand, was a meaningless session for me. I do not take part in decision-making that concerns textbooks. Therefore, I felt I could not contribute, this is why after having read its development, I decided to keep away" (Solomon, 3rd interview, 25.4.01). In this case, there was a similarity between virtual and face-to-face sessions - the need for relevance.

Summing up, I identified three reasons that three principals who had not participated in the forum about the "Bookless School", in spite of its appeal to the others, provided, which in addition to Solomon's idea about the need for more time:

1. Anger - at the contents of the forum (Rose).
2. Technological difficulties (Ann).
3. Irrelevance (Solomon).

I estimated that, had it been a face-to-face session, Rose's anger would have been expressed differently, Ann's difficulties would not have occurred and Solomon would have possibly expressed his lack of interest. I could identify some of the differences between virtual sessions and those that were conducted in the traditional face-to-face form: some reactions that were obvious in sessions had to be asked about in virtual ones. It clarified that, although I did not wish to embarrass the participants, I needed in some cases to ask them about their abstention, since their responses could provide valuable information to the 'instructor me' as well as to the 'researcher me'. I implemented this conclusion in other occasions of passive behaviours of the participants, as follows.

The fifth forum (15.4.2001-20.4.2001) invited the principals to present questions for a face-to-face session with an expert in educational

evaluation. Before that, a presentation concerning this theme had been presented on the web-site. Rachel's refraining from presenting a question for this session seemed strange in the light of things she had said in the first interview: "I think that there is much that I could learn about educational evaluation. I don't mean theoretical perspectives. What I would like to learn is how to implement the theories and approaches of evaluation into my school's practice" (Rachel, 1st interview, 16.8.2000). I asked about this strange abstention in the fourth interview: "In our first interview you made a point of your need to learn and implement practical aspects of educational evaluation. However, you did not present any question in the forum. Why was that?" (Tova, in Rachel's 4th interview, 30.5.2001). Rachel's reply told me something about the limits she had set to her involvement in the programme: "I like getting involved in forums that discuss educational and managerial issues. Presenting my questions, and I had some, might have exposed an ignorance or a misunderstanding, as I saw happen to others. I was not ready for that kind of self-exposure. Therefore, I kept my thoughts to myself" (Rachel in her 4th interview, 30.5.2001).

As an initial step for the forum "Being a successful principal in the 21st century" (1.5.2001-15.5.2001) I had sent, by post, an appendix of an Israeli daily newspaper discussing ten successful leaders in the business community, describing the way their workers perceived them and the way they perceived the reasons for their own success. The forum generated 24 accesses; some of them were excessively long, detailed and emotional. I raised the discussion's theme: "Where do you, directors of educational institutions, find common denominators with directors in the business sector. Please address the question as well as your colleagues' opinions expressed here" (1.5.2001-15.5.2001).

It was an intensive forum: its participants wrote long texts, although Sara had advised them to be focused and concrete in forums. Their texts were argumentative: "I think it is more effective to learn from failures than from successes. I consider a director who has failed in crossing a significant junction a resource for learning. Analysing a failure may help others to by-pass obstacles and lead their organization to success". Kira added: "All the best managerial traits that we find in the directors in the article could form a "shopping list" that ensures success. However, what makes the difference between business and educational directors? First of all his spirit, the "excessive spirit" that originates from a realization that his "raw material" is children, the purest and most vulnerable human factor. This calls for working whole-heartedly. An educational director must love his work and consider it as a mission and not as a workplace. This is what I suggest as the most crucial factor for principals' success" (1.5.2001-15.5.2001).

Rona was reluctant to compare school management to any industrial or business management: "Principals focus on directing pedagogic organizations and need to be experts in educational aspects, as well as in organizational ones. Unlike them, business managers know what the expected product is. Thus, they can hire the experts in order to achieve the best results, without being themselves experts in the subject matter. While in schools the definition of success is complicated and fragmented, there is a clear definition of the expected product, in education we are 'blessed' with processes that involve variety and ambiguity, as well as different views about expected 'products'. Principals assume responsibility for every aspect of maintenance as well as of children's academic interests. I think that appointing an administrative director is crucial in

order to ensure principals' focus on the educational issues. That is why I believe that principals could manage business organizations, while the 'vice versa' is not so clear" (Rona, Being a principal in the 21st Century).

Even Ann, who usually wrote briefly, broadened her response in this forum: "It seems to me that establishing an open network of communication is most important in educational as well as in business organizations: schools are complicated because of the involved populations and stakeholders. Maintaining a communications network that permits legitimating all kinds of ideas, attitudes and criticism is crucial for directors' success" (Ann, Being a principal in the 21st Century).

I wondered what caused such a high involvement in this forum. In the fourth interview, I raised the question: "I noticed your high involvement in the forum about Being a Principal in the 21st Century? Was there a special reason?" (fourth interview with Rona, 26.6.2001). Rona became almost furious responding to this question: "I am glad you asked, because I intended to talk to you about it. I appreciate professionalism. However, comparing business management to educational management, which has become very popular, enrages me: I would like to see any of these estimated managers coping with some hundred children, their parents and teachers, under a constant lack of resources and the ever-lasting demands of all the above, with the addition of several authorities" (fourth interview with Rona: 26.6.2001).

Rona's objection to the attempt to find common denominators between business and educational managements could find little support in the literature. Bush (1999a) followed the development of educational management:

The first educational management courses were characterized by a heavy reliance on concepts and practice derived from industrial settings and from the United States, where programmes in educational administration had developed strongly in the 1950s and 1960s. The 1976 Open University course, 'E321 Management in Education' was typical of this genre in that it drew heavily on both industrial and American models, including a unit comparing management in education and industry...The caution was understandable given the indifference or downright hostility of some academics within the more traditional disciplines in education departments. (p. 239)

Glatter (1999) believed that the field of educational management deserved a clear definition of its relation with industrial management:

This set of conditions calls for reflection, definition, and repositioning. A start might be made by redefining the field's relationship with the educational enterprise. By focusing on how educational management differs from general management, we have tended to define the field in terms of what it is not rather than what it is. (p. 263)

He (Glatter, 1999) went on to suggest a reunion of the fields of general and educational management, relying on common perspectives:

- The process of human learning and development (as distinct from the specific and limited concept of 'the classroom'), and
- The changes which formal educational provision will undergo in response to macro-environment and social forces in the years ahead. (p. 263).

Friedman's (1999) suggestion of a new programme for preparing prospective principals towards authorisation addressed an obvious relationship between general and educational management:

The process suggested in this document, bases itself on a standpoint that school is an administrative organization. The fact that a school includes many pupils and teachers who occupy themselves in daily occurrences and dramatic events of the children's life at school should not cause us to forget that school is conducted by the

customary rules of any administrative organization." (p. 11, author's translation)

I decided not to elaborate on the debate that Rona had raised, believing that the limited boundaries of the programme did not allow broad deliberations and thinking that an academic course would be more appropriate for such a discussion. However, I appreciated the value of debate itself for the participants' professional development, not looking for a definite agreement.

Summing up the principals' involvement in the forums, considering their active writing and the notable frequency of accesses (with the exception of the forum about staff-development), enabled me to conclude that not attending could be explained in the following ways:

1. Choosing to "listen" attentively, sometimes learning this way more than by active participation.
2. Refraining from expressing explicit opinions.
3. Objecting to a topic (on one occasion).
4. Lacking time for thinking.

I now turn to consider the issue of involvement in the face-to-face sessions. In addition to the face-to-face sessions, the programme for professional development of primary principals included five face to-face sessions, as presented in Table 6.2.

Table 6.2: The face-to-face sessions in the programme

No.	Date	The subject of the	Data	App. No
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		session		
1.	11.10.2000	Introduction Practising the use of forums and e-mailing	Observation	3
2.	13.11.2000	Staff development - 'Aliot' school	Observation Co-observation "products"	18
3.	25.04.2001	Educational evaluation	Observation	19
4.	31.05.2001	Marketing schools	Observation	20
5.	20.6.2001	"How to conclude..."	Observation Notes of the participants	Not translated

These face-to-face sessions could raise a different sort of problem in terms of the itinerary of the principals: whilst they were mentally 'accessible' for most participants, they were physically exhausting, forcing the participants to travel many hours in order to attend them. Some of the principals had to travel more than two hours in both directions; others had to stay away from home overnight. Still, all participants attended all the sessions.

However, attending physically did not necessarily mean active participation. Vivian did not take an active part in the face-to-face session about Aliot School (F2F session, 13.11.2000) although she attended the session. In the third interview (11.03.2001), I asked her: "I saw that you did not take any active part in the face-to-face discussion about Aliot, i.e., regarding staff development. Why was that?" (3rd interview of Vivian, 11.3.2001).

Vivian's answer took me by surprise: "I had a discussion with our Rabbi the day before that session, and he opened my mind to the benefits of just listening. I made up my mind to try it. As in my staff room I have to keep

expressing my views, I decided to try and listen in the face-to-face meeting." (3rd interview of Vivian, 11.3.2001).

I wondered whether this was even more beneficial than participating and heard her answer: "It was an interesting experience that took me back to the real me, who does not want to speak up as much as to listen. However, I know I am in a different place now, professionally, and the opportunities to listen without speaking up are narrowing." (3rd interview of Vivian, 11.3.2001). This occasion made me realize that I had a great deal to learn from this experience, as from any other. All of these provided a picture regarding involvement in the programme.

Both the intensity of participation and the principals' reactions and reflections concerning the face-to-face sessions demonstrated that the programme had 'reached' them, even though they had had to learn new modes of 'learning' and interacting. So far, the discussion had viewed each participant's proceedings in the programme individually; I now needed to focus on them as a group. Having established relatively intensive inter-relations - were any significant connections established between the participants?

6.4 Involvement with others

This section describes the inter-relationships that developed during the sessions and outside their frameworks. These relationships include communications of the principals with one another, and the way they have chosen, under certain circumstances to involve others in the programme. It relates to the participants' ways of relating to one another, and to the ways that they have chosen to construct the group work. The data has been obtained by observations, interviews, analysis of the forums, the

products of the programme and fieldnotes from my visits to schools in order to interview the participants.

6.4.1 Involvement with one another in the sessions

This section describes and analyses the ways that the participants chose to get involved with one another during the sessions. During the programme I could identify different kinds of involvement: an 'immediate support', a 'job-related support', cases of principals competing with one another and expressions of resentment. What do these terms refer to?

- a. 'Immediate support' in cases in which the principals supported one another when they were participating in certain activities or discussions during sessions of the programme.
- b. 'Job-related support' in cases in which the principals expressed identification, sympathy and empathy concerning the performance of their colleagues in the programme, appreciating their difficulties and appraising their success.
- c. A tendency of some principals to compete with one another.
- d. Resentment - which some participants expressed towards others during sessions in the programme.

The next sub-section describes instances of each of these attitudes.

The participants first met one another in the first face-to-face session (11.10.2000, see pp. 378-382) where they were introduced to one another as well as to the various environments of the programme. While I was excited to start the programme, it could be embarrassing for those principals who were technologically inexperienced. Revealing publicly this inexperience in front of strangers could cause inconvenience. It was

encouraging to the 'instructor me' to see the participants exhibiting openly either an unconcealed admittance of inexperience or an encouragement from those who had either mastered the media or were more self-confident.

In 5.3.1 (see p.197) I described the attitudes of Solomon and Kira, who had been technologically experienced, towards Rose who expressed her apprehension of the virtual environment (based on quotes from the 1st F2f session, pp. 378-382). These expressions were instances of forms of 'immediate support' that probably encouraged the participants in the first practice session to talk candidly with one another about their difficulties and success in a supportive and tolerant manner.

Another form of supportive behaviour was seconding someone's opinion openly. In the forum about the "Bookless School" (7.3.2001-21.3.2001) Rona entitled her own opinion "Outrageous!" explaining her view: "In an Israeli Jewish School this is unacceptable, and no innovation can justify it!" Abe seconded her gratefully, explaining his refraining from expressing his views: "Thank you Rona. I did not want to say it being an orthodox member of the group". This provided an example of 'job-related support', when agreements about professional issues, especially those which had the potential to divide the participants, joined them together.

Supportive responses were the most common way of relating to one another. In the forum about the principal in the 21st Century (1.5.2001-15.5.2001) Rona addressed Kira, entitling her words: "I must add...?", and expressing her opinion: "Kira! I agree with every word and must add that your saying touched me very deeply. You are right - "excessive spirit" is

what we mostly need. I add it to my "quotation notebook" as a most valuable precious thought. Thank you!!! Besides, please note my opinion that every principal could manage a business organization, while the "vice versa" is not so clear" (1.5.2001-15.5.2001).

As the forum developed Rachel joined in, entitling her access: "I am with Rona", and elaborating: "Rona, like you I believe that principals' managerial roles are much more complicated than those of business managers. Multiple clienteles, judging school from various angles and interests..." (1.5.2001-15.5.2001).

I identified 'job-related support' in the way that participants appreciated one another, especially in situations of weakness. Rona, who maintained relationships with Ann, (this will be discussed in the next section, 6.4.2) was tolerant of her difficulties. She told about them in the fourth interview: "I think (and I hope, in parenthesis, it is between the two of us) that she feels stressed in her town and does not dare to consult with any other principal there; she turns to me..." (Rona, 4th interview, 26.6.01).

Besides supporting Ann, she believed she would benefit from it as well: "...I find that thinking with her about her difficulties helps me realize many things about my work here" (Rona, 4th interview, 26.6.01). Ann confirmed it in her fourth interview: "I have decided to take advantage of the seniority of Rona with whom I have been corresponding for a while" (Ann, 4th interview, 7.6.01)

However, besides support, encouragement and tolerance, there was also, on at least case in the session about Aliot School (13.11.2000), evidence for a latent competition. I divided the principals into two teams who had to come

up with a decision. The observation (13.11.2000) reported: "During the first seven minutes Solomon delivers a 'speech' explaining that the principal was beyond reform. However, on the eighth minute, Betty reminds him that their mission is to be constructive rather than fire her. Then, immediately resuming group-leadership, Solomon turns the discussion in this direction, defining their aim as 'presenting a solution in order to solve the complicated situation'. At this point, Rachel joins in, remarking that maybe it was more suitable to present 'optional solutions' rather than 'a solution'. Ann nods in agreement, and Solomon, probably sensing the risk of losing leadership over the group, suggests wrapping up the 'first session', and summing up their role".

This observation revealed that under certain circumstances, some participants attempted to undertake the role of the group's leaders. Rachel's leading comment could be perceived as a preparedness of part of the participants to take over the role of the group's leader. Under such circumstances, even Ann, who had not been very active, could be regarded as a threat, and motivate Solomon to maintain his leading role. However, the team's crisis did not last, as its members were eager to accomplish successfully the assignment.

The latent competition in Solomon's team caused a waste of time and energy. Senge (1992) addressed this phenomenon, saying:

The fundamental characteristic of a relatively unaligned team is wasted energy. Individuals may work extraordinarily hard, but their efforts do not efficiently translate to team effort. By contrast, when a team becomes more aligned, a commonality of direction emerges, and individuals' energies harmonize. There is less wasted energy. In fact, a resonance or synergy develops. (p. 234)

Each team in the session about Aliot School produced a document in accordance with the assignment.

Unlike this session, the assignment (10.1.2001-24.1.2001) that was presented on the web-site on 10th January 2001 was virtual. The participants were asked to accomplish the assignment by 24th January 2001. It was challenging as it did not offer any channels of communication, leaving all the initiative to the participants. They had to form, through virtual channels, two working teams, and produce a 'project'. Considering the evidences that I obtained, Senge (1992) would have defined these teams as aligned. I could have easily intervened and facilitated their moves but I let them do it independently as part of their 'professional maturation'.

Two teams did form, including all the participants, and submitted, in due time, their products. I had no way of following the processes, having chosen to let them act independently. However, I hoped to learn something about this in the following interviews. Vivian talked about it in the third interview (11.3.2001): "I very much liked the interaction that we had to maintain in order to accomplish the virtual assignment. It confronted me with various challenges and being part of the group both scared me and encouraged me" (third interview of Vivian, 11.03.01). When asked to elaborate, she added: "I thought at the beginning that the biggest challenge would be the technological one - connecting virtually with colleagues there was no way of meeting in person, within the time limits. However, this turned out to be the least of our concerns. We were blessed to have Laila in our group. She is very capable with computers; she created our e-mail group, and we set out. One of our decisions was that, at

least once in two days, every one of us would message a thought/idea/etc." (third interview of Vivian, 11.03.01).

How did others in the team perceive this experience? Laila was probably the most capable technologically. She testified: "During the virtual assignment I learnt that Ann had much to say but lacked the technological capacity to do it, so I helped her. At the end, her contribution to the group was very significant" (3rd interview of Laila, 19.4.2001). Again, I could detect an act of 'immediate support'.

The collaboration relied upon the participants' acknowledgement of one another's points of strength, and mutual appreciation. Ann confirmed this in her third interview: "The 'virtual assignment' sent me to an experience that was 'triple intriguing': the topic, the collaboration and the need to accomplish it using technology. ... Laila was of great help, guiding some of us through the technological complexities" (3rd interview of Ann, 21.3.2001). Thus, I learnt that there was a basis for collaborative learning and interchange of ideas using virtual environments. I also gathered it was interesting/intriguing/challenging enough to motivate the participants to accomplish the assignment.

I identified resentment as another form of involvement in the session about marketing that took place on 31st May 2001. Ze'ev conducted this session and I documented it. During this session, three members were playing roles while the others were observing them. In the discussion that followed, Laila addressed the players commenting about these roles: "I can tell you there was so much hostility that nothing productive could have come out of it". The 'players' admitted that they had felt highly involved.

When Ze'ev asked Rachel, who had assumed the role of a teacher, what made her so resentful, she said: "I started with no direction, but somewhere I felt that my principal did not treat me right, and I thought about that teacher at my school, which always accuses me of not defending her, and adopted her role (31.5.2001).

Abe, on the other hand, could not explain his hostile attitude: "Somehow, I turned from a cooperative parent to a resentful one". Betty admitted she found herself: "...unprepared. The assignment landed upon me a moment earlier and I was totally at a loss" (31.5.2001). Criticizing one another, even though in a simulation, was a refreshing form of involvement. All participants, regardless of their position in the activity, demonstrated an active involvement with one another.

Obviously, the activities in the different types of sessions encouraged collaborative work and a sense of belonging to a group. Their involvement with one another concerned the roles that they had played, as it concerned the "real them" in other sessions. However, while I was watching the group-dynamics, I asked myself whether the technological infrastructure was as meaningful as I had expected. Indeed, the participants were opening a new broad 'public sphere' (Sivan, 1998): "Where participants dropped off, at their entrance, their personal interests, and devoted themselves completely to a talk that is entirely sphere-dependent" (p. 266, author's translation).

Sivan (1998) described the 'public sphere' as an arena that facilitated talks that were domination-free. All participants could access and exit the talk, as it pleased them. However:

This could not provide the democratic ideology that had supported this sphere. The existence of the 'public sphere' is an outcome of its participants' wishes; thus, it becomes a catalyst for the idea of the participating citizen. Unlike the role of the participant in a democratic society, where voting once in four years is enough, in order to keep the public sphere existing, the participants needed to take an active part. (Sivan, 1998, p. 267, author's translation).

The involvement of the participants with one another maintained in the face-to-face sessions the 'public sphere' that our web-site had created for them. The different forms of involvement with one another during the sessions convinced me that the programme facilitated several types of involvement. The fact that the programme had been conducted mainly on the web did not change the 'normal patterns' of its participants.

6.4.2 Involvement with one another outside the programme

This section discusses aspects of participants' involvement with one another outside the framework of the programme. It considers relationships that have developed between some of the group's members. Maintaining such relationships signified a passage from the 'instructor-centred' phase to the 'participant-centred'. This section characterizes the forms of relationships that have developed outside the programme, presenting examples for each of these forms.

The importance of this involvement leads us back to the origins of this research: principals' difficulties in sharing and consulting with colleagues who were geographical neighbours. I was searching to discover whether a programme that involved geographically remote principals could be an answer to this difficulty.

In order to obtain evidence about connections they had formed among themselves I had to rely on the participants as informants. To verify this evidence I compared different evidences of the same events. I regarded relationships that principals formed with one another outside the framework of the programme as one of the expected positive results of the programme. The ability to maintain collegiality with others, openly and frankly, indicated a development of professional maturity.

I searched mainly for signs of developed professional relationships that would extend outside the framework of the programme and affect the principals' work-world. The next five sub-sections demonstrate five types of collaborative relationships. All the examples demonstrate processes of forming professional acquaintanceships.

6.4.2.1 - Sharing similar difficulties

There is a saying in Hebrew: 'A problem of many is just half a consolation'. However, in the programme it turned out that a problem of two principals - Vivian and Kira - turned into a fruitful collaboration between two schools. In fact, this case took me by surprise; it concerned Vivian and Kira, whose cultural and social backgrounds were different. Vivian headed a religious school in a small orthodox community that rejected innovation, as she had told me in the second interview: "I find myself losing sleep over these thoughts. Not only because of my husband but because of our pupils' parents as well. We are about to introduce the use of computers and Internet to the pupils and may encounter similar objection within the community" (2nd interview of Vivian, 4.2.2001).

Kira, on the other hand, was the head of a school in a Moshav, (a small agricultural sharing community) where people's secularity was a matter of ideology. Vivian discovered the similarity between their schools in the forum of Ne'ot Ha-Kikar, identifying a problem: "We are dealing with a similar problem: my school consists of 102 pupils and 12 teachers. The proximity of all parents makes them feel ownership and they see themselves free to express their ideas about every pedagogical aspect" (2nd interview of Vivian, 4.2.2001).

Although Kira was trying to "moderate this involvement and to channel it to positive channels, avoiding petty issues" (Forum Naveh, 15.10.2000-15.11.2000, pp 383-390), she needed advice about dealing with teachers who: "being mothers of children who are educated in the same school, due to the lack of an alternative system" complicated her principalship. On the second interview, Vivian told me that: "After the forum about Naveh, I called Kira in order to express my deep identification with her and she offered to maintain relationships between our staffs. We are taking the first steps towards it. I learn to know all the others, as well" (2nd interview of Vivian, 4.2.2001).

On her second interview, Kira confirmed it: "Right after the forum, Vivian called me... offered her identification, having to deal with similar problems. I offered to keep in touch. It is interesting to see how we can develop professional relationships in the framework of entirely different schools... I am sure we shall develop more inter-relations with time" (2nd interview of Kira, 14.1.2001).

Seemingly, the beginning of the shift of these two principals from the instructor-centred phase to participant-centred was at an early stage of the programme, but it later developed further. Vivian told me that they had: "formed a group of coordinators in both our schools, three members from each school. Their assignment is to figure out if there could be any exchange of activities between pupils of both schools" (3rd interview of Vivian, 11.3.2001). How did Kira refer to this? "The connection with Vivian's team is tightening and we have two parallel teams working on the plan for our pupils' mutual activities" (3rd interview of Kira, 22.03.2001).

Subsequently, the relationships widened and included pupils as well. Vivian described the process: "Then there was the idea of mutual pupil visits. We started by forming correspondence relationships between our pupils. It was fascinating because we are an orthodox school and our respective pupils do not know anything about the others' ways and customs. The meeting was fascinating: children of the same age dressed differently, almost looking disguised to one another. Still, everyone searched out their pen pals and the walls of strangeness collapsed very quickly. It was an inter-cultural experience for children that formally use the same language, but actually do not mean the same thing. We all enjoyed it, the children most of all, and we are thinking about the next steps" (4th interview of Vivian, 27.5.2001). Curiosity must have added fascination but, apparently, it did not bother the children. Vivian summed it up as an: "inter-cultural experience for children that formally use the same language, but actually do not mean the same thing" (4th interview of Vivian, 27.5.2001). Was it mutual?

On her fourth interview, a day later, Kira also described the meeting: "Vivian's pupils visited us. We developed it gradually, from e-mail correspondence forming pen pals to the actual visit. It was quite a sight, different clothing, even a different language. However, all intermingled. Our pupils were anxious to meet their pals and show them around. The visitors were fascinated by the completely different style of life. We had to overcome the problem of kosher food and did it with the help of their Rabbi, who joined the visit. I am sure we shall go on meeting and discussing, thus bringing the inaccessible together" (4th interview of Kira, 28.5.2001).

Like Vivian, Kira expressed in this interview her belief that this was the beginning of a long-term relationship. Listening to both principals describing the developing relationships was encouraging. I was looking for other instances.

6.4.2.2 - Getting advice without being inspected and/or criticized

The next two cases present such inter-relationships:

The first one considers a communication between Betty and Kira. In her second interview, Betty was hesitant about approaching Kira, mostly through lack of confidence: "After the forum about Kira's school I wanted to call her. However, I hesitated. I did not know what I would tell her: offer my sympathy? She is not grieving or anything like that. Offer my advice? - She is much more experienced than I am. I liked her even before this session and I suppose that, in time, we will start some kind of dialogue. Maybe it is early still" (2nd interview of Betty, 5.12.2000).

Eventually such a connection was established: "Yes, I used my new virtual potential and accessed Kira. ... I told her about the way I elaborated on the virtual assignment in my school and got her positive feedback, which

meant a lot to me... I am sure that from here I will continue to communicate with others, as well, when I get more self-confidence" (3rd interview of Betty, 17.4.2001). This gradual development could establish evidence for the potential of the programme to form a professional support group for its members.

The second case was the connection between Ann and Rona. Ann was very shy, maybe even intimidated at the beginning. She admitted this in her second interview on 11 November 2000: "I am very introvert and the experience of opening up in front of strangers is strange to me". She was cautious not to diminish anybody's personal or professional attributes, adding immediately: "They are all fine persons, some of them impressively capable principals, I believe. However, at this time I can exchange views but not open up personally to them". However, although embarrassed, she decided to turn to Rona, as she admitted later in the same interview: " I called her once; she was very nice and opened a gate to continue our talks. I guess that eventually I'll turn to her for advice, and - maybe some comfort" (2nd interview of Ann, 11.11.2000).

In her second interview on 8th January 2001, Rona confirmed Ann's evidence, saying: "Ann approached me by telephone, she is a novice with computers, in order to get some advice, which I gladly provided". This approach must have encouraged Ann, who described in the third interview (21.5.2001) that: "I am consulting constantly with Rona. We started talking on the telephone but I figured out that her daily schedules are different to mine, this is why I intend to start using e-mails and other computerized communication soon" (3rd interview of Ann, interview, 21.5.2001).

6.4.2.3 Getting access to experts

There were two exceptional experts in the group: Solomon who was the head of a science centre and Laila who was a head of a pedagogic centre and had had experience and knowledge in constructing educational environments. I wondered whether the principals would realize the potential benefit of their expertise.

Abe was the first principal to take advantage of such connections. He told how he had decided to use Laila's centre to by-pass the barriers that leading an orthodox school in a small community had placed on him. Thus, as he said: "I have contacted Laila...I wanted to ask her about some learning materials, not all of them from the religious context. I did not feel free to do it in the pedagogic centre in my hometown, as the director is religious, so I preferred to do it with Laila. ...She was very helpful, as well as discreet about it (3rd interview with Abe, 15.3.2001). He found that it had been a wise step apparently, some unofficial talk followed and: "We used this opportunity to discuss our meetings, and we both found them refreshing and raising relevant issues" (3rd interview with Abe, 15.3.2001).

I was interested to discover that Laila was not the only expert resource that Abe used. Solomon told me "Abe visited me with his science teacher. The teacher met with a science teacher in the centre, claiming later that it was a fruitful meeting and wishing to continue the interchange. They exchanged telephone numbers and I offered that they exchange e-mails; Abe volunteered his e-mail for this correspondence and I hope the connection will continue" (3rd interview of Solomon, 25.4.2001). Abe was definitely developing his professional horizons, broadening his resources, because of his membership in the group.

Likewise, Rona believed she could improve the science teaching at her school, using Solomon's expertise and centre. She developed the connection gradually, as she told me in her third interview (8.1.2001): "I have approached Solomon for practical reasons. He is heading a science centre". At the beginning she just: "wanted to discuss with him the potential contribution of such a centre to primary pupils" from a general understanding they continued: "we exchanged e-mail addresses, and started corresponding". Now it became effective "He assisted me a lot, now I am able to look for certain supports for scientific education". The last stage was planning: "the possibility of transporting pupils, three times a year, to his centre, elaborating a programme for these visits".

Although these evidences demonstrated the feasibility of the programme's potential to facilitate collaboration of principals, I ascribed importance to Rachel who did not form any relationships outside the programme. I did it remembering Schratz (1993) who attributed much significant to the 'silent voice', thus emphasizing one of qualitative research's unique qualities, I was afraid that listening to voices that expressed, in a way, the 'realization of my dreams', would bias my research. I decided to pay attention to other voices, as well.

When asked about relationships with members outside the programme's framework, Rachel answered: "It may be something inherent in me: I want to do it, I like many of the others, I do not feel free to approach them. If any of them approaches me, I will be happy to respond, but I cannot find the strength to initiate" (3rd interview of Rachel, 15.3.2001). There was no change of attitude in our next interview: "I must confess: as much as I like

exchanging views with my colleagues in the programme during the sessions, I do not feel an urge to extend it beyond these occasions. I appreciate all of them for their merits, but tend to keep to myself" (4th interview of Rachel, 31.5.2001).

I have considers 'involvement' as signifying the passage from 'instructor-centred' to 'participant-centred'. Table 6.3 demonstrates the distribution of the principals in regards with their degree of involvement and its nature.

Table 6.3: The distribution of the principals according to their involvement with one another in the programme

	Active involvement	Responsiveness	Avoidance
Sharing/ Collaboration	Vivian Rose	Kira Rona	Rachel
Advising/ Being advised	Ann Betty	Rona Kira	
Accessing experts	Abe Rona	Solomon Laila	

As seen, I identified three degrees of activeness that related to the participants' getting involved with others:

- a. Active involvement - principals who turned to others.
- b. Responsiveness - principals who responded to others.
- c. Avoidance - principals who neither turned to others, nor responded.

In addition, I identified three agendas in the inter-relationships:

- a. Sharing and collaboration.
- b. Seeking / providing professional advice.
- c. Accessing experts.

Nine principals related to one another. Rona was the only principal who both responded and initiated. Beside her, five principals turned to their colleagues and three responded. One principal - Rachel - did not get involved at all. Could she be regarded as the exception that strengthened the general case? Was her avoidance a result of the fact that she had been forced by her supervisor to join the programme? This avoidance did not characterize her cooperative attitude during the sessions, as well as in the interviews.

Seemingly, the principals started to benefit from one another at the phase of "Actors". Gradually most of them shifted from the stage of 'instructor-centred' to the stage of 'participant-centred', thus indicating a professional maturity and a readiness to turn to others for collaboration, consultation, assistance and companionship. A natural broadening of participants' involvement would be their will to involve others, who were not part of the group, in its activities, meaning mainly school's stakeholders. Were they ready to do it?

6.4.3 Involving 'others' in the programme

This part discusses the cases of principals who involved others that were not part of the programme in some of its themes in order to improve the functioning of their schools. Relevant significant others could be teachers, supervisors, parents and pupils, as well as any figure that affected school in any way, or was affected by it. Here too I had to rely mainly on evidences that I had obtained from the principals, and I tried to create, where possible, a 'chain of evidence' (Yin, 1994, p.144). Sometimes I could verify these evidences by using fieldnotes that I noted in my visits at the

schools, and by following the developments as accounted for in successive interviews. The section will present four types of such involvement:

1. Inviting 'others' to see the activities of the programme.
2. Discussing the activities of the programme with 'others'.
3. Implementing activities from the programme with 'others'
4. Marketing their establishment.

6.4.3.1 Inviting 'others' to see the activities of the programme

The most unexpected involvement, considering the nature of the programme, was that of cases of involvement of two Rabbis, in two different settlements: Vivian's and Abe's.

The first case was that of the Rabbi of Vivian's school. Vivian foresaw the community's coming objection to the school's technological modernization. It started with her husband's objection. The conversation revealed that her orthodox husband avoided any Internet connection, except obligatory e-mailing, and disapproved of his wife's activity on the net as part of her work. She realised that she was (2nd interview of Vivian, 4.2.2001) "losing sleep over these thoughts. Not only because of my husband, but because of our pupils' parents as well. We are about to introduce the use of computers and Internet to the pupils and may encounter similar objection within the community"; therefore, she decided "to confront the issue directly, instead of letting it creep through the back door. I started with the Rabbi, asking him to join me when I approached our site. So he did, and I did not intend to argue with him, just let him see" (3rd interview of Vivian, 11.3.2001); after letting him browse in the web-site, she gained not only his enthusiastic approval as he realized: "This takes us out from our forgotten town to the centre of the world", he even asked to join the group.

Incidentally, when I arrived at Vivian's school for the third interview (11.03.01) the Rabbi did not express any reservations either about me or what I represented: "The first person I ran into was a man whom I did not know. He was welcoming, asked me who I was, ... then introduced himself as the school's Rabbi. I expressed my gladness to meet him, asked if it was possible to discuss some issues with him and to make it an 'on the record' discussion. He asked to join the interview and I regretfully declined, explaining ethical and methodical aspects, still hoping we would be able to talk later on. The Rabbi accepted, adding that **'every religion has its prohibitions, so I must accept yours'**. I offered my hand but he politely declined it, smiling and murmuring something about men-women relationships and touching each other" (fieldnotes at the beginning of the 3rd interview, 11.03.2001).

Similarly, Abe had to fight with his own community and school when he installed the Internet onto his computer. He invited the Rabbi to surf at his home when his school received its share of computers: "I started by recruiting the Rabbi: I installed the Internet in my house, although my wife protested because of our children's exposure. I showed her that I had blocked access to most of the sites, leaving it open only to the religious. Then I invited the Rabbi to surf, and all the rest is history" (4th interview of Abe, 14.6.2001). The orthodox authority, though seemingly not directly related, was the first significant involved 'other'.

I was wondering what parts of the programme, if any, would reach the participants' staffrooms? Would it affect principals' work with their teachers and/or coordinators? If so, in what ways? Most principals indicated in the first interview their difficulties in convincing leading

teachers to dedicate themselves to their role, regardless of their incapacity to reward them. Rona admitted, "I especially need to learn how to deal with the coordinators, who carry their roles technically. All these are vital if I want to make sure that the school, headed by me, develops professionally while keeping certain standards" (1st interview of Rona, 19.6.2000). Did she or others for that matter, open the programme's deliberations to these coordinators?

6.4.3.2 Discussing the activities of the programme with 'others'

I chose to follow Rona's processes of involving 'others' as a case study, creating a 'chain of evidence' (Yin 1994), presenting briefly others' principal doings form afterwards. Apparently, Rona was willing from the beginning of the programme to share its contents with 'others'. "I share every topic with the leading staff of my school" (2nd interview of Rona, 8.1.2001). Sharing seemed to have a purpose: "we discuss what is right, at this time, to bring to the staff room". However, the passage from talking to doing was not an easy one. "Actually, other than discussing it, we have not done anything yet". Still, being at the beginning of the programme, Rona was hopeful: "I am sure we shall return to every subject, at a given moment" (2nd interview of Rona, 8.1.2001). Did she manage to use the programme for her staff development?

6.4.3.3 Implementing activities from the programme with 'others'

In her third interview on 16th April 2001, Rona described what she had done following the assignment on the "futuristic school". "I decided to raise this issue in the staff room". I queried this, asking if it was not a

detached action, and asked her to explain the relevance. She did it: "I connected it to the fact that we have recently moved to this building and its construction and equipment call us to rethink the nature of our teaching and learning, and maybe to define the 'desired graduate' in terms of skills and not only in terms of value, as we did until now. I thought that our relationships with the parents deserved new thought, as well. So, I copied the assignment and, after one discussion, teachers are now grouped working for the next month on the issue of 'our school in the future' or 'the future of our school'" (3rd interview of Rona, 16.4.2001). After telling me she asked: "How does it strike you?" leaving me little option beside appreciation.

When I arrived at Rona's school for the fourth interview on 26th June 2001, "I went into the staff room... There were two teachers next to a computer. They greeted me and when I approached them, one of them said: 'Rona said you were coming today, and would probably be glad to see what we is happening here'. Upon my request, they said they were reading a document. They said it was the 'principal's weekly circular'. I asked how they received it and they said that all of them had their private e-mail addresses, adding that: 'Rona is working out some other way'. At that point, Rona arrived, inviting me to enter her office. As always lately, her screen was lit and there was the same circular on it" (Fieldnotes before the 4th interview, 26.6.01).

6.4.3.4 - Marketing their establishment

During the fourth interview (26.6.01) Rona said that "besides working on our own technological progress, we raised two issues, first in the leading group and then in front of all teachers: the issue of marketing and the

issue of educational evaluation in our school. We decided that in order to become accountable, we should recruit, next academic year, a guide in the field of evaluation, choose an activity and accompany it with a process of evaluation. As for marketing, there is a tendency to open all schools for parental choice towards first grade registration next year, we want to be prepared, having marketed our school in the community, before it starts" (4th interview of Rona, 26.6.2001)

The findings that I have presented demonstrate that principals involved significant 'others' in themes of the programme, with the intention of improving their practice. Two of the principals (Vivian and Abe), who involved their Rabbis, did it as a means of legitimating changes they were going to practise, in their managerial habits and at their schools. One principal who did not do so (Ann) thought it was correct to do so but felt unsure of her position in the staffroom.

What forms did this involvement take? Table 6.4 demonstrates various occasions and ways that principals used to involve 'relevant outsiders' in what they had acquired in the programme:

Table 6.4: Principals involving 'relevant others'

Principal	'Others'	Description of Involvement
Rose	Her deputy	"My deputy is my enthusiastic listener, so far. She even came over to my home to read the forums. We discussed

Principal	'Others'	Description of Involvement
		<p>what of the suggestions and issues we could consider relevant to our school". Rose was planning at this early stage regarding "staff development, I am thinking about sharing some of it with our coordinator, but I do not know yet how I am going to do it" (second interview, 18.12.2000).</p> <p>"...the session of educational evaluation made me realize the fact that the only ones who are subjected to evaluation in my school are the pupils. I discussed it with my deputy and she agreed to take an annual course in evaluation at the closest Teachers Centre...She thinks that the process we shall go through with her, regarding evaluation could be the right one". (fourth interview, 24.5.2001)</p>
Betty	Staffroom	<p>"I divided the teachers into 'mixed' groups, including teachers of different age groups and subject matters and allocated each group a different aspect of our school with a view to the future. The groups are still working on it"... (third interview, 17.4.2001)</p>
Laila	Head of departments; Principals in area	<p>"I did several things. Within the pg, I let the department heads read the article telling about that school. Then, after having discussed it, we reached a decision to approach the primary principals who are our clients with the same issue. They read, at our request, the articles, and we convened. At a certain point, I let them access the forum, and again, at their request I printed it for them. We decided that they would present the subject in the staff rooms, and in accordance with the discussions we should go on. You have to remember that the 'heads' in the pg, are also teachers in both schools" (third interview, 19.4.2001)</p> <p>"I presented the idea (of educational evaluation, TR) to the 'heads'... they refused to listen. They were afraid we were going to start criticizing one another. I offered we all learn something about evaluation. I asked our headquarters to approve a special budget for that purpose, and we are expecting a reply" (fourth interview, 14.6.2001).</p>

6.5 Summary

The chapter began by displaying the stages that formed the phase "Actors", 'instructor-centred' and 'participant-centred', characterizing

both of them. The passage from the first stage to the second was individual.

The chapter continued, trying to understand the cases of abstention from virtual sessions. Beside rare difficulties in accessing the forum, principals indicated three reasons for abstention: anger, irrelevance and lack of time for thinking. I compared the feasibility of these reasons to those for abstention in face-to-face sessions. I thought that abstention reflected the needs of those who did not wish to confront others openly. It could be awkward to say openly that a certain discussion was irrelevant and objecting to the mere presentation of an issue could create tensions. Participants could feel uneasy if they had to admit they needed more time to think things over when a discussion was going on fluently. The virtual situation "saved" such occasions. On the other hand, the sessions could lose their significance and authenticity when participants chose to evade professional discussions.

However, there was another, less conflicting, reason for abstention: participants' choice to be passive learners, 'listening' to others' views and digesting them. Some of them related this to Jewish traditions that indicated the significance of listening as a source of deep understanding. The interviews provided data that the participants had considered the forums as a good source of learning. What kinds of interactions with one another did the virtual sessions generate?

Examination of the documented forums and the principals' interviews showed several sorts of interactions: participants supported one another when they confronted difficulties, technological or otherwise. Another sort of support was expressed in cases of disagreement: principals sided

with one another in cases of professional disagreement. At the other end, there were cases of straightness, when principals talked openly to a colleague in the group, wishing to reflect or criticize. Under certain circumstances, there were expressions of competition, mainly on 'leadership'.

The participants did not absent themselves from face-to-face sessions, although they were time consuming, involving the principals in travelling long distances. As for the forums, they learnt to be 'wise users' of them, choosing when and how to participate either actively or passively. The principals' participation in the forums was significant as well as their abstention. Why did they miss forums?

The programme was planned in a way that would lead the participants, in the phase of "Actors", to a deepening and a broadening of the inter-relations and behaviours that had started shaping during "Origins". The connections that the participants initiated with one another within the sessions extended to their 'normal world of work'. The principals acknowledged their colleagues' professional experience, benefiting from the capacities they had discovered in one another. Likewise, they learnt to offer assistance. They realized the mutuality of asking-assisting-consulting-supporting relationships.

The participants began to transfer ideas from the programme to their schools. Besides its potential in catalysing schools' progress, it brought about a development of professionalism in their relationships with different stakeholders. The main practice was still with staff members: a deputy, coordinators, teachers, pedagogic counsellors; however, there was

a beginning of interaction with parents. The two Rabbis that were involved could be considered esoteric; still, they were very significant involved figures.

The principals' reactions and reflections, as well as the nature of their participation and the connections they had developed with one another, demonstrated that the programme had "reached" them, opening new channels of learning and developing them professionally. Finding these inter-relationships reassured me that the programme facilitated all types of involvement that develop as a part of group dynamics. The fact that the programme was conducted mainly on the web did not change the 'normal patterns' of its participants.

The principals started to take benefit from one another at the phase of "Actors". Gradually most of them shifted from the stage of 'instructor-centred' to the stage of 'participant-centred'. Their cooperation was serving different needs: they shared difficulties with one another, used their acquaintanceships to develop professionally and exchanged advice with one another. They learnt to appreciate others' expertise and make use of it. Other not less important benefits were the cases of principals befriending one another, not feeling threatened or competing. All these developed their capacity to accept 'others' and 'different'.

In their passage from 'instructor-centred' to 'participant-centred' they moved from behaving in patterns of responding; realizing proposed actions; criticizing; avoiding ...etc". They shifted to behaviours like "creating work/social collaborations with colleagues in the group; using ICT"; etc (Table 4.2, see p.160). All these examples indicated the ongoing effect of

the acquaintanceship. This demonstrated a professional maturity as well as a readiness to turn to others for collaboration, consultation, assistance and companionship. There was an involvement of the participants with one another. A natural broadening of participants' involvement was their will to involve others who were not part of the group, in its activities; these were mainly school's stakeholders.

The programme ended in June 2001. The "Farewell Forum" that was titled "how to conclude", expressed a wish that it should continue. However, at that time I detached myself from the programme and the participants. I decided to return to them, in order to conduct the fifth interview. The findings and analysis of the fifth interview, that showed the affect of the programme after it had come to its end, are discussed in the next chapter.

CHAPTER 7

'REVIEW' - THE THIRD PHASE: THE LASTING EFFECT OF THE PROGRAMME

7.1 Introduction

This chapter discusses the third phase in the research, "Review". It is shaped around five issues that focus on the effect of the programme.

The first section describes the third phase of the research, "Review". It identifies its duration between the end of the programme in June 2001 and the end of the fifth interview in December 2001. Next, it explains its two stages: 'Independence' and 'Reflection'. This leads to the second theme.

The second section presents and analyses the effect of the programme. The discussion begins by presenting once more the model that I had developed in the fifth chapter, based on the concepts of Watzlawick *et al* (1994) and Cuban (1992). This model has facilitated the display of the programme's effect in three perspectives that construct the next sections as follows.

The first perspective is discussed in the third section; it considers changes in the managerial behaviours of the participants. In fact, this perspective evaluates the programme for professional development of primary principals; then the findings are presented and analysed in relation to the relevant literature.

The second perspective that is discussed in the fourth section, describes in which ways principals has chosen to involve 'others' in activities within

their schools. Here again, findings are displayed, analysed through the same model and related to relevant literature review.

The fifth section discusses the third perspective that is the use that principals have made of channels of information technology within their managerial routine. It also describes the extent of this use. Again, the same evaluating model is adopted, and the findings are displayed, analysed and related to relevant literature.

The summary of the chapter concludes the issues that have been discussed in the chapter, and leads to a discussion of the research question in view of all the findings in the eighth chapter, 'Conclusions'.

7.2 The phase of "Review"

This section describes the development of the third and last phase of the research and distinguishes between its two stages: 'Independence' and 'Reflection'. The phase "Review" began when the programme ended, at the end of June 2001. It lasted until all participants were interviewed for the fifth time during November 2001 - December 2001 (see pp. 375-377). As the programme came to its end, I wanted to find out if it had affected the managerial functioning of its participants. Thus, the relevant category would be "the effect of the programme". This phase consisted of two stages: 'Independence' and 'Reflection'.

7.2.1 'Independence'

This section describes examples of development of the participants in the research during the stage of 'Independence'.

As noted in Figure 4.2 (see p.174) 'Independence' started when the programme ended, and we all assumed that the fourth interview, which I had conducted between 15th May 2001 and 15th June 2001, was be the last time we would meet one another. At this stage, the principals kept working at their schools. I did not keep in touch with them; therefore, I had no way of making sure they would choose to make use of any part of the programme in their practice.

My experience has taught me that summer vacations are dedicated to the preparation of the next academic year. There is no day-to-day pressure and they can carry out the required managerial functions when planning the next academic year. Friedman (1999) has identified five key assignments that form the core of principalship; these distinguish between the routine aspects of principalship and its strategic aspects: whilst the first aspects serve to maintain the regularity of school, assuring its activities, the second aspects serve to assure its organizational development. The areas were:

1. Strategic direction and developing school.
2. Instruction and teaching, including educating the pupils...
3. Leading and managing the staff.
4. An effective allocation of the financial and human resources.
5. Accountability. (p.23, author's translation)

The programme has addressed directly three of these areas:

1. Strategic direction - in the sessions "The Futuristic School" (10.1.2001-24.1.2001) and "Being a Principal in the 21st Century" (1.5.2001-15.5.2001).
2. Instruction and teaching - in "The Bookless School" (7.3.2001-21.3.2001) and "Educational Evaluation" (25.4.2001).

3. Leading and managing the staff - in the forum "Staff Development" (2.11.2000-13. 11.2000) and "Aliot School" (13.11.2000).

The programme for the professional development of principals did not address directly issues concerning allocation of resources and accountability, although they had been occasionally discussed. Another issue that the programme addressed was the use of channels of information technology in management, as facilitating tools. In addition, the 'instructor me' hoped that the principals would take advantage of ideas that had been discussed in the programme, while preparing their schools towards the next academic year making use of some of the ideas they had learnt in the programme.

Whilst the 'instructor me' had finished its role at the beginning of 'Independence', the 'researcher me' had started to organize the obtained data, and plan its display and analysis. I restrained myself from contacting the principals, although I felt an urge to do it. I realized that my departure from them was of much significance: the principals were not bound to the programme and could plan their moves independently. While organizing the data, I felt the need for an additional interview, in order to learn about the programme's effect. I did not intend to check up on them; I wanted to learn whether they thought that they had used ideas from the programme in their practice. Thus, I planned the fifth interview seeking to get information about:

1. The after-effect of the programme
2. The use (if any) that the principals made of the tools, mechanisms and knowledge that they had acquired in the programme

3. The relationships (if any) that principals maintained with one another after the end of the programme.
4. The nature and frequency of the use the participants made of channels of information technology in managing schools
5. The satisfaction of participants of the programme, retrospectively.

In a way, the fifth interview differed from its precedents. Instead of taking notes, I tape-recorded the interviews and transcribed them. Later, the transcriptions were e-mailed to the interviewees, asking for their comments. As with the previous interviews, they did not ask to change anything. The next step was translating the texts to English. The interview, although pre-structured, left substantial room for the interviewees to express their views on issues other than those identified above.

7.2.2 'Reflection'

The stage 'Reflection' took place in the months November 2001 and December 2001. During this period, I conducted the fifth interview with all the participants. However, while the interviews provided the principals' subjective perceptions about themselves and the effect that the programme had had on them, I managed to take fieldnotes during the visits at the schools; these notes could support the principals' testimonies, constructing a 'chain of evidence' (Yin, 1994).

I described graphically the activities of the principals and myself during this phase as follows:

Figure 7.1: The totality of activities in 'Review'

	Principals	'Researcher Me'
'Independence'	Preparing next academic year; Choosing what use could be made of the programme in order to facilitate their tasks Maintaining professional relationships with colleagues of the group	Organizing the obtained data. Preparing the fifth interview.
'Reflection'	Being interviewed for the fifth time: Looking backwards, appraising the programme, and the ways they had benefited from it.	Conducting the fifth interview; taking fieldnotes when possible, thus supporting the principals' testimonies

The main interest of the research focused on the principals' activities at their schools during 'Independence' as they were reflected in their interviews conducted during 'Reflection'. Following the discussion about the concept of 'change' in educational contexts, I formed a framework for examining the programme's effect:

In Chapter 5, I have already offered Figure 5.1 (see p.196) as a model for for an analysis of the programme's outcomes. I also suggested that the analysis of the programme's effect would focus on three dimensions:

1. Managerial behaviours: staff management and development, instructional issues, educational evaluation,
2. External relationships of the principals: regarding their relationships with one another in professional contexts, and involving school's stakeholders in school's affairs.

3. Making sophisticated uses of information technology as facilitators of their role and for maintaining external relations.

The next sections of the chapter will address the programme's effect in these three dimensions.

7.3 The effect of the programme

This section presents evidence that demonstrates the effect of the programme on the principals on each of the above-mentioned dimensions. It analyses this evidence, seeking the changes that the principals have identified by themselves in their own managerial behaviours, as outcomes of the programme. The discussion will be shaped around three parts that coincide with the dimensions of expected change: changes in managerial behaviours, external relationships of principals and integrating information technology as part of the managerial tools.

7.3.1 Changes in managerial behaviours

The changes in managerial patterns that this part discusses relate to the first research question that sought to investigate the effectiveness of the mainly web-based programme for professional development of principals.

What could be the potential changes in managerial behaviours in the suggested framework for analysis? Figure 7.2 presents an overview of the framework concerning managerial behaviours. It is based on Figure 5.1 (see p.196) and adapted to suit the issue under discussion.

Figure 7.2: A framework for changes of managerial behaviours

	First Order	Second Order
Incremental	Keeping the existing role structure, not involving staff members in school's plans and decision-making. Not demonstrating, after the end of the programme, any significant change.	Maintaining the existing role structure and patterns of involvement; still demonstrating some organisational improvements.
Fundamental	Changing the role structure and patterns of involvement during the programme; not maintaining these changes, after the end of the programme.	Changing the role structure and patterns of involvement during the programme; maintaining these changes after the end of the programme.

The figure presented two behavioural parameters:

1. Changing the role structures of school.
2. Involving staff members planning and decision-making at school.

Maintaining the changes in these areas after the programme ended formed a criterion for evaluating the changes that principals went through.

My previous experience with principals had taught me that they regarded their work with coordinators as troublesome: the Israeli educational system allows, even within self-management, narrow possibilities for rewarding them; therefore, principals are constantly seeking ways of

raising the motivation staff members to carry out demanding roles in schools. For that reason I presented two questions in the first interview (1st F2F interview, pp. 367-368), asking the principals about their satisfaction with the coordinators at schools and the way they nominated them:

8. Please, tell me something about their contribution to your school. Do you consider them helpful in administrative assignments? In educational issues? Are they loyal as distributors of your ideas and messages? Do you feel that you 'manage' them effectively? With what are you satisfied? Dissatisfied?
9. How do you choose/nominate the coordinators at school? Who, if any, share the process of decision-making? How are they presented in the staff room? Are their nominations permanent or are there personal changes? Is there a process of feedback? Who participates in it? How do you express satisfaction or dissatisfaction? (1st interview, pp 367-368).

Vivian's answer (1st interview, 20.8.2000) reflected her difficulties: "How do I recruit teachers to take charge although I cannot promise any rewards? Without it, I see no way that I can recruit them". Did something change following the programme? In the fifth interview (9.12.2001), Vivian's inability to reward her coordinators did not seem to cause difficulties: "During summer vacation I had long talks with every coordinator discussing their roles. We defined the assignments, the timetable, the expected outcomes and the way it will be presented to the teachers. Every one of them had to plan his/her activities with the relevant teachers in order to define expected results, in the relevant domain, and ways to assess it. Then, I gathered all coordinators, spreading all plans of action, thus being able to adjust them in order to balance the school's activities" (5th interview of Vivian, 9.12.2001). Evidently she assumed leadership and orchestrated their activities in terms of timetables and division of labour.

Likewise, Abe, who was a newly appointed principal at the beginning of the programme, was uncertain and unqualified as far as handling his staff was concerned: in his first interview (29.6.2000) Abe said: "One teacher replaces me as a coordinator of 'social education'. I find myself criticizing him because he thinks and acts differently and I cannot stop myself. Hopefully, if I do not manage to control myself, you are invited to help me. All other 'positions' are still vacant".

In the fifth interview (29.11.2001), I wanted to learn if anything had changed after having participated in the programme. Abe said: "...trusting some of my staff members more than last year, I showed them this way of planning and we started planning the year, everyone from his or her point of view. Then we gathered all the plans together, checking the feasibility of their plans. When we summoned all the teachers, at the end of August, most of the coming year's plan was presented to the teachers". I learnt that he had developed an ability to trust some members and inspire them, allocating assignments and involving them in the process of planning the next academic year.

Unlike Vivian and Abe, Ann, a first year principal, did not seem to sense any problem in her work with the coordinators, when first interviewed (24.5.2000) she said: "We have three coordinators, one for each group of two grades: 1-2; 3-4; 5-6. We also have coordinators for Mathematics, extra curricular activities, computers and science. Everyone is working in teams". However, I thought there could be a problem in the way she managed her staffroom, in view of her describing her main tasks as: "repairing human interrelations of all school participants with one another" (1st interview of Ann, 24.5.2000).

In the last interview (21.11.2001), I tried to learn about the ways she managed her staffroom: did she manage to repair human interrelationships? She told me: "I assembled all the school's coordinators and taught them the principles of Gant's flowing chart, as you had shown us. Then everyone had a week to prepare a suggestion for her flowing chart for the short term. After one week we discussed the plans, covering unattended gaps and dividing labour between us. Right afterwards I discussed with every coordinator her role, responsibilities and when and where she should consult me and report to me. At the beginning of July, when the building calmed down, I took the time to sum up last year and start planning the next one, following the same principles". Seemingly, Ann managed to lead her senior staff members in a collaborative manner that could contribute to their interpersonal relationships.

Both centres for teachers, the pedagogic centre led by Laila and the science centre led by Solomon, required a different organization of their staffs. Did these two principals realize it? Laila described some uncertainties when first interviewed (17.8.2000): "They are supposed to develop learning materials, to locate them, to offer them to the teachers in the schools. There is a partial mix-up between their roles: all of them teach in the local schools and function as guides for their colleagues. I am not certain that they are always the better teachers. Thus, establishing their professional authority is not simple. As long as I cannot establish their authority, the pedagogic centre's professional authority is shaky as well". How did she view the situation after the end of the programme? "We want to define criteria for the role of 'heads' in general, and each one of them in the particular area, and evaluate, throughout the year, the effectiveness of their functioning as a parameter of the pedagogic

centre's effectiveness" (5th interview of Laila 5th 6.12.2001). It seemed that Laila was in a rush to change things before evaluating them. However, she planned it as a collaborative process.

Solomon, who headed the Science Centre, did not think, when first interviewed (14.8.2000), that the centre's tasks required that its teachers would develop in broader senses than their subject-matter: "You see, there is a 'catch'. I have teachers of Mathematics, Physics, Biology, Chemistry, Computing and Technology. Our laboratories are well equipped, and we are ready to work eight hours a day, five days a week. However, there is no sense of belonging to a staff".

Did the programme change his organizational perspective? In the last interview (5.12.2001) he said: "...this was the first year that I did not prepare all by myself. I convened the centre's teachers to a three-day preparation session, and all plans were organized. Moreover, we elaborated a turn of duty; everyone is a mini-director at certain times. I enabled the teachers to contact the centre's secretary who, until now, had been 'my' secretary', in order to solve administrative difficulties". Besides involving the centre's teachers in collaborative work, Solomon evidently gave up some of his "status symbols" like the access to secretarial services without his explicit permission. Probably Solomon gathered that when asking the teachers to add duty by rotation, which was not part of their official task, he would need to demonstrate some changes in his perception of authority.

Betty, who was a second year principal, thought, when first interviewed (6.6.2000) that she was to blame for the insufficient functioning of her coordinators: "Three teachers form the 'leading team'. One is the

pedagogic coordinator of grades 1-3, the other is the pedagogic coordinator of grades 4-6 and the third is the coordinator of extra curricular activities. I am afraid that their functioning is less than optimal and I do not blame them. I would rather blame myself for not being able to correctly conduct their work".

Did she feel, when interviewed after the programme ended (14.12.2001) that the programme provided her with ways to achieve improvements? "The main lesson I learned was shifting school from 'my' responsibility to 'ours'. I felt that this was the most important idea that I had obtained from our programme and carried out. We all undertook the burden of starting a new year, of making school a pleasant place to come to. As a result, on the first school day, all teachers walked around proud as peacocks".

Rachel was a principal in her ninth year when she joined the programme. Her deputy had been a source of concern, as she testified in the first interview (16.8.2001): "The literacy coordinator is doing extraordinarily well. The mathematics coordinator is a beginner, and my deputy is the toughest problem in my school, believe me. I wish I could send her away, but she has been here from the beginning, she is netted in the municipality and I am stuck with her, unfortunately". However, her own satisfaction when interviewed for the fifth time (13.12.2001) resulted from another reason: "The main change was the way the coordinators and I planned the annual work. I demanded that they present clear aims and expected products and define the division of labour. This was done, at least partially, a result of the discussions we had in the programme last year".

The seven principals that I have mentioned here did not change the organizational structure of their staffs. However, all of them generated mechanisms of collaboration and broadened the borders of accountability from themselves to the relevant coordinators. These mechanisms consisted of:

1. Defining roles, expected outcomes and itineraries.
2. Defining division of labour among of coordinators and teachers.
3. "Bribing" coordinators (for instance: permitting an access to the school secretary).

I looked for a principal that had tried to change the organizational context. When first interviewed (13.8.2000) Kira, who headed a small school in a remote geographical area, did not attribute much importance to the need of role definitions: "In such a small school, with teachers who do everything together, and please remember that most of the pupils are our own sons and daughters, there is no room for functionaries. Neither can I reward them. The one and only exception is Orly who is our PE teacher and a computer expert".

This attitude changed when she was interviewed for the last time (3.12.2001): "We have decided to go through a process of labour and task division, as steps towards teachers' accountability, development and professional progress. It turns out to be constructive, even with a small staff like ours. Everyone's work is focused and there is no wasted energy from several teachers doing the same things at the same time". Apparently, Kira's school went through a process of changing the role structure. It could be said that the concept of role-structure was established for the first time at this school.

The fact that the second parameter, of involving staff members in school planning and decision-making, was materialized in all the schools that I had mentioned before was surprising. Fuchs (1995) conducted a case study in an elementary school that went through a process of change. She identified difficulties in processes of decentralization and in bestowing authorities. Although the principal she had investigated had expressed a readiness to go through organizational changes, the process of decentralization was slow; the principal suspected that the school's functioning would lose its effectiveness, if she were not personally fully involved in each process.

Fuchs (1995) appraised processes of involving school members in decision-making and school planning as crucial for principals' increased efficiency:

In order to focus on the main topics that contribute to a school's success in implementing necessary changes and achieving its goals, the principal needs to give up part of the roles and behaviours that have been customarily part of his role, passing them on to other staff members. This is an essential part of thickening principal's leadership. The main difficulty in such a process is dealing with the feeling of 'losing control'. Thus principals whose style has been traditional and centralistic will find more difficulty in doing it than others who have conducted a decentralized leadership. It is imperative that principals remember that this process opens a door inviting teachers to assume responsibility and commitment to the changes that school is going through. (p.167, author's translation).

Fuchs's (1995, p.167) account of "principals whose style has been traditional" made me look closely into the case of Rose, who had been heading her school for 15 years. In her first interview (5.6.2000), she mentioned her deputy as the only person she fully trusted at school. She also presented her managing style: "I make the decisions ... sharing it only with my deputy". When interviewed for the fifth time (20.12.2001), there

was some change in her traditional centralistic style: "...this year was different: we discussed and planned the introduction of evaluation, choosing the technological innovation and our adjustment to it as the subject for evaluation. We met a guide from the Teachers' Centre and formed some of the evaluation questions and the ways to answer it".

Surprisingly, when it came to an innovative process of change regarding the introduction of information-technology, Rose abandoned her traditional style, making room for teachers' involvement. She may have realized that such a change could not be introduced just by informing the teachers; their involvement was essential. Bush (1999) indicated that:

In education, collegial approaches are often manifested through systems of committees, which may be elaborate in the larger and more complex institutions. The decision-making is thought to be egalitarian with influence dependent more on specific expertise than an official position. The assumption is that decisions are reached by consensus or compromise rather than acquiescence to the views of the head or the principal. (p.63)

I doubted whether the principals who had participated in the programme had read Bush's (1999) views, but, seemingly, they materialized it. A possible explanation could be that principals became convinced they could "let go" of some of their tasks, allowing committees to handle them efficiently, without being threatened.

All the principals who had participated in the programme made some organisational changes with the exception of Rona. When first interviewed (19.6.2000), she demonstrated self-confidence regarding the functioning of the coordinators: "I have nominated three 'age coordinators' and four subject-matter coordinators: Literacy, Mathematics (which I am going to cancel because there will only be two teachers for this subject), a

coordinator for 'social education' and a teacher who is in charge of school-parent relationships. There is also the teacher who is in charge of 'safety and security', as dictated by law". I wondered whether she needed to introduce any organizational changes at all.

When interviewed for the fifth time (11.12.2001) Rona said: "I used, and taught my teachers and coordinators to use, Gant's flowing chart when planning every programme. Last August I talked with every coordinator separately, discussing their roles and guiding them on how to prepare their chart, including the expected results, criteria for success as well as ways and times of assessing it. At the beginning, it seemed difficult, but then they did it for this year's plan of action and, at the end, they could define clear aims and actions".

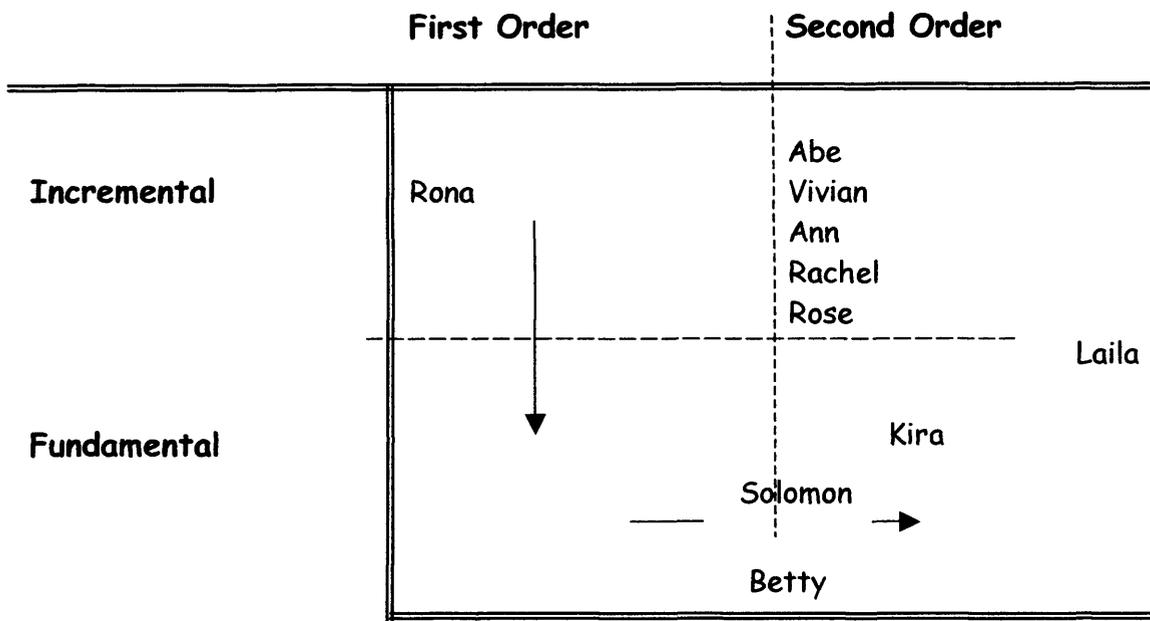
I found that actually Rona had changed nothing in the role structure of her staffroom; neither did she involve the teachers more than she had done before she participated in the programme. I kept asking myself: did it demonstrate the programme's failure in making her a more flexible principal? Could it be that this part of the programme did not suit her conditions or her style of management? The fact that Rona had been one of the most active participants, expressing innovative attitudes, threatened to bias my appraisal. However, I had to admit that no changes whatsoever as far as role structure and teachers' involvement occurred in her school because of her participation in the programme, maybe because when at the beginning of the programme she was already progressive as far as developing collaborative work was concerned.

Reviewing all the data that I had obtained of the principals, I concluded that:

1. Rona did not change the role structure or the degree of involvement.
2. Abe, Vivian, Ann, Rachel and Rose did not change the role-structure at their schools. However, they introduced into the existing structures new working styles; they also broadened their staffs' involvement in school decision-making and planning.
3. Laila started some changes in role perception and structure at her pedagogic centre; that was why I positioned her as passing between two sections of the model.
4. Solomon and Betty broadened their staffs' involvement and introduced some changes in role structure, demonstrating some evidence of its institutionalization.
5. Kira, who had been confident of the irrelevance of any role structure at her school because of its small size, realized during the programme that she needed to abandon existing attitudes and went all the way, introducing changes in aspects of role structure and staff involvement.

Regardless of the nature and the degree of the changes, the principals differed from one another in the ways that they had introduced the changes: their seniority in the role and the unique circumstances of each school dictated these differences, both in the aspect of changing the role structure and involving staff members. Figure 7.3 positions the principals' changes of managerial behaviours in staff management in accordance with the evidence I have presented in this section, based on the definitions in Figure 7.2 (see p.289).

Figure 7.3: Principals' positions in the framework of managerial behaviours



Were the patterns of external relations of these schools changing too?

7.3.2 External relationships of the principals

This section discusses changes that the principals implemented in their external relationships. It focuses on the types of relationships and the topics that encouraged principals to maintain them.

One of the reasons for initiating the programme for professional development of principals, including participants who were geographically remote from one another, was the solitude and isolation that principals felt in their role. These feelings had been identified by Friedman (1997) as causes for burnout. I was interested in the interrelations that principals kept maintaining with one another because of its relevance to the second research question about the potential of the programme to form a support group. I knew that I would be able to receive answers to this question at the end of the programme and after it had ended.

In the fifth interview (see pp. 375-377), I asked each participant: "Do you keep in touch with any of the other participants of our programme? If so, with whom? Why with this/these particular principal/s? What kind of connection do you maintain - sharing experience or views? Counselling? How frequently do you connect with each other/one another? Do you use virtual channels, like e-mail, in maintaining these connections? If no - why? Do you not miss it? Would you like to initiate such connections?" (see p. 377).

I already knew that in the second phase of the programme, "Actors", principals had shifted, at their own pace, from the stage 'instructor-centred' to the stage 'participant-centred'. The question about continuing connections of principals yielded useful trustworthy information.

When interviewed, the principals described a variety of connections that they had had with one another. Some stories were colourful; for instance, Betty told me in the fifth interview (14.12.2001): "I learnt from Vivian about Laila's help in designing her school's educational environment. I accessed Laila and, to make a long story short, I travelled over to her pedagogic centre with my coordinators and art teacher. We stayed there a whole day, in the evening watching the sunset over the canyon, and whatever you see here is the outcome of this visit."

Apparently, Betty's connection with Vivian motivated her to approach Laila in the pedagogic centre. However, the formal connection was just a beginning of the next development, as described by Betty in the fifth interview (14.12.2001): "Moreover, my 'young age' coordinator is corresponding now through the e-mail with the parallel coordinator in

Laila's pedagogic centre, consulting with her. She is ready to discuss her problems with a distant colleague rather than with the local 'young age' coordinator in the local pedagogic centre".

What did Laila, who had become popular, think about this event? Eventually it turned out that the connections with Betty were one part of an eventful story of other principals who looked for her assistance, as she described in the fifth interview (6.12.2001): "Then I got an e-mail from Betty, pleading for help with designing the educational environment. I could not go over, but instead, I asked her to come with her coordinators and the art teacher to my pedagogic centre. I asked them also to bring photographs of her school, which they did. They stayed with me for a whole day conference, we discussed their educational programme and the potential to create an environment that develops with the programmes and reflects them. In the evening, I took them to watch the sunset in the canyon and then they went home. About a week ago they e-mailed me scanned photos of their school. I e-mailed back my admiration. I was proud, both of them and, in a corner of my heart, of myself".

Laila was proud of the outcomes. The 'giver' was certainly a 'receiver' as well. The branched interrelations seemed to be beyond verbal presentation. I chose to present them in Table 7.1, supporting each testimony by a respective one.

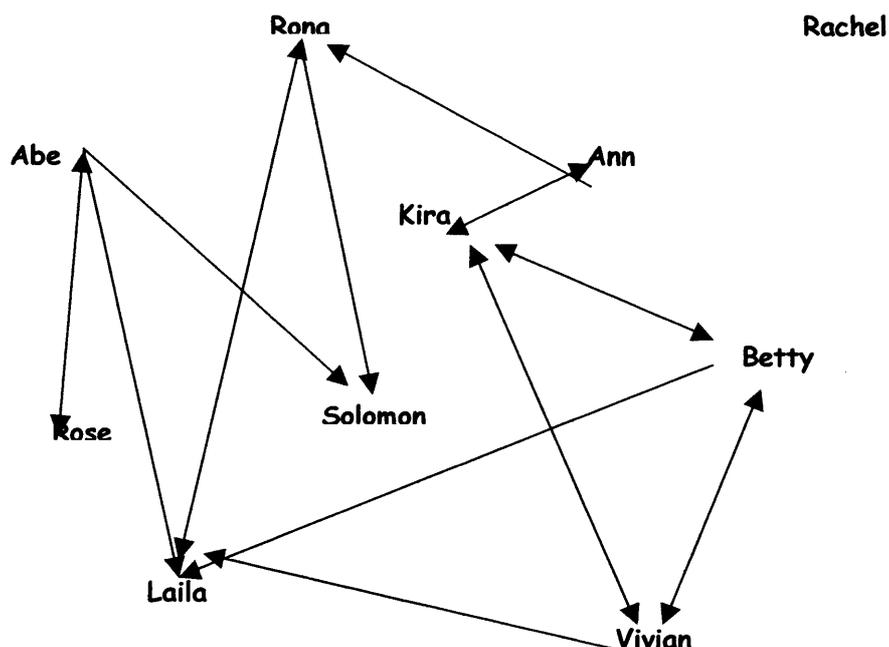
Table 7.1: Principals' inter-connections in 'Review'

Initiated	Connected To...	The Nature of the Connection	Supported by...
Abe	Laila	Visited during summer vacation in order to locate learning materials	Laila
Abe	Solomon	Visited during summer vacation with his science teacher in order to get help planning science teaching	Solomon
Vivian	Laila	Invited her for a 2-days lecture with teachers, developing a learning environment	Laila
Vivian Betty Kira	Vivian Betty Kira	Maintain e-mail correspondence, consulting, sharing	Vivian Betty Kira
Betty	Laila	Stayed in Laila's pedagogic centre for 2 days with 2 teachers designing learning environments	Laila
Rona	Solomon	Planned an annual programme for Rona's pupils in the centre	Solomon
Rona Rose	Rose Rona	Exchanging e-mails leading to students' exchange	Rose Rona
Ann	Rona	Keeping an open-line for advice	Rona
Ann Kira	Ann Kira	Exchanging e-mails frequently	Ann Kira
Rose Abe	Rose Abe	Forming learning groups of teachers; preparing a biblical contest of pupils	Rose Abe

The principals proved to be very creative in the styles and sorts of connections they developed with one another. There were no barriers: principals that headed religious schools exchanged advice with secular colleagues; principals who beginners in the role maintained connections with experienced ones; female and male principals, even religious ones, maintained contacts. I summed up the principals' testimonies about their interrelations, referring to the topics that had brought them together and, by indicating the supportive evidence that I obtained, forming a 'chain of evidence' (Yin, 1994).

Whilst Table 7.1 (see p.303) describes the contents of the relationships, Figure 7.4 maps them. The directions of the arrows indicate the initiator of the connection. In several cases it indicates the mutuality of the interrelationships. Figure 7.4 shows that Laila, the principal of the pedagogic centre, who had had experience in educational environments, attracted four of her colleagues. Kira, who had opened her experience in Naveh School at the beginning of the programme, attracted three of her colleagues. Vivian and Abe, both orthodox inexperienced principals had turned to three colleagues, seeking professional advice.

Figure 7.4: Map of principals' relationships during "Review"



The only principal who stayed outside was Rachel. I reread her first interview (16.8.2000), discovering what she thought about professional colleagues: "My experience with colleagues up to date was very disappointing, what makes me faithless. I am willing to see how things develop and play along". However, towards the end of the same interview,

when asked about accessing the Internet, she commented: "Actually, I am more ready to learn to access it than to access other principals". She behaved accordingly, this led to her regretfully admitting in the fifth interview: "This is something I regret: not doing anything to start connecting with others. I guess they thought I was not interested and I stayed as an outsider. I am sure it is my loss, not taking advantage of the collegial opportunity the programme opened to me" (5th interview of Rachel, 13.12.2001). She offered no explanation.

Table 7.1 (see p.303) and Figure 7.4 (see p.304) show the branching of the principals' connections with one another. Their interviews, which supported one another, provided information about the nature of these connections:

1. Turning to resources of expertise (pedagogic and science centres).
2. Establishing connections between schools: teachers and pupils.
3. Advising and seeking advice.
4. Professional friendly talk.

Apparently, the principals took advantage of the opportunity to enrich their professional resources through the experience of colleagues and to share views and experiences with others who did not present a threat, thus contributing to one another. How did technology fit in?

7.3.3 Integrating information technology as a managerial tool

This section discusses the integration of information-technology into management. Here too the principals were the main source of information. Whenever possible I supported their testimonies with fieldnotes taken on my visits to the schools in order to conduct the interviews.

Integrating information-technology was significant in two ways:

1. Facilitating professional connections between principals who did not work in the same geographical areas by using channels of information-technology.
2. Introducing the use of information technology as a managerial tool. I was convinced that such a use could lighten some of the heavy burden of principalship. The fourth research question, as presented in Chapter 1 (Introduction) and in Chapter 3 (Methodology), was: "To what extent, in what ways, and how effectively do participants utilize virtual tools as managerial communication systems, following such a training programme?"

The *raison d'être* of the fourth research question was my conviction that principals needed as part of their management to contact frequently colleagues, coordinators, teachers and other stakeholders, and it could be a burden on their schedules. I wanted to investigate if principals who participated in a virtual group would develop and apply similar communication channels to facilitate their contacts.

During my visits at the schools, I observed some changes that they had implemented, as reported mainly in the part of 'Actors'. On returning to them, in November 2001-December 2001, I wanted to see whether they had continued developing in this respect. Looking back at my first visits to their schools when I conducted the first interviews (see pp. 375-376), I gathered information about the technological access and skills of the prospective participants and mapped it as presented in Figure 4.1 (see p.158).

As the programme progressed there were distinct changes. On my third visit to Betty's school (17.4.2001) I described in my fieldnotes (Fieldnotes, Betty's 4th interview, 17.4.2001): "The office has been changed. Betty's former desk had disappeared and an L-shaped desk was standing in a new angle, with a computer situated on top of it. Betty grinned and invited me to watch her access our site without assistance, which she did. She said she had decided to become an 'independent' user and do it in the trial-and-error manner, basing herself on Kolb's experiential model that we had discussed several times before".

Likewise, on my fourth visit to Ann's school (7.6.2001), I noted (Fieldnotes, Ann's 4th interview): "Entering Ann's office, on my fourth visit, I was delighted to see that she was seated by a new L-shaped desk, a computer that was connected to a telephone socket was covering one of its wings. Ann greeted me, standing up from the computer that was open showing the last forum on its screen". This experience among others reinforced my conviction that the use of ICT was appropriate for principals as communicating tools. However, the question remained: Did it develop at the phase of "Review", after the programme stopped? I had to check the three virtual channels that we had practised during our programme: e-mailing, forums and chat-room conference.

The most common use that I found upon returning to the principals in November 2001-December 2001, was the abundant use of e-mail as a connecting channel of principals to colleagues and maintaining communication within and between schools. The connections that Table 7.1 (see p.303) and Figure 7.4 (see p.304) demonstrated were based mainly on e-mailings. In my last visits to the schools, in November 2001-December

2001, I found that some principals made use of information-technology in communicating with one another. When I arrived at Ann's school for the fifth interview (21.11.2001) I noted: "Ann greeted me warmly upon arriving at her school but asked me to accompany her to the staff room. There were four teachers convening and Ann introduced me saying 'It is because of her that we are all e-mailing to one another now, instead of talking'. I was ready to get my share of anger, but they burst out laughing. Ann said she would explain later" (Fieldnotes, Ann's 5th interview, 21.11.2001).

Later in the fifth interview (21.11.2001) Ann explained that she had used the days of preparation towards the new academic year to acquaint her staff with the computers: "We started the first day in the town's Pedagogic Centre. They have 40 computers there, all connected to the Internet. We had a trainer, who taught us to access computers, Internet and e-mail addresses. Every teacher chose her mail address and we started communicating with one another". She was not yet satisfied, so she used the momentum: "I installed two PC's in the staff room, connected during school hours to the net, and the fun is great. The teachers learnt to attach documents and some of them started to exchange ideas for work sheets between them. I e-mail my monthly circular to all teachers in the same way, not printing them at all. The fun is great! We feel we have entered the 21st century".

Ann was not the only one to "blame" me for technological changes. It was the turn of Abe's school to get new computerized equipment. In his scholarly way he said in his fifth interview (29.11.2001): "I have opened my eyes to see and my head to understand: by seeing I mean learning about the existence of the media; by understanding I mean the opportunity to

practise it and benefit from it. Unfortunately, I am still only using partially it and my proximate mission is to introduce its benefits to my staff".

Betty had not used any information technology at the beginning of the programme. In the fifth interview (14.12.2001), she described two forms of external virtual relations: "All four of us keep corresponding as a group. Moreover, my 'young age' coordinator is in e-mail correspondence now with the parallel coordinator in Laila's pedagogic centre, consulting with her. She is ready to discuss her problems with a distant colleague rather than with the local 'young age' coordinator in the local pedagogic centre. I told the chair of the parents' board, unofficially, about this programme. She suggested that we form a discussion group, using our personal e-mail addresses, and it works. When there is an unexpected issue it is raised in the e-mail, discussed and dealt with, thus not creating an urgent need to convene and find a proper date".

Laila's pedagogic centre is located in a small town; therefore, all the teachers who benefit from its services live close to it. The centre provides them with a 'homely' feeling. On one of my visits I found one of its staff members arriving to work carrying her newborn in her arms since her babysitter had let her down; all her colleagues took turns in looking after the baby. Under these circumstances, there was no real need to use virtual communicating channels. Still, in the fifth interview (6.12.2001), Laila told that: "We certainly do (use virtual communications - T.R.). It causes a problem, though. The 'heads' and me, we find ourselves working almost around the clock. However, we all know this is one of the consequences of working from home. Still, we are more synchronized than before and function in accord with one another".

Rona's school had been constructed and designed with an ample technological infrastructure. During "Actors" Rona had demonstrated a sophisticated technologic intra-use. After the programme had come to its end, she did not hesitate to seek virtual external relations: "Are you kidding me? All is done through e-mails. Besides, I have approached the nearest teachers centre, knowing they have an infrastructure that your organization, CET, has installed, and I asked them to form a room where I can handle a talking forum with colleagues. They are sorting it out and I hope to 'meet' my colleagues there" (Rona, 5th interview, 11.12.01).

At the beginning of the programme Rose pronounced loudly her technological ignorance (1st observation, 11.10.00, see pp. 378-382). My fieldnotes from her staffroom when I conducted the fifth interview showed some changes: "...in the furthest corner there were two computers, and three teachers, probably on a free hour, were gathering around them. When I approached and introduced myself they identified me as 'the cause of this change'. They showed me that they occupied themselves simultaneously with both computers: preparing a work sheet for their groups (all three were teaching Mathematics in lower grades) on one computer and reading the monthly circular on the other. They asked my advice regarding some 'Word function'" (Fieldnotes, Rose's school, 20.12.2001). Later in this interview Rose expressed her pride in view of the fact that the teachers, who were mostly females, were now able to use the web, not only at school but at home with their families as well.

Solomon, who was managing a science centre, had accessed the Internet before joining the programme. However, he found new uses that facilitated his management, completing the sense of involvement he had introduced to

his staff, as presented in 7.3.1: "I am away from the centre at least one day every week. The centre's computer teacher has established an infrastructure that enables the staff, including the secretary, to maintain a virtual multi-channel communication. We keep updating one another, and several times discussed issues using the net, thus avoiding time-consuming meetings" (5th interview of Solomon, 5.12.01).

Rachel was an exception in the group. In the fifth interview (13.12.2001) she admitted that she had neither formed relationships with other colleagues, nor adopted any virtual habits: "Nothing new for the time being: preparing my circulars on computers but nothing more".

The principals' testimonies showed that the main technological tool that the principals adopted was the e-mail. They used it for two purposes:

1. Connecting with others who were external to their schools (mainly for their inter-connections).
2. Establishing a school's intranet system (first steps).

I refrained from asking the principals why they did not adopt infrastructures, like the forums that they had constantly used. I preferred to discuss with them the half-filled cup rather than the empty one. My concern was for possible organizational changes that could help the principals in fulfilling their role, and leading their schools in new directions. What changes were anticipated, following the introduction of knowledge- technology?

Fullan (1994, p.85) relies on "countless studies that show that the majority of schools do not seek and process ideas from the outside". Therefore, he makes some suggestions to principals:

First, he or she needs to be involved outside the school, especially in learning activities... It will be necessary to be selective, but ongoing involvement outside the school, in some form, is essential for perpetual learning and effectiveness...

Mostly, however, we suggest that the highest priority be placed by the principal on helping teachers widen the contacts with the professional world outside schools. (p. 87-88)

Maintaining connections between schools is essential for their functioning and development: Argyris and Schon (1996) argue that the distinction between an organization and its environment is one of the main organizational characteristics. It is significant that, in addition to the organizational need to be goal minded and focused on its goals, it needs to be connected to its external environment. Sivan (1998) illustrates a metaphor that compares organizational structure to that of a city: "The process of constructing a learning organization resembles a city establishment, whereas interrelationships of its inhabitants, its physical structure and its infrastructures are essential" (Sivan 1998, pp.243, author's translation).

Sivan (1998) also added some restrictions that should be considered when encouraging technology-based organizational learning:

- The idea of 'professional colleagues' is not necessarily acceptable to all. Young principals and users tend to absorb the idea more than the seniors and experienced.
- Sometimes, lack of organizational abilities and organizational life-cycle perception and focusing may damage processes of opening the organization to its environment.

- It is easier to practice a partnership that is content-based than one that is process-based.
- Whilst virtual systems facilitate the transition of some to leadership, it prevents the transition of others.
- The virtual world changes the rules of the 'game' called 'becoming a leader and an entrepreneur'.
- 'Virtual leadership' calls for a leadership combination that differs from conventional leadership (p.256-257, author's translation).

These points, made by Sivan (1998), could explain some of the differences that I had found between principals as far as integrating knowledge-technologies were concerned. The two senior principals demonstrated it, in spite of the differences between them:

1. Rachel, who did not demonstrate any wish to progress in that direction was leaning on her experience in principalship, having practiced it in two schools.
2. Rose, who had been a principal for 15 years, tried to integrate such technologies because her school had been granted a budget and her experience guided her, rightly, not to lose it.

In accordance with the model that was demonstrated in Figure 5.1 (see p.196) I attempted to generalize some conclusions about the extent to which the principals who had participated in the programme had practiced the channels of information technology that it had offered. In order to do this and reach a conclusion about the programme's effect in the technological aspect, I adjusted the model of appraising the programme's effect (Figure 5.1 p.195) into the topic of integrating information technologies into management. Figure 7.5 relates to the elements that I mentioned at the beginning of this section, i.e., communicating with external factors and establishing an intranet system.

Figure 7.5: Integrating knowledge technology into management

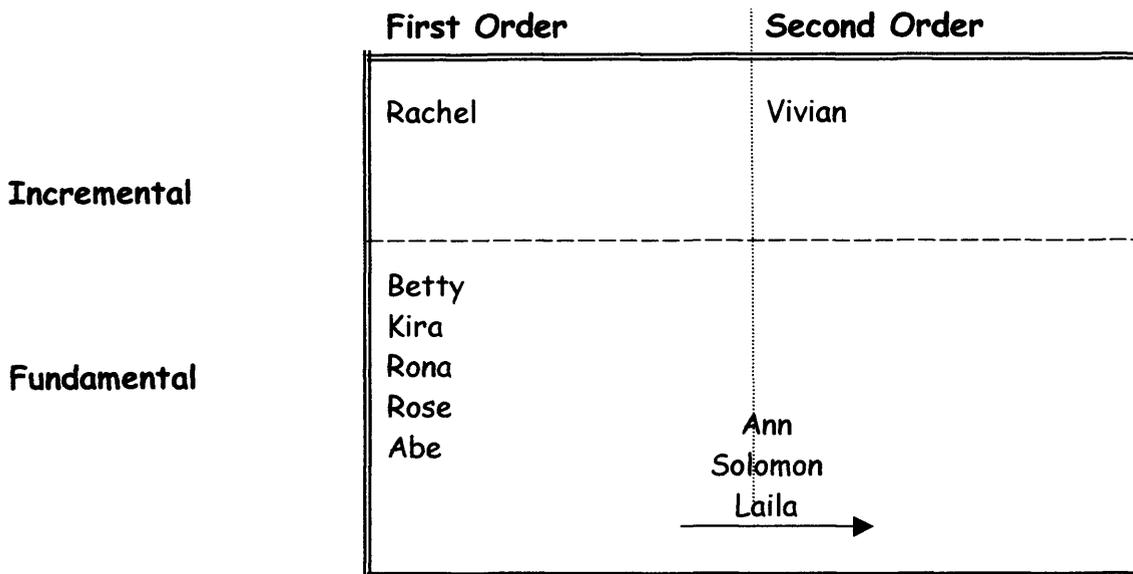
	First Order	Second Order
Incremental	No use is made of knowledge technologies to establish external relationships or an intranet system; thus, no organizational change takes place.	Some use is made of knowledge technologies to establish external relationships or an intranet system, but no organizational change takes place.
Fundamental	School uses knowledge technologies to establish external relationships or an intranet system, only during the programme, leaving it after the programme was over, but with no organizational changes.	School uses knowledge technologies to establish external relationships or an intranet system, during the programme, and after the programme was over, accomplishing organizational changes.

Positioning the principals in this appraising model raised some difficulties:

1. Kira was unquestionably the most advanced member of the programme. She was the most experienced principal at the beginning of the programme, declaring that she had joined it mainly because of its virtual character. Still, I could not detect a radical change that would position her in the model. She used knowledge technologies wisely but did not succeed in making them a lever for organizational change.
2. Vivian created another question: when I arrived to interview her for the fifth time (9.12.2001), I found that financial cuts had terminated the use that she and her teachers had started to introduce during the duration of the programme.

Rona headed a technology-equipped school; still, she did not make significant moves towards organizational changes.

Figure 7.6: Principals integrating knowledge technology into management



Ann, Solomon and Laila were the most "advanced". The first obvious fact was that they had not been necessarily technology-competent. Ann had been a "beginner" as a principal and as far as her technological capacities was concerned. Laila had been a beginner in headship with some technology experience, while Solomon was an experienced head with some technology knowledge. The progress was depending neither on former technological skills, nor seniority in principalship.

7.4 Summary

The chapter discussed the effect of the programme at the phase "Review". Therefore, it began by presenting this phase, defining its time boundaries, beginning immediately after the end of the activities of the programme in

July 2001. It came to its end after the fifth interview (5th F2F, pp. 374-375) with all principals, at the end of December 2001.

Like the first two phases - "Origins" and "Actors" - "Review" consisted of two stages: 'Independence' and 'Reflection'. 'Independence' was the period of time in which the principals prepared the next academic year and started it. It started at the end of the programme for professional development of the principals, coinciding with the summer vacation before the academic year of 2001-2002. The title 'Independence' symbolized the fact that the principals were not obliged to make or account for any use of what they had acquired in the programme. There was no pressure, social or otherwise, that they implement new styles of management, connect with one another or introduce information technology into their schools.

The 'researcher me' started, at this stage, to organize the data that I had previously obtained. Although I was curious to learn what was happening with the participants, I refrained from contacting them. However, while organizing the data, I realized that I needed to meet the principals once more. It was then that I started to plan the fifth interview. I entitled the second stage of the phase "Review", the period dedicated to the conduct of the fifth interview, 'Reflection'.

'Reflection' was a condensed period during which I travelled from one school to another, interviewing all principals. This interview was tape-recorded, unlike its four predecessors that had been noted in writing. The principals accepted this change willingly and later, on reading the transcripts, confirmed them. All these led to the discussion of the effect of the programme.

It could be argued that a period of six months was not long enough to appraise the effect of the programme. On the other hand, it was important to look into it while there was still an open connection between the principals and me. I intended to look for evidence of this effect in three aspects:

1. Managerial behaviours of the participants (referring to the first research question).
2. Interrelations they maintained with one another (referring to the second research question).
3. Introducing information technology into management (referring to the fourth research question).

Although "Review" was the third phase of the research, it related to all the researched aspects of the first phases - "Origins" and "Actors", because it followed them and the researched individuals were the same. Whenever possible, I supported the evidence that I obtained through the interviews by fieldnotes taken during my visits to the schools. I used the model that I had structured in Figure 5.1 (see p.196), based on Cuban (1990; 1992) and Watzlawick *et al* (1994) for summing up the changes.

7.4.1. Managerial behaviours of the participants

The display and analysis of the data regarding this aspect referred to two components:

1. Changing role-structures at school.
2. Involving staff members in school planning and decision-making.

In order to organize the data I adjusted the model to these components, as presented in Figure 7.2. (see p.289). After having discussed the data, I

positioned the principals in the model (Figure 7.3, p.300). I was then ready to conclude that:

1. One principal did not change the role structure or the degree of involvement, although her starting point was progressive compared to others.
2. Five principals did not change role structures. They introduced new working styles to the existing structure; they also broadened their staffs' involvement in school decision-making and planning.
3. One principal started some changes in role perception and structure at her pedagogic centre; that was why I positioned her as passing between two sections of the model.
4. Two principals broadened their staffs' involvement and introduced some changes in role structure, demonstrating some evidence of their institutionalization.
5. One other principal, who had been confident of the irrelevance of any role structure at her school because of its small size, realized during the programme that she needed to abandon existing attitudes and went all the way, introducing changes in both aspects.

Would it be the same regarding maintaining relationships with colleagues?

7.4.2. Maintaining relationships with colleagues

One of the programme's aims was to create a professional support group for the principals, who, I had believed, did not find such support with their neighbouring principals. Relationships had been formed during "Actors", forming steps of the passage from the 'instructor-centred' stage to the 'participant-centred' stage. Did they keep going, or even developing, and for what aims?

I presented the data, organizing it in a table that displayed the topics that brought principals to share and consult. Its presentation, in Table 7.1, also identified the supporting testimonies. Figure 7.4 (see p. 304) demonstrated the network of relationships between principals and their direction: unilateral, bilateral or multilateral. Principals testified that significant relationships addressed:

1. Turning to resources of expertise (pedagogic and science centres).
2. Establishing connections between schools: teachers and pupils.
3. Advising and seeking advice.
4. Professional friendly talk.

Having covered this aspect, I turned to look into the integration of knowledge-technology into management.

7.4.3 Integrating knowledge-technology into management

In order to clarify the significance of this kind of change I turned to Fullan (1994), who explained the importance of schools' and principals' capacity to be open to what was occurring outside their institutions. Fullan (1994) relied on several researches that had proven that it became existential for schools to connect to others. Argyris and Schon (1996) supported Fullan's (1994) argument. Sivan (1998) specified the significance of knowledge-technology as a connector between organizations. Nevertheless, Sivan (1998) indicated probable obstacles that could arise in such situations. I related some of these obstacles to some of the participating principals.

Once again, I adjusted the model of change, based on Watzlawick *et al* (1994) and Cuban (1990; 1992) to the topic of technology integration, considering three components:

1. Using technology in order to facilitate external relations.
2. Using technology in order to facilitate management.
3. Using technology in order to establish organisational changes.

The findings that I presented related to these components, leading to positioning the principals in the model of appraisal in Figure 7.6. The findings showed that the progress was dependent neither on seniority in principalship, nor on prior technology experience.

This chapter has concluded the programme for professional development of primary principals, and the action research that has investigated it, by presenting and analysing the findings of the three phases. This leads to Chapter 8 that will consider the research questions and conclude the whole process.

CHAPTER 8

CONCLUDING THE RESEARCH

8.1 Introduction

This chapter summarizes the research: it addresses three main themes. First, it discusses the research questions. Whilst Chapters 5, 6, and 7 presented and analysed data that concerned these questions, they did not refer to them directly. Therefore, based on the data and analysis, some conclusions regarding these questions are presented here. Thus, the first part of the discussion is divided into five sub-sections, each of them addressing briefly one of the research questions.

Considerations regarding the limitations of the research follow, divided into two parts: the first part describes limitations of the present research while the second one presents suggestions as to how I would conduct a similar study if I were to do it again.

Since the research has been qualitative, some importance is ascribed to my reflections on it. The main motif of this discussion is the satisfaction that conducting the programme gave me, as it provided an opportunity to materialize a challenging idea of mine. The discussion presents the depth that the research bestowed upon the programme, as well as the high demands it presented at the same time. At the end of this part, I briefly discuss some of the experiences that I have had in the academic year of 2002-2003 concerning programmes for professional development of future principals, and the virtual parts of such programmes.

Although I have been able to draw some conclusions from this research, there are still open ideas and questions that deserve further research. Therefore, the discussion presents what could be learnt from it, and what would be my recommendations for such a continuation.

The last part of the chapter reviews briefly the main themes of this chapter and brings this thesis to its end.

8.2 The research questions - conclusions

This section directs the attention of the reader back to the five research questions, summarizing the main conclusions regarding each of them. The research questions sought to examine the effect of the programme for professional development of principals in to four main aspects:

- a. Changing managerial behaviours - question No. 1.
- b. Forming a professional support group - question No. 2.
- c. Adopting patterns of use of information technology - question No. 4.
- d. Characteristics of virtual programmes for professional development - questions No. 3 and 5.

8.2.1 Changing the behaviours of managers

The first question asked: "How effective was the researched programme?"

I defined behaviours of managers in terms of two criteria:

- a. Changing organisational structures of their staffs and involving staff-members in decision-making.
- b. Integrating ICT into management: I will address this issue when discussing the fourth research question,

Criterion (a) is relevant to the first research question and has addressed the fact that the shift of school management from its traditional mode to the autonomous form and to self-management has shed light on the role of principals: it has emphasized human resource management and has stressed the significance of teamwork. This has included "Defining school's educational policy and planning ways of realizing it" (Glaubman and Iram, 1999, p.467, author's translation) and "teamwork thinking and planning school's ideological decisions, as well as practical ways of implementing them ... reached by all members." (Danilov, 1996, p.34, author's translation). It has raised my interest to discover to what degree did the programme affect the managerial behaviours of its participants?

The findings demonstrated the substance and degree of changes in behavioural patterns. I will present two examples that are different from each other that show such changes: One principal, Kira, had been very confident, before joining the programme, about the irrelevance of role definition in her school because of its unique circumstances (a small rural school). During the programme, she realised that there was more than one way to approach this issue. Thus, she led in her school a process of role definition, establishing, at the same time, new patterns of staff involvement.

On the other edge of the continuum there was Rona, who had been highly involved in the programme demonstrating innovations in her headship before having joined it. However, she did not change anything either in the role structure of her school, or in the degree and nature of her staff involvement. While she thought that the programme confirmed that her headship was appropriate, it did not initiate any changes.

In between these two extremes there were other principals who were affected by the programme: five principals (Abe, Vivian, Ann, Rachel and Rose) did not change the role-structure of their schools but introduced new patterns of collaborative work, involving their staff-members in decision-making in more ways than they had done before having joined the programme. Two principals (Solomon and Betty) broadened the involvement of their staffs, introducing some changes in the role-structures and practising them. The tenth principal (Laila) tried to change the perception of her staff concerning the role structure of the Pedagogic Centre, trying to materialize this perception in the future.

I could summarize saying that there was no strong evidence of principals who had changed the organisational structure at their schools; Kira was the exception: all other principals had shown evidence of changes within the existing structure, mostly as far as joint definitions of schools' roles, and forming a frameworks for collaborative work of coordinators and teachers were concerned.

8.2.2 Becoming part of a support group

The second question asked: "Can such a programme form an active and worthwhile support group for its participants?" Friedman (1997a) and my personal experience, have commented that feelings of isolation and solitude accompany principals as part of their role. Moreover, these feelings could catalyse principals' burnout.

The context of the Israeli educational practice brings together principals who head neighbouring schools that sometimes compete with one another. Such situations reduce the possibility of creating professional communities of principals. The principals who participated in the programme were able

to make it an opportunity to collaborate and share, without being threatened by one another. This explains the context of the second research question. I looked into this question using two functional elements: 'openness' during the phase of "Origins" and 'involvement' during the phase of "Actors".

In order to achieve openness it was necessary that a mutual appreciation would develop among the principals, during the programme. I tried to learn about it by asking for the principals' views on one another. Their answers showed that they evaluated and appreciated one another on three dimensions: the professional, the social and the personal. Whilst the principals differed from one another in the weight they attributed to each dimension, they generally expressed a high appreciation for their colleagues in the programme, as well as a belief that they could learn from one another. Thus, each one of them was prepared to open up to the other group-members. I discovered this preparedness during the first phase, "Origins". It remained to be seen, in the next two phases, whether this openness would transfer into an involvement with one another, what would be its context, and would such joint ventures continue after the programme had come to its end.

During the second phase, "Actors", the participants in the programme acquired the necessary technological skills and knew one another's pedagogical attitudes and opinions. The a-synchronized sessions, as well as the numbered face-to-face sessions, revealed an increasing degree of mutual involvement that included expressions of support for one another's attitudes and siding with one another. Their discussions revealed that they felt that they could be straight forwarded and even criticizing with one

another, if necessary, without jeopardizing their collaboration. Behaviours of support as well as a certain degree of competition have developed in the group. Such behaviours are part of the dynamics of groups, in general. As for their mutual involvement outside the boundaries of the programme, the participants have chosen with whom, in what ways and what subjects to communicate, discuss, and consult.

The data that the research has presented show that the principals formed independent inter-relationships outside the programme, and that these communications served them as part of their efforts to improve and enrich their managerial capacities and functioning. The joint ventures of Kira, who was heading a rural school in a secular community, and Vivian, who was heading a religious school in an orthodox small town, provided an example of the feasibility of forming support groups through a virtual programme.

It also showed that those principals who seemingly could not collaborate with one another because of the differences in cultures and emphases, could form cooperative and productive relationships. Another example was the mutual communication of heads with colleagues who did not head schools but specialized in various areas (arts, educational environments, science). Such communications depended highly upon a confidentiality that was secured by the geographical distance and proved beneficial to all concerned. At that point, it remained to be seen whether they would maintain these relationships after the programme came to its end.

The evidence that I have obtained concerning the third phase - "Review" - after the programme had come to its end, show that all participants, with the exception of Rachel, maintained inter-relationships with one or more of

the others. They turned to one another expecting to receive and give support in various aspects. In some cases it meant seeking specific expert knowledge that they had come to appreciate in one another. In others, it meant looking for opportunities to establish connections between schools - teachers and pupils - in order to broaden the spectrum of their activities. The principals' accounts revealed cases that they had sought advice under certain circumstances, and offering it under others.

They also told that in some cases they kept connecting with one another, just for the sake of maintaining professional discussions with colleagues. Throughout all three phases of the research, the group was becoming crystallized, its members strengthening their preparedness and willingness to benefit from one another and support each other mutually.

8.2.3 The user-friendliness of synchronized and a-synchronized discussions

The third question asked: "To what degree are synchronized vs. a-synchronized sessions user-friendly?" Most a-synchronized generated an active participations. The principals accessed them, and sometimes admitted in the interviews that they had preferred to stay passive readers, but were still eager to follow their colleagues' opinions.

As for the synchronized sessions, I have described at length in Chapter 5, how the only session of that kind that had taken place turned out to be a total failure. I will not describe it again, limiting myself to saying that under the unique circumstances of the research I failed to provide a solid answer to this research question. In 8.3.1, when discussing the limitations

of the research, I will address this research question again, from a different point of view.

8.2.4 Making use of virtual tools in management

The fourth question asked: "To what extent, in what ways, and how effectively do participants utilize virtual tools as managerial communication systems, following such a training programme?"

I had been certain that virtual tools could facilitate the work conditions of principals and serve as useful "time-savers" in their heavy burdening schedules. This conviction had been one of the generators of the programme's virtual nature. However, I had known all along that if the virtual channels did not become part of the principals' professional tools, the whole idea would end up as a fruitless exercise. Therefore, during my visits to schools for the interviews, as well as in the interviews themselves, I looked for cases that would demonstrate that participants' 'made friends' with virtual tools utilizing them in their routine work, and the degree of these uses.

I could not find a connection between the principals' previous technological capacity in the case of the principals' adjustment to the use of asynchronous sessions. However, I could mildly such capacities with the manner and pace that principals had introduced technological tools into their practice: for instance, while Kira, who had mastered the Internet before joining the programme, enhanced its use, some of the other inexperienced principals proved to be 'daring' in certain aspects.

This boldness could be seen when some principals installed in their offices computers that connected them to the Internet. Others, after having realized the benefit of accessing the web around the clock, did the same in their homes, becoming available to others (colleagues within and outside school) at all times. Some principals have installed computers in staffrooms, thus encouraging teachers to use them. The more 'daring', started to communicate with, and pass information to, teachers through e-mails. Most principals also maintained reciprocal communications with other participants through e-mailing.

However, this was the limit of their actions. There was no evidence for a break-through such as independently opening forums of teachers-parents, or communicating with others who were not members of the group. It would seem that such a change required a broader experiential basis in order to provide the principals with self-confidence and help them trust their ability to initiate activities of that nature. I would dare and assume that such changes would have to rely on general developments of the educational system, in these aspects.

8.2.5 An "ideal" proportion of face-to-face and virtual sessions?

The fifth question asked: "Is there an 'ideal' proportion of face-to-face and virtual sessions in such a training programme and, if so, what is that proportion?" The answer to this research question turned out to depend mainly on two factors: the individual who had been asked and the timing of the question. At the beginning of the programme all principals with the exception of Kira, had had no previous experience with virtual channels. Therefore, during the first interview (see pp. 364-366), nine out of the ten participants valued highly the opportunity to meet one another in

person. They were ready to try the use of virtual channels, but still looked forward to the opportunity to be introduced to other colleagues in the traditional way. Kira was the only principal who admitted that she had joined the programme because of its virtual nature; all others were prepared to 'endure' the virtual parts of the programme for the sake of communicating with others, for reasons discussed in the second research question (see 8.2.2).

However, this attitude kept changing constantly during the course of the programme. The participants shifted from preferring face-to-face sessions to preferring virtual sessions, explaining this by two factors: the first was their progress in mastering the virtual channels, mostly the forums and e-mailing. The second was a result of the effort they had had to make in order to attend the face-to-face sessions: the long and demanding drives and the need to be away of home and school for the greater part of the day, sometimes even overnight. At the end of the programme those principals, who wished to continue and convene in a continuing programme, offered to keep it just through virtual sessions.

The relevance of a programme for its participants, their ability to master its virtual vehicles and the available alternatives - either giving up the programme or the need to drive long hours to the meetings - increased the preparedness to take part in virtual sessions. This proved the feasibility of programmes for principals who were geographically remote from one another. It seemed that principals would be willing to participate in such a programme. However, in order to conduct such programme, it would be necessary to ascertain the training of the participants in the use of virtual

vehicles. The relevance of the programme would be crucial in a virtual programme as well as in a conventional one.

In view of some of the weaknesses of the research, as discussed in the following part, I have been very cautious in presenting its conclusions

8.3 The limitations of the research

Discussing the limitations of the research, refers to two parts: it presents aspects of the research that might diminish its value, leading to some thoughts about the ways I would have conducted the research if I were to do it with the knowledge I have gained through the present experience.

8.3.1 Some self-criticism

The limitations of the research have been partly discussed earlier, mainly in Chapter 3 (see 3.5.1, pp.112/3). I will list these aspects without addressing them in detail in order to avoid repetition. My double role, of which each aspect - the researcher and the instructor - was very demanding, could have been a crucial limitation. I have discussed, in Chapter 3 (see 3.5.1, p.117) instances of "neglecting" the instructor's role in order to avoid harming some aspects of the research. However, there has been an additional development of this aspect: during the programme and the research, the conflict of the role strengthened as I found myself fighting my tendency to prefer my obligations to the 'researcher me' over my obligations to the 'instructor me', sensing, at the same time, the possible professional injustice I would do to the participants.

Another weakness that I came to identify only when it was too late to change anything related to the synchronized (chat-room) experience that

we had had in the synchronized session. There was an active correspondence regarding this experience (see pp. 390-391) and the participants referred to it in their second interviews. After the programme came to its end, and I reread their comments, I realized that I might have lacked sensitivity in listening to their voices, and missed an opportunity to try the use of a chat-room again, under different circumstances. At first, I assumed that the success of the a-synchronized session reflected the progressive capacities of the participating principals. Reality proved this assumption mistaken: one a-synchronized session could not enable me to foresee the participants' general virtual ability. It rather demonstrated that they had been ready to try virtual conferences of an a-synchronized nature, and that the first forum must have been relevant to them. It proved nothing about their capacities.

My view about a-synchronized and synchronized sessions did not take into account the 'time factor' that differentiated them from each other: while a forum enabled its participants to access it at a time of their convenience, and divide their time between reading, thinking and writing, the chat-room was very different. What did the participants complain about? They said that the need to read, think and type their thoughts, in a short, given space of time, had been difficult for them. It would seem that my 'enthusiasm' to progress in the programme, as well as in the research, and my naïve belief in the virtual capacities of the participants, distorted my judgment.

The technological choice regarding the infrastructure of the chat-room was an additional obstacle to its success. The advice that I had received from experienced persons in computer communication at CET indicated

that adding visual components - like videoconferencing - could complicate the communication, thus damaging it. As an after thought, and in view of the consequences, I thought that a synchronic videoconference might have been more friendly; the participants had probably used audiovisual appliances before, thus such an environment could have resulted more user-friendly than computer technology.

An aspect that I never addressed, in spite of its crucial importance, was the cost-effectiveness of the programme. By cost-effectiveness, I refer to the assessment of several costs and benefits as:

- a. The cost of maintaining such a programme.
- b. The cost of preparing a cadre of experts in order to turn it from a unique case to an officially established mode of professionally developing principals.
- c. The cost of training different participants each time in order that they can take part in such a programme.
- d. The cost of building and maintaining the technological infrastructure.

All of the above should have been considered in the light of the effectiveness of the programme on the principals' functioning, compared to the effectiveness of other programmes that are available. In view of these considerations, how would I behave "if I had to do it again"?

8.3.2 "...If I had to do it again"

As much as I liked both my instructing and researching roles in the research, I think that I would decide to choose one of them as my role in another research of this type. In doing so, I would separate instruction

and research from each other. Such a change would implicate some methodical changes of the research that would not be an action research. What could the programme and the research gain from it?

The programme could have gained a 'total instructor', dedicated solely to this role. This way the exclusive commitment of the instructor would be to the programme and the participants, avoiding situations of role-conflict. The research, on the other hand, could have been conducted in an impartial manner, avoiding situations that could have affected the programme. This comment does not mean to imply a criticism of action research; it rather offers a different way of conducting such a programme and researching it. I must also emphasize, the fact I suggest this role separation in a probable future research, does not reflect that I repent my choice in this research. I would not have done it differently since I deeply value my accumulated experience in both roles. I am confident that the research that I have conducted will affect positively my future practice with primary principals, as well as any future researches I would conduct.

I would like to refer to the failure of the synchronized conference: in Chapter 3 (see 3.2, p.102), I presented the reasons for choosing the infrastructure, and in Chapter 5 (see 5.3.2, pp.200/201), I described its outcomes. Looking back, I think that I have yielded too hastily to the participants' demand to refrain from communicating in a chat-room again. The fear of 'losing' my audience defeated my ability to judge correctly. I think that the volume of the principals' voices against a repetition of such an experience prevented me from trying it again. I could have tried to deepen the participants' skills in synchronized sessions and then, try to use it again. Alternatively, I could look for an audiovisual infrastructure that

would be a similar environment to a face-to-face session, freeing the participants of the reading and typing that have slowed them.

Up to this point I have discussed my role in the research from a practical point of view, mainly considering its two faces. However, there was a high emotional aspect, which I would wish to discuss in a reflective manner.

8.4 My personal reflections on the research

The first word that I would associate with the whole process of the programme and the research is 'satisfaction'. Long before I started working with the group, I had toyed with the idea of conducting a mainly web-based programme, knowing at the same time that it would not be easy to initiate and run such a project.

The first two differences between this programme and any other programme that I had previously conducted for primary principals were the way that I recruited the participants and the fact that they had not known one another previously. These two factors complicated the situation from the beginning. Usually a supervisor or a head of a LEA has initiated my work with a group of principals, and have chosen the preferred themes. In this case, I created the programme and was responsible for all its aspects. It was my role to find the volunteers and convince them to join a programme even though its themes had not been defined. Moreover, it was in my best interests to maintain the programme and not do anything that might cause them to drop out of it, endangering the research. As a result, I felt that my responsibility for both the programme and for the research enhanced the quality of the programme; moreover, my commitment to the members of the group was binding. The participants had joined the

programme voluntarily, dedicating to it a substantial part of their limited time. They kept making great efforts of various kinds: having to travel long hours to participate in the face-to-face sessions, letting me into their schools opening them up to me, taking the time to participate in the forums and perform the tasks. I felt obligated to respect their needs, their professional dignity and to do everything I could to maintain their confidence.

When I started the programme I could only offer its pioneering spirit to the principals. There had been no previous successful history of virtual programmes for professional development of principals in Israel, that I could present or rely on. In addition, the programme's virtual nature demanded that the participants adjusted to new channels of communication and absorbed their use, adopting and practising them. This enhanced, even more, my commitment and dedication to the principals.

Another key factor was mutuality: although the participants regarded me as a professional authority, which had been the main reason for them to join the programme, I insisted on relating great importance to their own experiences and views. I chose not to be the instructor who knows everything, preferring the 'learning together from one another' attitude. A directive lecturing style could have proved in some ways to be more effective as far as changing managerial behaviours was concerned, thus more beneficial for both the principals and the results of the research. However, this was a price I was not prepared to pay: my usual attitude in coaching, advising and instructing principals starts from respect of their experience as an important source of learning. I was not ready to change this attitude for the sake of possibly achieving a higher level of

effectiveness and a more definite and positive answer to my first research question.

Eventually, the change of my instructing style became part of my professional character. In the year that followed the programme, in various instructional situations, I found myself to be listening more and instructing less. It seemed that I had gained a greater understanding that trainees' experience, attitudes and former knowledge - though informal - was of much value and deserved the opportunity to be heard. Thus, I found myself more of a listener and less of the knowledgeable instructor; I was ready to make concessions for the sake of letting the members of the group develop their own ideas and suggestions.

As I have noted before I was eager to start the programme. However, as much as I had wanted this for several years, I was aware of the need to document and research it in order to turn my personal knowledge into public knowledge. Writing the thesis opened the gate for this, on one hand, but soon proved to be very demanding on the other. In my practice, I usually have to make decisions within unexpected contexts and I am prepared for the consequence of success or failure. Usually, the approach of 'trial and error' appeals to me, even though I am aware of the possibility of failure and frustration; I consider them as 'tutorial payments'. However, in the case of this programme, the research forced me to think and rethink every move with much care and attention.

The first factor was the need to plan, foreseeing the procedure and the probable consequences of each step. The second factor was paying attention to the documentation and taking advantage of it, not only for the

sake of the research but also during the programme as guidelines for improvement. I believe that this has been one of my gains from this experience: learning to slow down, looking carefully into the instructional situation and improving the next steps accordingly. In a way, I gained personal professional development as an instructor of principals.

The need to slow down and take time for thinking, collided with the demanding schedule that the programme created for me: at times, I found myself on the roads day in, day out, going to the remote areas where the principals worked, in order to interview them. This was a demanding part of the research. I made it a rule to mail the text of the interview to the participants on the day that it took place, trying to avoid a probable blur of memory. As soon as they had confirmed the texts I translated them into English. I also translated most forums as well, keeping in mind the importance of these texts to the research.

At a later stage I marked every research question by a different 'computer-marker' and I mapped the texts of the forums and interviews, using the same markers. When a part was relevant to more than one research question, I copied the part of the text, marking them each time with the relevant marker. This way, I maintained a constant map of the data that was accumulating relating to each research question. I found myself trying to do it in my ordinary work that had nothing to do with the research, as part of mapping the instructional situations and reactions. In fact, I still do it, even now, and therefore processes of documentation have become part of my instructional routine.

My hope to make available virtual programmes for principals and coordinators is materializing very slowly. During the academic year 2002-2003, I have been instructing a group of coordinators who are considered as candidates for headship. They all live and work in the same town, but in different, sometimes competing, schools. At the beginning, I had to establish some unwritten but agreed rules of confidentiality within the group. Then, when the members of the group realized that our time together did not always enable them to study some of the discussions exhaustively, I offered that we continue to do it in a virtual manner. In view of my inability to hastily create a proper infrastructure, I created an emailing group, and we started our discussions through that. Soon, a virtual conversation developed, allowing more members to express and share their views. Some members addressed me directly, presenting their own professional issues privately and asking for advice. Others told about their 'private' emailing with one another concerning professional themes.

I feel that a part of my virtual instructional vision is realizing itself, and this satisfies me very much. I have to add that this whole part of the project is unofficial and not financed; it means that the time that participants invest, as well as my time, is still not officially considered as part of the programme, but rather as a realization of my private ideas. Apparently, the way to institutionalize such instructional courses is still long, although formal groups of academic learning do exist and get the proper accreditation.

In view of all this, what would I recommend for further research?

8.5 Recommendations for further research

I would like to start by saying that I believe that further research is needed. I have identified some limitations of my research that need to be corrected in the future in order to learn more about the potential of virtual programmes for the professional development of principals. I would, therefore, advise that:

- a. A programme of this kind should be approved by an official authority (such as an academic centre for training principals, the Ministry of Education LEA and so on...) as an official experiential programme for professional development of principals.
- b. An academic research centre should conduct a following research about its different aspects.
- c. That such a programme be financed, thus the researchers will be able to assess its cost-effectiveness as compared with other programmes that the educational system acknowledges and finances.

If such an experiential programme develops, I will be satisfied that my vision of programmes for professional development of principals that are mainly web-based is beginning its march and I have been lucky to be its pioneer. Privately, I will continue to try to practise such programmes, within the limits of my personal time and technological capacities.

8.6 Summary

This chapter has concluded the thesis. It started by reviewing the five research questions, drawing conclusions regarding each one of them. The conclusions have not been definite in term of positive or negative answers. This is not surprising since the questions did not call for such answers. The qualitative nature of the research, have not aimed towards the

identification and acknowledgement of decisive answers; they have rather facilitated a follow-up of developing attitudes and behaviours, as the presented and analyzed data that chapters 5,6 and 7 have presented.

Next, it discussed the limitations of the research. The discussion referred to limitations that were caused by subjective causes that had to do with my inexperience and objective causes that derived from the unique circumstances of the research. In the next part I discussed my 'wishful thinking' about conducting such a programme and initiating its research in the future. I also described some limited experiences of using virtual vehicles in training programmes that I have been practising in the current academic year of 2002-2003.

The last section discussed my recommendations for further programmes and research. It also sets out what I believe should have been the conditions that ought to apply to this research. This concludes the challenging and intriguing experience I have had in conducting the programme for the professional development of primary principals.

I would like to let two principals of the group to say the concluding words. The first principal is Rachel, who has refrained from establishing collaborative relationships with her colleagues throughout the programme. In the concluding fifth interview (13.12.2001), she admitted regretfully: "You know I have a sense of loss regarding our programme, and I know I am to blame. I believe I would have behaved otherwise, had I started it again: more cooperation would have served me; more virtual interaction would have developed my capacity".

The second principal is Abe, an orthodox principal who would not even shake my hand because of his religiousness: "It was the first time that I felt the process of becoming a part of a group that is 'mine', not because I have to be part of it, but because I like it. You must realize that we, religious people, especially teachers, naturally belong in groups, whether we like it or not. This was a group of my choice. I could quit at any given moment, and I wanted to be part of it. This sense of belonging strengthened during the year and with every session, face-to-face or virtual, I learnt a lot just from listening to others' opinions, or reading them in the forums. I got some good advice, some directly from you and others, indirectly. Taking part in the forums taught me the skill of self-restraint, not having to respond immediately and taking the time for reflection. I believe it will be reflected in my dialogues with teachers and parents. I would like to let the teachers experience it, so it is reflected in their relationships with their pupils. I wish... I still have much to wish for".

These two, as well as the reflections of other participants has made the programme and the research a significant, worthwhile and fruitful experience, looking at this point both backwards and forwards.

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Appendices

While I was arranging the findings and preparing them for analysis, I marked some of the texts, to find their relevance to the research questions. I used the markers to distinguish between the questions, as follows:

- a. To what extent is training principals, that is mainly web-based, effective
- b. To what extent can a web-based framework of training be supportive for its participants.
- c. What sorts of web training are comparatively more effective rather than others (synchronized or a-synchronized)?
- d. Do principals who participate in web-based training groups, tend to adopt this mode of communication as a managerial tool?
If so - how and to what extent?
If not - why?
- e. Is there an "appropriate" proportion of web training and F2F? If so, what is it?

Therefore, some of the appendices are marked, using these colours. Those phrases that seemed relevant to more than one research questions, I copied and coloured them respectively.

Interviews: I documented the first four interviews, at the time that it took place, using a laptop. At the end, I gave each principal a diskette with the file of the current interview. I asked them to read and comment if necessary. However, not even once any of them asked to change any of the written materials.

Forums: when the text appears in a red font, it means that the "speaker" refers to one of his precedents.

Appendix No. 1

The Itinerary of the Research

Time	Activity	Data obtained
May - Aug. 2000	First Interview with every one of the 10 prospect participants	Written documentation of every interview (translated)
11 October, 2000	First Face-to-Face Meeting: Acquaintanceship; Learning the technological environment, learning the group, discussing arrangements, establishing norms.	Observations: the researcher's and that of a co-researcher
25 Oct. - 15 Nov. 2000	First forum: Ne'ot Ha'Kikar School	Full documentation (translated)
13 Nov. 2000	Second Face-to-Face Meeting: Staff development	Observation The products of the groups
22 Nov. 2000	First on-line session (chat-room)	
23 Nov. - 26 Nov. 2000	E-corresponding, regarding the synchronized session	Documentation
30 Nov. - 20 Dec. 2000	Second Forum: Issues in Staff Development": Aliot School	Transcription and observations: the researcher's and that of a co-researcher
21 December 2000	Correspondence about Staff Development Forum	
15 Jan. - 15 Feb. 2001	Second Interview	Written documentation of every interview (translated)
10 Jan. - 24 Jan. 2001	A virtual assignment: The Futuristic school	Two "projects" of two groups of principals

Time	Activity	Data obtained
7 March - 21 March 2001	Third Forum: A "Bookless School"	Full documentation (translated)
22 March - April 1 st . 2001	Correspondence following the forum about the "Bookless School"	Full documentation (translated)
10 March - 30 April 2001	Third interview	Full documentation (translated)
15 March	Presenting the "Final Assignment" in the web	
15 March - April 1 st . 2001	Fourth Forum: Participants' comments upon the assignment and the way it has been presented	Full documentation
15 April 2001	Presenting the presentation "All you ever wanted to know about Evaluation and never dared to ask..." in the website	
15 April - 20 April 2001	Fifth Forum: Principals presenting questions towards the face-to-face meeting about Educational Evaluation	Questions on the website
25 April 2001	Third Face-to-face meeting "Educational Evaluation"	Observation (translated)
May 1 st . - May 15 th . 2001	Sixth Forum "Being a Principal in the 21 st Century"	Full documentation (translated)
15 May - 15 June 2001	The Fourth Interview (last one)	Full documentation (translated)
31 May 2001	Fourth Face-to-Face meeting "Marketing Schools" and immediate telephone interview	Observation (translated)
10 June -	E-correspondence: why do you	Full documentation

Time	Activity	Data obtained
15 June 2001	think the last forum did not develop at all?	
15 May - 15 June 2001	Participants presenting their Projects (assignment)	9 Projects (2 of them translated)
June 20 2001	The Fifth face-to-face meeting "How to conclude ..."?	Observation
June 20 - July 1 st . 2001	Seventh Forum: A farewell Forum	Documented
July - August 2001	Eighth Forum: Participants relating to at least 2 projects of colleagues	Planned but not carried out

App. No 2

Timetable of Interviews

Participants	1st Inter.	2nd Inter	3rd Inter	4th Inter	5th Inter
Abe	29.6.00	25.1.01	14.3.01	14.6.01	29.11.01
Vivian	20.8.00	4.2.01	11.3.01	27.5.01	9.12.01
Ann	24.5.00	22.11.01	21.3.01	7.6.01	21.11.01
Kira	13.8.00	14.1.01	22.3.01	28.5.01	3.12.01
Laila	17.8.00	28.12.00	19.4.01	15.6.01	6.12.01
Rachel	16.8.00	16.11.00	15.3.01	30.5.01	13.12.01
Betty	6.6.00	5.12.00	17.4.01	22.5.01	14.12.01
Rose	5.6.00	18.12.00	26.3.01	24.5.01	20.12.01
Solomon	14.8.00	24.12.00	25.4.01	5.6.01	5.12.01
Rona	19.6.00	8.1.01	16.4.01	26.6.01	11.12.01

Appendix No. 3

First interview with all principals, between May 2000-August 2000

I conducted this interview before the beginning of the programme,. I visited every principal at his / her school. When I called the principals to schedule the interview, I described the unique virtual nature of the programme, and to my agenda as a researcher. These phone conversations prepared the prospective participants, and formed their interest or disinterest in the programme. Those who were interested invited me over, and then this interview was conducted.

The interview was planned ahead. However, There was no need to present all questions, because every interviewee answered most of the sub-questions naturally, on his/her own. Sometimes there was a "reminding" of an additional point from the list of questions, but generally the interview was flowing and the answers were built-in with almost no need to ask all the details.

The interview itself:

1. How many years are you functioning as a principal? Is it your first headship or have you head another school before this one?
2. What have you practised in education before getting to be a principal? Have you been a teacher? What were the subjects you taught? Did you teach at the same school you are heading now, or in any other school?
3. Did you participate in preparatory courses or studies as part of getting your qualification as a principal? What were these programmes? Do you feel these studies prepared you towards your role as a principal? In what way / aspect?
4. Have you continued to learn during the time of your principalship? What is it you learn? Whose initiative was it - yours, your supervisor, anyone else? Are your studies relevant to your role, in what way?
5. Tell me about your school: how many students, in how many groups? What grades are there at school (*My own comment: 40% percents of primary schools in Israel are still schools of 1-8 grades; some others are K-6). This is why this question was presented*)? What is the socio-economic background of the students? How many teachers are there at your school? How many of them are "group leaders" and how many "subject-matter" teachers?

6. What seem to your main three tasks as a principal? Why do you consider them important? Do you feel qualified and prepared enough to carry them out? What are you doing in order to prepare yourself and your staff to succeed in dealing with them? What do you still lack, and how will you fill it, considering those tasks?
7. Who are the leading teachers in your school? Coordinators? Others? What are the main "roles"?
8. Please, tell something about their contribution to your school. Do you consider them helpful in administrative assignments? In educational issues? Are they loyal as distributors of you ideas and messages? Do you feel that you "manage" them effectively? With what are you satisfied? Dissatisfied?
9. How do you choose / nominate the coordinators at school? Who, if any, shares the process of decision-making? How are they presented in the staff room? Are their nominations permanent or are there personal changes? Is there a process of feedback? Who participates in it? How do you express satisfaction or dissatisfaction?
10. What training styles do you prefer: On what subjects would you like to focus? Are you willing to participate in a group of principals? Would you prefer principals that you know or "strange" principals? Would you like some kind of individual guidance? If so - in what areas?
11. What would you expect to gain from a participation in a group of principals? A support group? "Managerial prescriptions"? Sharing experiences of success and frustration? Something else - what?
12. What are your computer-communications skills, experience, and infrastructure?

Appendix No. 4

Second interview with all principals, January-February 2001

By now, the participants have practised various manners of communication:

- a. One face to face meetings
- b. Two virtual forums
- c. One synchronized meeting (chat-room).

The interview intended to get from the interviewees, information concerning:

The degree of "friendliness" of each channel of communication, and the participants' preferences

The participants' opinion about the degree of the programmes' affect on their professional function

The level of general interest in the programme, including their intention about future participation

The researcher traveled separately to every participant, after having scheduled the time with every principal. The interviews took place at the schools, and every host-principal was very keen to invite the researcher to tour his / her school, or at least observe some activity, learning environment and so far.

Although the interview had been prepared, the atmosphere was a very open and informal.

The Interview Itself

1. In what sorts of "meetings" have you participated until now?
- (Referring to F2F sessions, synchronized sessions and the one unsynchronized session).
2. How do you feel about your colleagues in the group: are you willing to share with them experiences, to discuss with them issues? Do you have any reservations about any of them?
3. Grade the kinds of meetings according to your preference to participate them: give the least acceptable form - No. 1, the following in desirability - No. 2, and the most acceptable - No. 3 (*my comment: the question in Hebrew was simpler and clearer*).
4. Can you tell in more details about your preferences? Upon what considerations did you base your preferences?
5. Would you consider avoiding the meetings in the least acceptable mode, and participating only in the acceptable ones? - Explain your choice.
6. Which one of the topics we have dealt with was the most relevant to you? Which one was not relevant at all? Could you use any of the ideas that had been discussed, within the framework of your daily work? If so - Can you tell about it?
7. Do you share your experiences and the topics in this group with someone else? - If so - with whom and for what reason? Did you tell your staff at school (or part of them - if so - whom?) about this group's discussions and topics?
8. Have you approached any of the members of the group, other than in the formal meetings? Whom? How often? For what reasons? Do you intend to do it in the future?
9. Did you consult the group's leader other there within the context of the meetings? If so - in what context? Was it helpful? Do you intend to do it in the future?
10. Did you find the sessions interesting? Do you intend to continue your participation in the group's meetings? If so - what would you like to improve? If not - Why?

Appendix No. 5

Third interview with all principals, March-April 2001

Since the previous interview, there was a feeling of institutionalization in the various kinds of sessions: participation was consistent both in virtual and face to face meetings.

The interview intended to get from the interviewees, information concerning the research questions:

- a. The effectiveness of the training programme
- b. The feasibility of forming a support-group through such an activity
- c. The extent of adopting virtual means in day-to-day management
- d. The "ideal" proportions of face-to-face and virtual sessions in such a programme.

As in conducting the previous interviews, these ones took place at each principal's school, after scheduling them. During the interview, I noted everything using my laptop, so at the end each interviewee received the file saved on a diskette, and was invited to add his/her comments. This process occurred repetitively in all interviews, and, as always, no comments were made.

The interview itself

- a. Was there any activity that served you later on directly, in any of your school's practice? Can you tell about it? **Alternatively:** Were you able to make a practical use of anything at all in the programme? Please tell about it. If you could not do any use - why do you keep participating? Are there any topics you would like us to confront?
- b. With whom, if anyone at all, have you been in any communication, other than during the sessions? Who initiated this communication? What was / were the subjects you discussed together? **Alternatively:** was there any collaborative initiative of you and another/other principal/s in the group that was the outcome of these sessions? Please, tell about it
- c. Have you tried to practise any of the virtual medias as part of your managerial routine? If so - please, tell about it: what was it? Who were the participants? How did they accept the change? Was it effective or not -how can you tell? If not - why don't you try it (reasons of infrastructure, or substantial reasons)?
- d. What do you like better in the programme: virtual forums or face-to-face meetings? Can you explain your preference? If we had to constrain ourselves to "either - or" what would you prefer?
- e. How often would you like to meet in face-to-face meetings and how often in the virtual forums?
- f. Would you like to add any other comments concerning the programme?

Appendix No. 6

Fourth interview with all principals, May 2001-June 2001.

As in the previous interviews, I scheduled every interview with each participant, I traveled to everyone's school, I asked permission to write the interview on my laptop while conducting it, and I left a diskette at the end of each interview with the interviewee, asking to comment, object, or whatever they felt was right to do.

The nature of this interview was "summative" (Nevo, 1990). We all knew that, formally, the programme has come to its end. Carrying it in mind, there was only a little reference to questions of improvement, and more to questions relating to Research Questions.

The effectiveness of the training programme

- a. The feasibility of forming a support-group through such an activity
- b. The extent of adopting virtual means in day-to-day management
- c. The "ideal" proportions of face-to-face and virtual sessions in such a programme
- d. The participants' evaluation of the programme

This is why most of the questions are repetitive, using those of the third interview.

The interview itself

- a. Was there any activity that served you later on, directly, in any of your school's practice? Can you tell about it? **Alternatively:** Were you able to make a practical use of anything at all in the programme? Please tell about it. If you could not do any use - would you like the programme to go on? Why? Are there any topics you would like us to confront?
- b. With whom, if anyone at all, have you been in any communication, other than during the sessions? Who initiated this communication? What was / were the subjects you discussed together? Are you going to continue these professional relationships in the future? Have you planned something together? If so - what? Have you accomplished it? **Alternatively:** was there any collaborative initiative of you and another/other principal/s in the group that was the outcome of these sessions? Please, tell about it
- c. Have you tried to practise any of the virtual medias as part of your managerial routine? If so - please, tell about it: what was it? Who

- were the participants? How did they accept the change? Was it effective or not -how can you tell? If not - why don't you try it (reasons of infrastructure, or substantial reasons)? Are you planning to try it in the future?
- d. Did you prefer the virtual forums or face-to-face meetings? Can you explain your preference? If we decided to continue the programme, what would you like better?
 - e. What would you regard as a right proportion between face-to-face and virtual sessions? What kind of the two, would you prefer in a future programme?
 - f. Would you like to continue the programme, next year? If so - what would you like the topics to be? Would you prefer virtual or face-to-face meetings? Would you like to add more colleagues to the group? What would you like to stay in the same pattern and what would you like to change? If not - Is it because of: you did not profit from the programme until now? You did not find the colleagues and/or the topics challenging enough? It was a burden? Another reason - Which one? Would you consider another programme for professional development - What kind? What style of activity would you prefer?
 - g. Would you like to add any other comments concerning the programme?

Appendix no. 7

Fifth interview with all principals, November-December 2001.

Again, I scheduled every interview with each participant; I traveled to everyone's school. However, this time I asked permission to record the interview, while conducting it. At the end of each interview, I let the interviewee listen to it, asking for approval. As in previous cases, all the principals affirmed the punctuality and expressed their consent to use it as part of the data.

This last interview searched to get some information about some points:

- a. The after-effect of the programme
- b. The extent of the participants' sensation of longing to the programme
- c. The extent of use that principals do with tools, mechanisms and knowledge, that had been acquired in the programme
- d. The relationships (if any) that principals maintain with one another, after the end of the programmes
- e. The frequency and type of use the participants make of technological channels, in managing schools
- f. The sense of participants' satisfaction from the programme, when reflecting upon it.
- g. A general appraisal of the programme, by its participants.

The interview, though planned before, left much room for the interviewees to express their views in issues other than mentioned above.

The Questions

1. How are you? How was it to start a new academic year? What went smoothly? What difficulties did you encounter (physical conditions? Staffing? Budgeting? Learning Environments? Parents? Local authorities? Or - else?)
2. In the process of preparing school towards September the 1st, were there steps when you made use of some insights you had developed throughout our programme? Would you like to discuss it? What was the situation? What use could you do with this learning? How did it help you? Was there something missing?
3. Last academic year you participate in our programme, voluntarily. Are you learning, now, in any other framework, voluntarily? If so - where? With whom? Why did you decide to do it? What do you expect to gain from a principal's point of view? Have you stated

- already? Are you satisfied / not satisfied? Why so? If you do not go on learning voluntarily - why?
4. Are you participating in any learning group that is obligatory? If so - where? Whose initiative was it? Who else is learning with you? What are the main issues in that course? What do you expect to gain from a principal's point of view? Have you stated already? Are you satisfied / not satisfied? Why so?
 5. Do you keep in touch with any of the other participants of our programme? If so - with whom? Why with this/these particular principal/s? What kind of connection do you maintain - sharing experience or views? Counseling? How frequent do you connect with each other / one another? Do you use virtual channels, like e-mail in maintaining these connections? If no - why? Do not you miss it? Would you like to initiate such connections?
 6. Do you miss our sessions? If so - what do you miss? Do you feel that way on certain occasions (what occasions) or generally? What exactly do you miss (company / discussions / the social aspect - something else)? If not - do you regard these sessions as episodes / a passing experience?
 7. Have you adopted any virtual tools from the programme? If so - what tools? When and under what circumstances do you use them - for personal or professional affairs or maybe - both? What is the added value you estimate that you gain by using them? If not - why? Is it because you find it difficult to use it? Is it a matter of lack of proper virtual means? Is it because you think that your experience in and out of our programme did not justify the effort needed for it?
 8. Looking backwards, generally: did you like last year's experience in the programme? If so - what was it you liked? What was it you think you gained professionally? Would you recommend a colleague of yours to participate in such a programme? If not - what made you disappointed? What did you not like?
 9. What kind of sessions did you prefer: virtual or F2F? Why so? Does it inflict your tendency to use / or not to use virtual channels of communication in your daily personal and professional practice? Have you experienced personal changes regarding virtual tools? F2F meetings with colleagues?
 10. Do you think you benefited from the fact that your colleagues in the group were not of geographic proximity to you? If so - how and why? If not - can you explain it?

11. Do you miss your "membership" in the programme? If so - what do you miss? Did you encounter alternative channels to comply with it? What are they? If not - do you consider the time you invested in the programme as wasted time? How so?
12. The next and last question is hypothetical: if you were to decide today, or to advise a colleague of yours, would you decide / recommend for or against joining such a programme? Why? If you were asked to advise such a programme's tutor: what would be your advice, regarding the plan and performance of such a programme?
13. Is there anything else you would like to add? You are invited to do it?

Appendix no. 8

Observation No. 1 - first F2F session, 11 October, 2000,

Noted by: Tova Ron

Participants: Abe , Vivian , Ann , Betty, Kira, Rachel , Rona , Laila , Solomon and Rose. The instructor was Sara.

The aim of the meeting: to familiarize the principals with the web site, learning to operate it.

The meeting started at 13:00 at one of the computers' laboratories at CET. It began with an introductory part. The principals were asked to prepare their own tags, writing down what they though best defined them. What they wrote was:

Abe	<i>A teacher</i>
Vivian	<i>A principal - asking questions...</i>
Ann	<i>A starting embarrassed principal</i>
Betty	<i>Glad to be here</i>
Rachel	<i>A principal who has already seen everything...</i>
Kira	<i>A principal who is always seeking</i>
Rona	<i>The ever learning student</i>
Solomon	<i>The scientific angle of the group</i>
Rose	<i>Does experience count here?</i>
Laila	<i>...so glad to be here.</i>

Next, they were grouped voluntarily into pairs, talking with each other for about 10 minutes. The 'instructor me' decided to let them talk freely without taking any notes. Immediately afterwards, Sara took over, presenting herself, telling the participants: "*at the end of this meeting you will know how to approach the website of our programme, how to add announcements, and how to keep other channels of communications with one another*".

Rose: You seem to be sure of yourself, but you don't know what kind of ignorance you have to deal with. I will need private tutorials.

Ann : Me, too.

Sara: Let us wait and see what we say in two hours from now. Are we ready to start? We shall begin by mailing notes to one another. I suggest each one tries and sees for oneself.

Kira: I want to say that my attitude is different. I have no doubts that we do not even need that much time to familiarize with it.

Vivian : I am afraid you speak for yourself, as all of the others do not know anything about it.

Solomon : It is not that complicated.

Sara: I suggest we begin. I have prepared an e-mail box for each one of you in the website. However, if you wish to change the nickname I ascribed you, there is no problem at all.

Vivian : If I manage to master it, I will be that happy, that I will not change anything.

Abe : You have to be more optimistic.

Vivian : Rather than realistic?

Sara: Let us not waste time on speculations. Your computers are switched on. Turn to them (they all do) and look at the list of e-mail addresses I have prepared for you on the sheets on the desks.

The participants look at the sheets, and turn to the computers. Kira, Solomon and Rona start immediately to write messages. Abe turns to Solomon , asks him about some technicality and starts writing. Betty turns to Kira, asks her advice and starts writing a message. Rachel , who was watching it, does the same and starts working. Ann smiles a confused smile and turns to Sara:

Ann : there is no way I can start on my own.

Sara asks if someone wants to join them. Laila and Vivian join, Rose sits by herself, looking at loss. Sara starts to demonstrate on Ann 's computer. After a moment Laila says: OK, I can do it from here, and retires to her computer. She retires to her computer and starts operating it. Sara invites Rose to join them. Rose joins with a confused smile, murmuring something about not being young. Sara ignores the remark and goes on for 2 minutes. Then she suggests that they move to their computers, promising to offer her assistance.

Meanwhile, there are laughing noises:

Abe : Kira, thank you for you mail. My answer is on its way.

Betty: Solomon , did you get my mail?

Solomon : I certainly did, my answer just went out.

Ann (exclaiming): I do not believe, I received Laila 's message and managed to open and read it. How do I answer?

Laila : Congratulation. Touch the reply icon and when the sheet opens, write your message.

Ann (after a few seconds): it works, I am answering now; tell me when you get it.

Rose: can anyone send me a mail?

Abe : Be my guest, I just did!

Rose (exclaiming): Here it is! How do I answer?

Ann : It is easy! Press the reply icon and write.

Rose (after a while): I did it! Unbelievable! Miracles still exist... If I did it - everybody can...

Rachel : Rona , did you get my mail?

Rona : Certainly did. Now you can read my answer.

Sara: I suggest that now, that you can do it, keep on for three minutes before we start attaching documents.

All the principals are busy for the next moment

Ann : I begin to believe that I can do it. My sons will get crazy, as they labeled me as the 'family computer-ignorant'.

Sara asks if there are any questions and goes on, demonstrating on the mega-monitor how to get to the attachment.

Sara: Ann , I do not hear any reservations.

Ann : I am a believer now. Ready to try anything.

Sara asks that everyone sends and receives one message attaching and opening the attachment respectively.

For 5 minutes they are all occupied. Sara approaches Rose, watching and helping, and then turns to Vivian who refuses assistance: thank you, I manage.

Sara: Was it easy?

Different answers, most of them nodding, Rose saying: even I managed.

Sara: we are going to move to the website.

Ann : I thought I reached the top of my capacity....

Sara: This will be much easier, I promise. All you have to do is following the instruction, pressing the proper icon.

For some minutes she instructs them moving among them watching the monitors, as they approach the website.

There is an announcement: Welcome to our coffee shop. How do you like your cup of coffee?

Sara: You have the topic for discussion, which is the flavour of you coffee. Whoever wants to add an opinion has to press the button of "add an announcement". Let us start!

Solomon : If I write my favourable blend, will I get it?

Sara: You have to try in order to know.

Meanwhile, others start to add messages.

Rona : It is amazing! You can see all that is written by others!

Vivian : This really works! More impressive than e-mailing!..."

Sara: Whoever needs assistance, please - tell me!

Solomon : I want to answer directly Betty. Is there a way I can do it?

Sara: An excellent question that I have been waiting. Everybody - please, listen to me and watch the mega-monitor.

Everybody stops, but Ann says: I hate to stop at the moment that I feel sure enough to do what is needed.

Sara: you will feel even more reassured.

Sara explains how to address a specific message in the forum, in a different way from addressing it generally. She demonstrates on the mega monitor, everybody following her.

Kira: Now I can tell Vivian what I think about her favourite Turkish coffee - (giggles)

Ann : And I can tell Betty my opinion of her instant coffee.

Sara: You seem to enjoy the forum very much. However, now I can turn you to Tova.

At 14:30 I took over the meeting and Sara took over the observation.

Tova: I would like to get your comments on the experience you have just had.

Rose: Maybe, in order to avoid repetitions, everyone will prepare a note, and then we can discuss it.

Kira: If we are to discuss it in writing, why not use the forum?

Tova: I appreciate both suggestions, and wish to offer my opinion. We have just acquired an interactive tool. I suggest we learn to use it wisely. I admit that the "coffee forum" was foolish, but it was in order to learn it with a smile. Let us keep it for instrumental use.

Rose: I agree. It costs me an effort to do it; therefore, I want to be sure that the effort is worthwhile.

Ann : I would like to begin: it was an extraordinary compensative experience. Arriving here, I believed I was going to make a fool of myself, and, in a matter of one hour, I am a changed person.

Rona : I feel I have made my first Internet step.

Vivian : I wonder what the Rabbi would say about such uncontrollable correspondence. It stands against the religious value of writing after deep thoughts and preparations.

Abe : I assure you that most Rabbis would not approve. As for myself, I feel that the gap between my insight and my school's practice is getting bigger and deeper.

Rose: I would not be sure about it. Anyhow, as far as I am concerned, I took a big step into the 21st century.

Laila : Like I feel that I have shorten the distance between the centre and me.

Kira: I am glad it went so fast and easy. I was afraid that virtual training would be time consumer and boring. I think you were all fine.

Betty: tonight, at home, I am going to retrieve the e-mails that our supervisor sends regularly, without having to depend on my husband and children.

Solomon : My benefit from our meeting was getting to know all of you. I am familiar with Internet use; however, it was a pleasant meeting, and I am looking forward to go on.

Rachel : I feel right because my Internet ignorance did not cause me any embarrassment.

Tova: Regarding the next forum, I would like you to suggest an authentic situation, problem or question for discussion. It does not have to be now. You can mail your suggestions until 18th October. The forum will open a week later. You will be informed in the mail; please, open it frequently. I would like to thank you all for you participation, and for the trouble you took to come.

Ann : now I understand what you said in our personal meeting about transparency.

Tova: Does anyone wants to regret?

SILENCE

Sara: If anyone practises difficulties, please let me know in the e-mail.

Tova: and a BIG THANK YOU to Sara!

All participants applaud. Departure....

Appendix No. 9

Forum No. 1. 15.10.2000-15.11.2000

The Topic: A case study - How to help Naveh School

The Presented Question

What has your experience with parents thought you, and how is it possible to take advantage of small classes as a lever for school improvement.

The Aims of the forum

1. To let the participants practice the use of a forum as a mean of communication and exchange of ideas
2. To facilitate the participants' ability for exchange of ideas and experience
3. To provide the principal of Naveh School with potential management tools with accordance to her difficulties, due to the certain situation of that school, as presented to the participants.

The forum

Name	Title	Message
Rose	A small school	<p>Small schools should consider reorganization of learning groups: forming these by analyzing students' capacity and interest, rather than age-criteria.</p> <p>As for parents, it is advisable to consult an outside organizational phsycologist, in order to locate negative forces and offer a way to recruit the positive parents in school's favour.</p> <p>Small schools should consider reorganization of learning groups: forming these by analyzing students' capacity and interest, rather than age-criteria.</p> <p>As for parents, it is advisable to consult an outside organizational phsycologist, in order to locate negative forces and offer a way to recruit the positive parents in school's favour.</p>
Rachel	Relating to Kira's story	<p>It is obvious that your remoteness and small size creates a problem.</p> <p>However, knowing you and your school, I assume</p>

Name	Title	Message
		<p>you utilize these obstacles and turn them into points of strength.</p> <p>By all means, pupils' variety gets a proper answer, I am sure about it.</p>
Abe	Reporting an Internet course - and suggesting	<p>Lately I have attended an Internet course. I did not learn anything there. Why do I bring it up?</p> <p>- If you have some kind of a members' forum, Kira, you can openly raise the problem, define the borders of all participants' responsibility, and work together in order to get solutions.</p> <p>As for small classes, I do not distinguish between teaching classes by their size.</p>
TR	To Abe!	<p>Abe, I know your hesitations about joining our group, for technological inhibitions. I congratulate you upon jumping into the water. My best compliments.</p>
Kira	Bring pupils - where to???	<p>Rachel your offer is a very mysterious one.</p>
Betty	Small classes	<p>Kira, I think you should consider a flexible framework of time, both during each day's routine and the annual order of learning. Pupils can, in certain subjects, choose their framework of time. Of course you have to be cautious about the basic demands of the Ministry of education. Needless to say that flexibility of age groups is in order, as well.</p>
Solomon	Small classes	<p>Hi Kira!</p> <p>Of course the dynamics of a small group is in kind of disorder. However, I think you can form, in some of the subject-matters, multi-age groups, gaining some and risking some</p> <ol style="list-style-type: none"> 1. You will be able to offer more class-hours to each student 2. The group will become bigger, and its dynamic will "recover"
TR	Please, be concrete, Solomon	<p>Solomon. I agree with your basic assumption, however you stay very vague. Please, be more concrete in your suggestions small classe.</p>
Solomon	Concrete	<p>I want to offer some suggestions about turning</p>

Name	Title	Message
	suggestions	<p>parents' involvement into a partnership";</p> <ol style="list-style-type: none"> 1. The "expert" parents should be invited to staff and managing staff meetings whereas they will suggest their ideas, offering the responsibility they are willing to undertake. 2. You should generate meetings that will allow the parents to raise their disagreements, and express their ideas. Maybe some of the problems they are causing will be solved, that way. 3. You should deal directly with the issue, calling parents to define the borders of their involvement
Rachel	Parents in the Internet	Parents who consider themselves as participants of school's life, deserve much esteem. I think Kirayou should take advantage of their interest; maybe they have never found appropriate answers or room for a dialogue.
Rona	Parents involvement	I assume that parents interference makes it difficult to cooperate. Still, if you are wise enough to involve them in significant issues, regarding school's needs, they will be you best lobby wherever necessary out of school.
Kira	How???	There is an active group of cooperative parents. They are involved in curricular decisions, and participate in processes of decision-making. The questions is what can we do with those who are critical, provocative...
Rona	Some more...	Recruiting parents to participate in school's activities, sharing with them relevant issues and keeping discretion.
TR	Even more...	Rona , do not get mad at me, but it strikes me that you preferred to stay on a vague undefined territory. It is not a typical manner of yours; do not adopt it, please...
Rachel	My suggestions to you, Kira	<p>Sorry to say it, but somehow your problem seems at first sight, to be a "rich people's problem".</p> <p>It is not really like that. You are dealing with a</p>

Name	Title	Message
		<p>highly involved population, willing and capable of contributing. It is a merit to have such parents at your side.</p> <p>I suggest that you map with the parents their areas of strength and capacity for contributing to school. This may be a basis when forming support groups by interests. The common denominator school's best interest will facilitate its functioning.</p>
Abe	Taking care	<p>Regarding Rachel 's suggestions, I recommend that you do not open a door that will invite parents to participate in pedagogic decision-making. These decisions should stay in teachers' exclusive territory.</p> <p>Regarding Rachel 's suggestions, I recommend that you do not open a door that will invite parents to participate in pedagogic decision-making. These decisions should stay in teachers' exclusive territory</p>
Kira	To Rachel	<p>Parents are participating in pupils' reserch plans, working with them. Each parent who wished to do it, chose a topic of interest and pupils find this assistance a very valuable one. Our problem is still with the un-cooperative parents.</p>
Shoshans	A personal learning plan	<p>You should take advantage of the situation and build a personal learning programme for each student</p>
Vivian	A solution for Neot Ha-Kikar school	<p>We are dealing with a similar problem: my school consists of 102 pupils and 12 teachers. The proximity of all parents makes them feel ownership seeing themselves free to express their ideas about every pedagogical aspect. Today we are trying to moderate this involvement and to channel it to positive channels, avoiding petty issues.</p> <p>My own question is about being mothers of children who are educated in the same school, due to lack of an alternative system.</p>
Abe	Do not be	Vivian and Kira.

C

Name	Title	Message
	pressured	I know that one of your problems is the continuity of school. When you are communicating with parents, refrain from lobbying your school. Recommending school is undertaking an accessive responsibilities. Vivian and Kira. I know that one of your problems is the continuity of school. When you are communicating with parents, refrain from lobbying your school. Recommending school is undertaking an accessive responsibilities.
Kira	Do not be pressured	This is not my problem.
Vivian	Do not be pressured	Yes, it is my problem and refraining from lobbying school may seem as a low self-esteem
Rose	Do not be pressured	You are right, Abe . Principals could easily become hostages of parents.
Rona	In small communities parents involvement is a fact of life	This is why schools should strive to excEllence, under all circumstances. Experts should be recruited either from the parents or, otherwise, from other resources. I feel that I have all the right to say it, being convinced that I am right
TR Trainer	Please, be more specific	Knowing you and your school, Rona , I appreciate you are relying upon your experience. This why it is a pity you are just "hinting" when suggesting. How about demonstarating with examples that will enable us to consider various strategies basing herself on your experience?
Abe	Rona 's talking from experience	I would like to comment that Rona is dealing successfully with problems of this nature in his school. We had some "out of rhe site" interchange of views, and seems that we should share her experince
Kira	Excellence?	What do you mean, Rona , by excellence?
TR	One comment, please	I appreciate all of your suggestions. However, it seems to me that the generalities and agreements we see here, are not going to assist our progress.

Name	Title	Message
		<p>There should be some creative ways to refresh the agreements of teachers-parents, while presenting a high mutual respect.</p> <p>Even when there is no crisis around the corner, schools ought to address these issues, and do it creatively. It is true especially when the educational staff is considering some kind of change, and about to make decisions, regarding these changes.</p>
Abe	How?	In case I am misunderstood; I admit that there are problems in managing small classes
Rona	Parents-Teachers	<p>I am sure that beside the teachers' difficulties, they can use some advatages of this unique situation</p> <p>I am sure that beside the teachers' difficulties, they can use some advatages of this unique situation</p>
Abe	How do you handle over-involvement?	I am looking for ideas about dealing with parents that are sure that participating in the parents' board gives them rights to decide anything about school. There was this parent who entered a classroom and called all its pupils to leave it, declaring: "You will not learn with this teacher, anymore"...
Rachel	Cooperating with other schools	<p>Kira's problem is not the size of the learning-groups. The community is a very densed one, and multi-age learning groups will not solve this difficulty. A feasible solution is creating virtual groups with other schools, in and out of the country. It does not provide an answer to emotional and social needs, but it applies some variety to the learning process. Another solution may be a "one day a week learning with or at another school". Thus, enabling the pupils meeting larger groups of learners and develop interrelations with them, while still maintaining the uniqueness of their own school</p>
Laila	Learning	You know I am not heading a school as most of you do. I follow you, learning a lot. Not commenting does not mean I am not listening.

Name	Title	Message
Ann	Me too!	I am following every word. I have entered a situation caused by my precedent, regarding parents' involvement and dicting. I take the privilege of just reading and learning.
Betty	About small classes	I would like to suggest a certain person who performs as a teachers'-counseller; she is very experienced and creative. She is able to construct, with your staff-room a pedagogic programme that takes advantage of the classes being so small. She might be not available right now, but it is worth giving it a try.
TR	Parents-teachers	Many of you are referring to the increasing parents' involvement. I think that actually we are dealing with over-involvement. What do I mean by "over"? The parental role that overpowered the educative role (aren't we all mothers?). It is advisable to form a staff-room discussion and create local ethical rules: What do you say to whom? With whom do you discuss school? And most important - How do you solve a problem, once it has occurred? In case of over involvement it is crucial to define limits of action.
Kira	What's next?	Solomon , we have already practised your suggestions. Now we are stuck in an unknown next-stage, because it actually does not work in accordance with our wish
TR	Interchange between schools	Not only that classes are small, but the whole social environment is limited. In that case, a multi-age learning is not sufficient. However, I suggest virtual connections with pupils from remote areas. This, by itself is not sufficient, as far as social needs are concerned. Another possible way may be a joint learning of pupils form various schools. For instance, learning one day every week with or in another school is another option that can facilitate an

Name	Title	Message
		integrative experience for the students, while maintaining the uniqueness of each school
TR	To all counsellors	<p>I keep coming into the site, amazed again and again at your high involvement and cooperation. It is our first forum.</p> <p>I congratulate Kirafor presenting her school as our first case study, a courageous deed, indeed! The development of your referring to the problem and to one another along the forum, is fascinating.</p> <p>I do not believe you have offered "closed" solutions. Nor was it my intention. However, the similarities between schools who exist in totally distinctive population strKiras me as a very fruitful opportunity for you.</p> <p>I break a virtual bottle of Champaign over this new vessel.</p> <p>Let us all sail and learn together!!!</p>

Appendix No. 10

Correspondence following the synchronized session (23-28 November 2000)

Kira (23 November 2000)

Hi Tova!

Please, don't be angry with me for writing you, but I can still feel the deep frustration of last night. You know that I am usually an eager user of virtual channels. However, this was my breaking point. The topic was relevant, at least to me; still, even I, with my Internet skills felt I got lost.

I know that it is important to you for your doctoral work. I thought it was more important to me, living so far away, as another channel of communication. However, there is no way I am going to experience such a "conversation", again, at least not for the time being.

Still, I am looking forward to our other sessions.

My best to you

Kira

Vivian (24 November 2000)

Dear Tova!

I did not know whether and what to write to you, and how I would express my disappointment. For me it was a steep falling from the heights of the enthusiasm in the forum, to the realization of my incapability. I was so proud of being able to communicate in the forum, so that I even sinned the sin of vanity, showing off to my family and to teachers at my school.

Please, do not make me experience another frustration!

Yours, Vivian

Rose (24 November 2000)

Hi Tova!

This was really an unfair test for novices like me. Moreover, I saw I was not the only one to get in trouble. Please, promise me there will be only a-synchronized virtual sessions, as I was embarrassed.

I think I do not have to add anything more!

Best regards

Rose

Rona (27 November 2000)

I took my time before writing to you, trying to understand what had happened in the synchronized session, both to me and to my colleagues.

I think that I can say with much confidence that I am not to blame; neither are you, of course. I can also tell you that if and when you want to try it again, I will go along with you. However, I would rather stick to the practice of the forum, which enables my participation when I am ready and free to do it.

It was doubtless an interesting, though frustrating experience that I would rather no repeat.

Yours sincerely

Rona

Solomon (27 November 2000)

I did not write before as I went for a brief service in the army.

I can sum up the synchronized experience as an unpleasant though supportable one.

Unless it is essential for your research, please, do not repeat it.

Best Regards

Solomon

Abe (28 November 2000)

Hi Tova!

It says in our sacred sources that one should not react in great hurry, so I took my time.

I believe that I do not have to tell you that the synchronized meeting was not a meeting but a disastrous experience. I hope we saw the last of it.

Best regards

Abe

Ann (28 November 2000)

Dear Tova!

It took me a long time to 'recover' from our last meeting.

Please, do not make me experience it again!

Yours

Ann

Appendix no. 11

A Virtual Assignment - The Futuristic School (10-24.1.2001)

The following assignment was presented to the participants in the site of the programme. The members of the group had a 2 weeks period to form teams, through the site or via e-mails, as they chose, and propose the image of a "futuristic school". They had to point at issues that their planning had raised.

At the end of this period, both "models" were presented in the sight, and I invited the participants to refer to it, within the framework of another forum that we opened).

10 January 2001

A Virtual assignment: the Futuristic School

In the forum we have dedicated to Neot Ha'Kikar, some of you presented pedagogical innovations. I thought that you could start designing the Futuristic School.

The obligatory components of the assignment are:

You are a team of educators who were recruited by a municipality to design a school that will merit the title "the Futuristic School".

Your recommendations, ideas and plans have to follow these conditions:

- a. You are to form two work-teams, including 5 members in each.
- b. You are to follow the time limit -

There is no fixed format for your suggestions.

Your plans will be e-mailed to Sara or Tova by 24 January 2001, so they can introduce them in the website.

In case you need to ask any questions, please refer them via e-mail to Tova.

The municipality of.....

Group No. 1 - Learning Communities

Participants: Rachel , Betty, Solomon , Kira, Rona

The main assumption that leads our model is that school's borders are broadening beyond its fences. In place of the perceiving school as the educational relevant unit, we define the formal borders of the settlement as the educational system. The main direct result of this definition is the enhancement of the choice given to all school's participants.

Our futuristic school requires rethinking about the following pedagogic-didactic themes:

- a. **Flexibility** of passage from certain learning frameworks to others: the conventional pre "age-defined" unit is not necessarily the right one for every pupil, as well as the choice of subjects and teachers. We propose a variety of units, and the legitimacy of passage from one to the other.
- b. **A redefinition** of the **units of learning**: what are the core-topics, skills, values etc. besides a variety of wider subjects.
- c. A **periodical evaluation** of each "learning unit" in terms of its quality, students' achievements and satisfaction.
- d. **Providing rich technological educational environments** to all school's participants. **Providing the rich technological educational environments** to all school's participants.
- e. **Multi-lateral interaction** with the surrounding centers of industry, science and arts.
- f. A new perspective of evaluation: what is evaluated? Who evaluates? Who are its addressees?
- g. **We suggest a steering committee** that will represent all schools stakeholders.

Group No. 2 - Computer-Centered Learning

Participants: Ann , Rose, Vivian , Laila , Abe

Our group presents the following suggestion for a futuristic school, as a result of many deliberations and debates about the question: what might turn the school of the present to the school of the future. We have managed to phrase the main issues that occupy us, regarding this question, present some perspectives and suggest some steps in order to attain the establishment of a "futuristic" school.

Assumptions

- a. Perception of "school-time" ought to change
- b. Perception of "learning-arenas" ought to change
- c. A "core-assignment" of school is fostering values
- d. A "core-assignment" of school is developing capacities "knowledge management"
- e. Issues for Discussion
 - a. What are the "core-roles" of a futuristic school?
 - b. What is the organizational core that will keep school's framework in a "student-focused" futuristic school?
 - c. The need to redefine the roles of school's participants: principal, teachers, students, parents - who else?

Basic Conditions

- a. An individual progress plan for each student
- b. Technological equipment (like - a laptop for every student)
- c. Components of technological infrastructure and learning environment.

Appendix No. 12

F2F Session: Marketing Our School (31.5.2001)

(Instructor: Ze'ev - an organizational psychologist)

The aims of the workshop

- ◆ To analyze together the various dimensions of the needs for school marketing
- ◆ When should school be marketed?
- ◆ To whom should school be marketed?
- ◆ What aspect of school does one market?

The Workshop

An open discussion around the topic of school marketing: when did you start feeling that school should be "explained" or "interpreted", because of a lack of previous clarifications?

Part two consists of an "Aquarium Simulations"

The simulation: three participants: principal, a member of the committee of parents, and a teacher.

The situation is school's decision to start self-marketing in town; the municipality has enabled parents' school choice, initiating a competition, and catalyzing a competition.

The rest of the members will take notes referring to the effectiveness of the discussion, from the aspect of planning some steps for making school "magnetic".

Observation - the first workshop

Three members are in the centre of the room: Abe , who is acting as a parent, Rachel who is acting a teacher and Betty who is acting the principal. The rest are seated around, making notes.

Betty: have summoned the meeting as some situations are in a course of change: the municipality has yielded to parents' demands and next year parents can choose the school for their first grade children.

Abe : It is time, thanks god!

Rachel : I am surprised at your enthusiasm. I have been your son's teacher for the last two years. I did not know you were not satisfied.

Abe : sorry, I did not mean it that way.

Betty: Let us not get personal. We have a lot to accomplish.

Rachel : Sorry, Bacha. I expected you to tell this parent what I just told him. You never think it is right to backup the teachers. Now, when you are under stress, all of a sudden you call for my help.

Abe : I have to clear something. Rachel , you are a great teacher. I did not mean otherwise. Still, I believe that parents should be able to make this choice. Be sure that I will always choose you.

Rachel : thank you

Betty: I think, Rachel , we ought to discuss what you have just said. However, this is not the time. We need to think of a strategy.

Abe : how is the financial situation of school?

Betty: why is it relevant?

Abe : because I believe in professionalism. I think we should hire a professional consultant.

Betty: Let us not get carried away. Before we turn to external expensive assistance, we ought to think what we can do by ourselves.

Abe : I do not follow you.

Betty: Well, start thinking!

A looooooong silence.....

Betty: what do you suggest?

Abe : I can come up with nothing, sorry

Betty (turns to Hanna): Well, I have high expectations of you, Rachel

Rachel nods her shoulders, reluctantly

Abe : Betty, I cannot believe you have summoned this meeting without any ideas of your own

Betty: that is what sharing is about. Would I have come forward with my ideas, you would have felt compelled to receive them.

Rachel : Next you will tell us about synergy, won't you?

Betty: Of course, and I mean it

Rachel : Look. There is a lot we can do before hiring someone.

The problem in the short run is convincing parents of first graders. I think we should work with all kindergartens. Prepare a leaflet that describes and presets the life in the first grades at school.

Abe : By the way Betty. What is the percentage of the non-readers in the first grades?

Betty: most children are readers. We have some Ethiopians who have difficulties.

Abe : they are potential clients, as well. How are you handling it? I hope you are seriously into it.

Rachel : Abe , your attitude is very negative today. You do not seem to trust us, all of a sudden.

Abe : Usually, I do. However, today, when you have to advocate your pedagogic work, all of a sudden you need me to do it?

Rachel : no, Abe . We know perfectly well to do it. All we need from you is your support, being able to confirm what we say about ourselves from a professional point of view. Are you able to do it?

Betty: of course he can!

Rachel : sorry, Betty. He should confirm it.

Abe : You go ahead, prepare some papers that tell about school. Add some photos. I will approach our firm's magazine's editor and see what we can do.

Betty: Let us define a timetable

Ze'ev: CUT!

Ze'ev: Betty. How did you feel?

Betty: I felt unprepared. The assignment landed upon me a moment earlier and I was totally at loss.

Ze'ev: Rachel , whose role were you playing, being so resentful?

Rachel : I started with no direction, but somewhere I felt that my principal did not treat me right, and I thought about that teacher at my school, which always accuses me of not defending her, and adopted her role.

Ze'ev: Abe , how did you feel being a parent?

Abe : Somehow, I turned from a cooperative parent to a resenting one. I have no idea why, because personally I trust my own children's school.

Ze'ev (turning to the watching members): what do you want to tell them.

Laila : I can tell you there was so much hostility, that nothing productive could have come out of it. Ze'ev: I suggest that you do not speak generally but address the relevant role player, and some of the issues we have discussed earlier.

Ann : There were two issues we have discussed earlier: the timing and the need. I was eager to see you Betty addressing them as my situation is similar.

Ze'ev: I would like to move forward. Please, divide into pairs and discuss points of relevance of this situation to you, trying to remember one occasion that happened to you.

There are 5 pairs now: Abe -Rona ; Solomon -Kira; Rose-Betty; Ann -Vivian ; Laila -Rachel . They keep discussing for 15 minutes.

Ze'ev: Now, let us get back in the plenum; Everyone will characterize briefly the problem they encountered in their partner's story, commenting whether it was a "marketing" problem, and - with whom.

Abe : It does not seem to me that Rona has a marketing problem (Rona raises an eyebrow). If any it is in her staffroom, as she keeps moving very fast.

Rona : Abe has a need to advocate his innovative approaches to his school's orthodox authority and community.

Solomon : Kiraneeds to 'advocate' her school, in order to prevent parents' moving their children to other, remote schools.

Kira: Solomon needs to make the principals in his town the importance and potential added value of his centre.

Rose: Betty needs to convince her teachers and parents that her higher education background is a benefit not a deficit in her role.

Betty: Rose needs to convince the parents that her seniority does not prevent her tendency for innovation.

Ann : Vivian has to convince the community, including her teachers, that knowledge technology is beneficial not corrupting.

Vivian : Ann has to convince the parents that although being a 'beginner' she is going to make the decisions, considering their views, and not them.

Laila : Rachel has to convince the parents about the quality of educational services her school provides.

Rachel : Laila has to convince the schools in her town to be her centre's users, maintaining multi lateral connections.

Ze'ev: you have raised the questions of: whom do we have to convince and of what.

We shall treat the "whom".

A discussion about 'clients', 'consumers' and 'stakeholders', develops for 10 minutes.

Ze'ev: Can you map your situations more clearly, with these conceptions?

Rona : I believe this will help me focus on the 'who' and 'what'

All others nod in agreement.

Ze'ev: Am I right to say that you have now some thinking to do?

Betty: I think I have to connect between my school's practice and this issue. I am not going to 'add' marketing separately from other activities. Even if it's meaning is waiting.

Ann : I wonder how can one person that happens to be a principal to cover all these tasks.

Solomon : I think that my successes with some of yours schools here, are going to be my public relations.

Rachel : I feel I have a lot to think about, using the terms we acquired today.

Ze'ev: I believe this is a time for a 'didactic pause'. Thank you for having invited me.

Appendix No. 13

Telephone Interviews following the Marketing Workshop (31.5.2001)

The interview took actually the form of a conversation with the interviewees. It suited the conditions of their conduct: the interviews were conducted by phone. I contacted each one of the interviewees through their mobile phones, when they were still on their way home. I told them that the interview was being taped. This way the immediacy was gained. Besides, I thought that I had the best opportunity to receive authentic and unbiased answers. There was also the need to feedback the workshop that was directed by a guest tutor.

I chose to interview 2 participants who took an active role in the simulations, and 2 participants who were in the external circle.

The Interview of Abe - a Participant in the first simulation as a Parent

Q: Hi, are you traveling home already?

A: Yes, the traffic is heavy, so I have the time to reflect upon my experience in the workshop.

Q: What was the first thought that crossed your mind, regarding your experience?

A: It was interesting to have an instructor whose expertise is other than education. It broadened the horizons of the discussion, especially the examples he used.

Q: How did you feel when you were acting in the simulation?

A: You know me, Tova. Usually I do not place myself in the centre, so at the beginning I was embarrassed, but later on, as I started to "play my role" I even liked it.

Q: How did you feel about taking the parent's role in the simulation?

A: When Ze'ev(=the instructor, T. R.) allocated my role, I felt I would never be able to "change the hats" and become one. Astonishing enough it took me just a few minutes to be, think, and even feel as a parent.

Q: What do you feel was, if any its contribution to you?

A: It made me see clearly the situation through parents' points of view, something I did for the first time. I hope I will be able to apply it to other situations, especially to crises in reality.

Q: Would you like to add something?

A: Yes, please thank Ze'ev again on my behalf, and of course - thank you for creating the opportunity to meet him.

The Interview of Rachel - a Participant as a Teacher

Q: Hi Rachel ! I guess you are on your way.

A: Yes, my son's lucky day, getting a lift from the university to our remote town. Glad to hear from you, but what brings you back to me, so soon?

Q: I would like to get your comments on the workshop we just finished.

A: I am glad to talk with you so soon, you do not mind my son overhearing the talk?

Q: Of course not. Hope you do not mind me taping the conversation, as part of my research data.

A: It is all right, Tova. I told you numerous times that you are welcome to any data you want for your research.

Q: Rachel, what do you think about an instructor, whose expertise was not education?

A: I have to admit that at the beginning I thought he was not going to contribute anything. I even had my regrets about traveling two hours each direction to meet him. However, he surprised me, in two ways: he knew quite a bit about educational organizations and his "business world" opened my eyes to new aspects, which was good.

Q: How did you feel in the simulation about becoming a "teacher" again?

A: Amazing how soon we forget. I keep talking with the teachers in the staff-room, I believe I see their points of view, and what happened was that during the simulation, "becoming" a teacher again, raised not only thoughts but also feelings within me.

Q: Do you care to tell something about it?

A: Sure. First, I felt a frustration. Why does the principal rely on me only when she thinks she cannot manage the situation by herself? What about daily aspects of school? Why does she not involve me ever in them? Then I told myself it was an opportunity to prove my value as a staff member, and last I came out of my shell, trying to be helpful.

Q: And where was Rachel the "real life principal" all that time?

A: Towards the end I thought to myself there were some good ideas about school marketing that I should adopt when returning to real life. Tomorrow, I intend to tell the teachers about this experience,

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opening a door for them to come and express their doubts, thoughts, and ideas.

Q: Thank you Rachel, drive carefully. If anything interesting happens at school, please, keep us informed.

A: Thank you Tova. I liked our session very much. After all, it was a good idea to invite Ze'ev (=the instructor, T.R.) to join us.

The Interview of Ann - a Member of the External Circle

Q: Hi, Ann, this is Tova again, can you talk safely while driving?

A: Yes, Tova. Glad to hear from you so soon, I have my cell phone plugged in its cradle, so I can talk safely.

Q: Ann, I would like to discuss today's session with you, and to get your permission to tape this discussion. Is it all right with you?

A: As always, you are mostly welcome.

Q: How did you feel about an instructor does not specialize in education?

A: It was a fascinating experience. We, teachers and principals, tend to limit ourselves to educationists missing other points of view, so this was refreshing.

Q: Was it not boring to be in the external circle, in a passive role?

A: Once, when I consulted you about the staff-room, you talked with me about the "Gold Mine" that is to be found by listening and watching. I remembered this conversation today, and found it was helpful to just watch, listen and reflect to myself upon the situation.

Q: Do you mind sharing some of those reflections with me, now, while it is all still fresh?

A: On the contrary. The situation was feasible. I kept putting myself not only in the "principal's shoes, but in the others' as well. I kept imagining such a situation at my school, involving the real participants there. There was all the time a "double" scene in my mind: the one developing in front of me, and the other - a potential situation in which I may be involved, at my school.

Q: So, if next week, any of these situations develops in your school, are you more prepared to deal with it?

A: I certainly hope so.

Q: Can you define - in what way?

A: First, I am not going to "shoot" my answers and solutions immediately, as I tend to do. This will promote others to be more active as partners rather than "inferior participants", and it might

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produce some positive constructive ideas. Then, I am going to create collaborative situations, something that until now I tried to avoid. And most important, having experienced listening, I am going to try doing it more often: you know that I demand others to listen to me, not doing it enough, myself.

Q: Ann, thank you so much for this small conversation. Please, drive home carefully; you have a long road in front of you.

A: Thank you, Tova, and see you soon, either on the web site or in person.

The Interview of Solomon - a Member of the External Circle

A comment: Solomon is not a school-principal. He manages the "Centre for Science" in a small southern town. His drive is an especially long one: three hours on each direction. One could easily argue that the workshop was not relevant to his role, so I wished to interview him.

Q: Hello, Solomon, this is Tova. How is the traffic "behaving"?

A: Tova, it is quite a surprise to hear from you so soon. The traffic is rather smooth, and I keep "rowing" on my way. What brings you back to me so soon?

Q: I would like to reflect with you upon our session today, you are the fourth member I am doing it with. As usual, I have to get your permission to record this conversation, for the purpose of my research. Is it all right with you?

A: As always - permission is granted, go ahead with it, and actually, it is a positive distraction of the boring road.

Q: Thank you, as long as you keep your attention on this "boring" road. So, are we ready?

A: Of course, but I would like to start telling you that it was an interesting session.

Q: I am glad, as one of my doubts was its relevance to you, not being a principal.

A: You are very wrong about it. The situation was very relevant to my professional context.

Q: Can you demonstrate it, please?

A: Gladly. I experience crises as well as problems of marketing. I will start with the second issue: though we are living in a small and remote town, other institutions are competing with us. Parents sometimes tend to believe what we say "there is no prophet in his town", that is to say - the

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local institution is never as good as the one located far away. Therefore, every semester I have to market my centre.

Q: Are there any other implications you can think about, following today's session?

A: Certainly! It may mean that I have to be creative about the centre's renewal, as well. This raised another thought during the session: the need to listen both to instructors in the centre and to parents.

Q: What part in the workshop brought about this thought? You have been a "passive" participant, staying in the external circle.

A: Exactly. For once, I had to limit myself to listening, something I rarely experience, and it was a very perceptive situation.

Q: So, actually you are talking about several benefits, am I right?

A: Yes. I am talking about a new look at the issues of marketing and the potential contribution of the centre's instructors. Then, I am talking about developing an ability and a willpower to listen rather than do all the talking.

Q: It was a pleasure to talk to you, Solomon, thank you and drive carefully.

A: Again, thank you, and please, pass my appreciation to Ze'ev!

Appendix No. 14

Accesses to Forums

	1. Net of Hakikar	2. Staff development	3. Bookless School	4. Final assignment	5. Towards Evaluation	6. 21 st Century Principals	7. Farewell session
Abe	6	2	3	4	2	2	1
Vivian	2	-	1	4	1	4	1
Ann	1	-	1	1	1	2	1
Betty	2	-	1	2	1	3	1
Rachel	4	1	2	4	-	2	1
Laila	1	2	2	1	1	3	1
Kira	6	-	2	4	1	3	1
Rona	4	-	4	4	2	2	1
Solomon	2	1	-	3	1	1	1
Rose	3	-	-	1	1	2	1
TR instructor	8	2	7	2	-	5	1
Total	39	7	23	30	11	24	11