THE IMPACT OF PROVIDING INSET FOR ISRAELI PRIMARY SCHOOLS: A CASE STUDY OF THE ORANIM SCHOOL OF EDUCATION AND PRIMARY SCHOOLS IN NORTHERN ISRAEL

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In memory of my parents, who are with me always.

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ABSTRACT

This research documented an attempt to introduce a change in teachers' working methods in several Israeli schools through the use of in-service teacher training courses (INSET). The courses were held in the Oranim School of Education of the Kibbutz Movement. Oranim is a comprehensive teacher training college, offering a wide variety of training courses for educators and school teachers at all levels.

This research study focused on two main objectives:

1. To investigate the suspicion that Oranim course graduates are not implementing the material learned in the course in their classes. This was noticed by the researcher and her colleagues during their visits to numerous schools. This objective was to more systematically investigate if this feeling reflects reality.

2. To investigate how teachers and head-teachers explain this phenomenon, that is, their ability (or inability) to implement new methods, techniques and didactic means learned in the course in their classes.

The first objective was examined both by reviewing the reality through observations, questionnaires and interviews, as well as by making comparisons to work methods and opinions of teachers who did not participate in the course. The second objective was examined through interviews and questionnaires.

The main research findings showed that the course participants differed from their colleagues who did not participate in the course with respect to their level of awareness of the need to implement change, and their familiarisation with diverse teaching-learning methods. The two groups of teachers actually worked in a similar fashion. The main explanations provided by the teachers for this were: lack of follow-up by an expert after the course; lack of cooperation by the school's teaching staff; and insufficient preparation in order to cope with their unique reality during the course.

CHAPTER ONE: GENERAL INTRODUCTION

1.1 GENERAL INTRODUCTION TO THE STUDY

Teaching is a highly complex activity requiring thorough mastery of the subject, as well as a wide range of skills, concepts, sensitivities and understanding of human development. Like every other professional, the teacher must cultivate the skills necessary for understanding her/his work and the goals involved. Ability to act autonomously must develop on the basis of knowledge and experience, along with the capacity to change and to make changes in accordance with developments within the system and outside it.

Teachers are the people who must implement changes, reforms and improvements in the schools. They play a somewhat ambiguous role of being simultaneously both the subject and the agent of change (Sikes, 1996). This problem gives rise to the two main components of this research: **teacher training programmes and alternative teaching methods**, that is, alternatives to the teacher-centred approach.

There is no question about the need to constantly improve teaching methods, update teacher training programmes and be receptive to new curricula that could be introduced into the classroom. The main reasons for developing alternative methods are:

1. General dissatisfaction with conventional teaching methods, recognising that they limit the ability of teachers to achieve a wide variety of learning, and social and value-related goals.

2. Schools and classes have become significantly more heterogeneous since schools have been opened to all sectors of the population, both due to a policy of integration as well as greater mobility by the pupils.

Teacher training programmes, therefore, are of primary importance, since they enhance a teacher's professional development. When linked to specific change or innovation, teacher development and implementation go

hand-in-hand (Fullan and Hargreaves, 1993).

Teacher development should be related to innovation through its implementation and include varied formal (e.g. workshops) and informal (e.g. teacher exchange) components (Stallings, 1989; Fullan and Hargreaves, 1993). The question is whether or not teacher training programmes (pre-service and in-service) prepare teachers for this complicated task.

Research in Israel and elsewhere reveals an entirely unexpected picture about the knowledge acquired in training programmes (Fullan and Hargreaves, 1993; Ben-Ari and Rich, 1992, 1994; Sharan and Sharan, 1991; Reynolds and Packer, 1992; Joyce, 1990). Innovations in training programmes are urgently required and where likely, are prescribed, but generally not carried out in the field. This is particularly true in the case of alternative teaching methods and for the case of Israel, where teacher-centred approaches are still widespread.

It appears that not many teachers are exposed to the right kind of preparation, i.e. training programmes, that help them understand the specific needs of a heterogeneous class and equip them with the appropriate tools. The broad issue of teacher training has been discussed extensively in many places in the world. This research will focus on the situation in Israel where there is, on the one hand, a wide network of in-service teacher training exists, but on the other hand, many schools still use outmoded methods unsuitable for present-day conditions.

In Israel, in the past, there was a relatively high level of homogeneity in the schools, reflecting the homogenous nature of the residential neighbourhoods served by the schools. With the recent waves of immigration from the former Soviet Union and Ethiopia, whose people have cultural backgrounds quite different from that of the established Israeli population, heterogenous populations entered the schools. Moreover, there is a trend today to include disabled pupils, who formerly studied in special education frameworks, in regular classes for at least part of their studies.

All these factors produced schools which are much more heterogenous, and

so, lecturing and demonstrating to a class is no longer accepted as the only ways of teaching. Classes of 30 to 40 pupils exacerbate the difficulties of dealing with diverse groups. The traditional method has not helped teachers find answers to differences in achievement levels, pupil aspirations, and individual distinctions. In other words, the heterogeneous class confronts the teacher with pedagogical and didactic difficulties (Evertson, Sanford and Emmer, 1981). This has led to a demand for methods and materials that make more effective teaching possible and enable all pupils to realise their intellectual and social potential.

The educational response has been to develop methods of varying quality. Some of these methods were based, in part, on educational theory and research, their implementation in the classroom, closely followed by tests and evaluations. Other methods emerged in the field and were only later analysed by theorists and researchers. There are also teaching methods based mainly on individual knowledge and feelings of those who created them, and less on analysis and precise, objective evaluation.

If new methods are to be passed on to teachers, the need for innovative training programmes is clear. The programmes must expose teachers to the theory at the base of the new system, letting them try characteristic working methods and develop their own ways for effectively applying theoretical principles.

The Israeli educational system offers a broad range of training programmes. In most cases, the initiators are the Ministry of Education or academic institutions such as teacher training colleges, schools of education etc. Teachers participate in workshops and attend courses on the subjects that they teach, or on other topics that are relevant to their personal development. Many training programmes appear to lack the components essential to equip teachers with the proper understanding and skills to implement what they have learned in their classes, and to use this material to the best practical advantage.

In an attempt to introduce educational change and innovation, the Israeli

educational system recently began operating in-service training programmes within the schools. These programmes take the form of regional and personal counselling and school-based INSET.

As previously stated, this study will principally deal with those training programmes carried out in academic institutions, which still make the greatest contribution to teacher training in Israel.

1.2   SCOPE OF THE PROBLEM

The researcher is a staff member of the Oranim School of Education, and for several years, has headed as well as designed and taught INSET courses in teaching methods.

In the capacity of teacher trainer and INSET coordinator, the researcher visited a large number of schools in northern Israel. During her visits, the researcher became aware of the difficulties faced by teachers in fully and consistently implementing teaching methods. They indiscriminately applied various methods, and no marked changes in teaching practice were evident. What prevailed was traditional teaching, the aim of which was to cover as much material as possible.

Even though varied training programmes are offered to individual teachers and schools, and the Ministry of Education recognises the need for new teaching methods and curricula, few schools apply them systematically. This is particularly true of secondary and high schools, but even in primary schools, methods that can advance the pupils academically, socially and as individuals are not applied as they should be. An example of this type of problem is discussed below:

INSET courses in Israel place great emphasis on equating four different elements in the classroom: organisation, teaching task, pupils' behaviour, and the individual teacher. Classroom observations showed only a few cases where any weight was given to this problem. In many cases, the oversight was blatant:

there was a discrepancy between class organisation and teaching task (sitting in groups in a teacher-centred lesson); between teaching task and the teacher (group work in which the teacher interferes unnce); and between the task and pupils' abilities (a task/project that requires cooperation in classes inexperienced in group work).

The foregoing observations showed the need to examine the difficulties of implementing new teaching methods with reference to the individual teacher, his/her working environment, and the course programme. The situation is seen as a network of interactions, where the perceptions of the individual research subjects (teachers, head teachers, school inspectors, INSET tutors) are very important.

As we perceive it, the central problem is as follows: why, despite the heterogeneous classes requiring individualised methods, despite declared support from at least some senior officials in the Ministry, and despite the varied training programmes offered in Israel, do so few schools apply methods and curricula suited to their pupils' needs systematically, and in the long-term?

Extensive literature on the upheavals accompanying changes in the educational system (Gordon, 1984; Huberman and Mills, 1984; Fullan, 1992; Hargreaves, 1994, and others) describes external and internal obstacles to implementing new methods and curricula. The former lie outside the educational system and are linked to the country's social and political foundations. The educational establishment can react to them but cannot control them. This is true for a society having a defined caste structure; a society having a minority ethnic population which is discriminated against both socially and in terms of employment opportunities (in Israel, the situation in the past applied to Oriental/Sephardic Jews; today, it applies to Jewish/Arab populations); a society where caste barriers prevent talented individuals from applying their academic skills to appropriate jobs and social positions. In a society of this type, a negative attitude could develop in terms of scholastic achievements in schools. The minority groups will feel that it is improbable

that achievements in their studies will significantly reward them in the future.

Schools can try to increase motivation among these pupils and improve their scholastic achievements, but are unable to change the social structure.

Ogbu (1992) maintains that in many countries, the relationship between minority groups and the majority reflect society's caste structure. He focuses on the Afro-American population in the United States but also discusses five other countries, including Israel. According to Ogbu, the relationship between eastern and western groups in Israel reflects a discriminatory caste system. Social barriers prevent talented lower-class individuals from applying their academic training in appropriate employment and social positions. Children in this group feel they have no chance of success, and develop negative attitudes with respect to scholastic achievements. The schools do not try to meaningfully change this situation and, moreover, they are unable to.

A survey (Dar and Rash, 1991) of the current situation in Israel shows contradictory evidence. For years, increased support has been given to improving the achievements of children of Sephardic (Oriental) origin, many of whom are concentrated in poor urban neighbourhoods and townships settled by new immigrants. Some schools that are success stories of academic and social achievements are located among such weaker populations. This proves that it is possible to promote our educational goals even against external obstacles. The educational establishment concentrates on what it can control, i.e. those internal obstacles that, in great measure, determine the ability to achieve educational goals.

These obstacles can be divided into four general groups (Chubb and Moe, 1990; Richardson, 1990; Fullan, 1991; Shedd and Bachrach, 1991; Rich, 1993; Sharan and Shahar, 1994):

1.**Organisational** obstacles - involving the lack of defined means for attaining goals, of opportunities for staff to work as a team in order to improve teaching, and contradictory educational initiatives.

2. Obstacles connected with **the teacher's knowledge and training**, before starting work and in-service.

3. Obstacles connected with **the teacher's skills**.

4. Obstacles connected with **the teacher's opinions** on specific activities and in the ideological sphere.

This classification is useful for discussion purposes but in reality, all four obstacles are interrelated.

In this study, a group of teachers was "treated" in such a way as to train the teacher and increase her/his knowledge of new methods. Indirectly, this would affect perceptions of the classroom situation, as well as beliefs and opinions on the subject areas. The present research attempts to examine whether the "treatment" did in fact change the teacher's work and outlook. If there were no marked changes, what were the obstacles hindering change as perceived by the teachers themselves, the head teachers and the supervisors?

In conclusion, the main problem dealt with by this study is the attempt to bridge the existing difference between the Israeli classroom structure and its composition (the large number of pupils, heterogeneous classes), and the teaching-learning methods commonly used. The study investigates one way of coping with the problem: training teachers to use alternative teaching-learning methods as opposed to the traditional method.

1.3   RATIONALE AND PURPOSE OF THE STUDY

The rationale of the present study is to contribute towards an understanding of the term INSET, making specific reference to its provision in Israel. The study itself fits into the general context of research on the implementation of methods acquired in INSET. Israel is an appropriate location since, over the last decade, radical changes and improvements in the scope and range of INSET programmes have taken place here. Since INSET extends over a wide variety of objectives, target populations, subject matter, and executive bodies, a

comprehensive policy and firm strategies are required for optimum results.

Several dilemmas still face INSET planners regarding the objectives of INSET:

•Should INSET fulfill the system's requirements or those of the participants?

•Should INSET satisfy future needs or rather offer a perspective of the present?

•How far ahead should INSET programmes be planned: within the present time framework of the organising body or according to future market prospects?

•Should objectives include social rehabilitation and the special needs of diverse communities?

Other questions relate to the way INSET programmes are initiated, criteria for prioritisation, and organisation of the different operating bodies.

In looking at teacher training programmes in Israel, those designed for special purposes such as alternatives to traditional teaching methods for example, are worth examining. The Oranim School of Education offers a wide range of programmes. Their effectiveness has not been examined, and follow-up with participants while they are implementing what they have learned, is not maintained. After completing the course, participants merely fill out a feedback form which is identical for all groups.

The School is now developing the role of 'supporter' during the training period, a staff member who supports teachers taking their first professional steps. (Support of this type is provided only to teachers during their first year of work and in some cases, also during the second year. Teachers having more experience are not eligible for this support and they may only rely on the different courses offered in the schools and elsewhere.) This tisiv 'retroppus's the new teacher's classes and the two will meet regularly and privately for purposes of professional guidance.

There is, therefore, room for a more systematic examination of the results of training programmes, with a view to improving them and adapting them to teachers' needs.

The essential purpose in this kind of research would be to answer the

question: "Does the unique amalgam of materials, activities, administrative arrangements and role-determined tasks comprising this particular programme enable the programme to achieve its objectives (Morris and Taylor, 1978)?"

The minand essential conditions for applying any teaching-learning method is linked to teachers in the classroom, to their attitudes, to assumptions and goals for their pupils, as well as to the school and the curriculum. Every training programme and all guidance in teaching methods must include the educational thinking that lies beneath improved means of implementation in the classroom. The particpating teacher is expected to become aware of her/his methods and to improve them.

As previously mentioned, the topic of this research will focus on investigating the impact of specific INSET provided for Israeli primary schools. This study will attempt to examine the level of implementation of methods and supporting doctrines acquired through INSET, and to locate impeding elements. As indicated in Section 1.2 (Scope of the Problem), negative factors could be the outcome of the structure of the educational system in Israel, the teaching environment in the class and the school, the formula of the course, or factors related to the individual teacher such as personality, quality of training, and experience.

Discovering these factors and reporting them to course planners and to the appropriate bodies in the educational system might prove beneficial to the structure of courses and to subject matter, with a view to adapting courses to the participants (one can assume that changes in course structure and subject matter would be far easier to implement than changes in the educational system).

Throughout the course, teachers are exposed to various methods of class organisation and different methods of teaching and assigning tasks. They examine the pros and cons of each and every method and draw conclusions as to implementation. All course participants are required to utilise the material in planning class activities and for the subjects they teach. One criterion in

measuring the quality of activities is implementing the adequacy principle. Has the teacher organised the class in a way adequate to the assigned task? Is the task suitable for the specific class (age group, academic level, previous experience, etc.)? The teacher's role during activities is scrutinised as well (see detailed course structure in Appendix 1).

Reexamination of the course programme, together with the interviews and questionnaires of the participants and non-participants, as well as of head teachers and inspectors based on their observation of the participants' class work, may shed some light on such questions as:

- Have goals and needs been met?
- Was the INSET programme run as planned, and if so, was it worthwhile?
- Was the programme delivered effectively?
- What results were achieved in terms of classroom implementation, and what is the quality of the results?

Research, in general, plays an important role in advancing alternative teaching methods. It can disclose factors impeding implementation, show what is missing or unsatisfactory in the material used, and indicate ways of improving it. Examining these matters may help to work out more effective courses of action and thus, advance work in the field.

By determining the attitudes of the individuals involved, in addition to examining the professional literature, the researcher hopes to bring about a deeper and keener understanding of different aspects of the problem. The desired result consists of far-reaching changes and improvements in INSET programmes as they are implemented in practice.

1.4 APPROACHES AND STRUCTURE

Being a case study, this research work is based on findings gathered by unstructured and semi-structured interviews, classroom observations and questionnaires submitted to teachers.

The research population constituted two groups of teachers: Group A was exposed to a certain type of 'treatment,' Group B was not.

The 'treatment' involved providing a special training programme on alternative teaching methods one day a week for a year. Lectures and workshops affording active experience with the teaching methods under study formed part of the course. The research examines how Group A and Group B teachers use different methods of teaching. At the same time, teachers' explanations as to the extent to which they implemented, or did not implement, the alternative methods in their classes are also examined.

Teachers in Group B were matched for individual similarity to a member of Group A. That is, each Group A teacher was assigned a partner from the same school, and the partners made up Group B. Assuming that at least some teachers would make -reference to the structure of the educational system as a whole and to the demands of both the system and those of their school, head teachers and supervisors were also interviewed. They were selected for the sample from the treatment group, i.e. from schools whose teachers attended the training programme.

Analysis and data processing are also carried out with qualitative instruments - explanatory and descriptive processes that attempt to reveal participant teachers' points of view and practical knowledge. The analysis combines interactions between subject and researcher, and between practice and theory. The research analyses impressions from the field (observations and interviews) into units of content. At a later stage, an attempt is made to determine patterns that describe the practical work of the teachers being studied (Connelly and Clandinin, 1984).

The principal analysis instrument is content analysis. This process searches for conspicuous, meaningful, interesting and recurring components in the assembled data. These components are the analysis categories and were selected by the researcher in keeping with the questions asked in the study (Guba, 1978; Patton, 1980).

Quantitative analysis is used only to a limited extent. It relates to the number of times each category appears within the analysis units established, and the frequency of each category's appearance.

In view of the foregoing, the importance that the researcher affords to discovering the thoughts, opinions and preferences of the participating teachers is evident. It is based on the assumption that conduct in the classroom stems from the perceptions of teachers, and the importance in their eyes of what goes on in the class and in the school.

1.5 STRUCTURE OF THE THESIS

This thesis is comprised of three main sections:

Section A (Chapters 1 to 3), providing a general introduction to the research study.

Section B (Chapters 4 to 7), describing the preparations involved in carrying out the research study.

Section C (Chapters 8 to 11), detailing the findings and conclusions.

Details of these sections follows:

<u>Section A</u>

Chapter 1: Reviews the problem at the base of the research, details the rationale and the objectives, and alludes to the research structure.

Chapter 2: Since the research focuses on the situation in Israel, this chapter deals with the individual reality of the State of Israel, in general, and the Israeli educational system, in particular. Special emphasis is placed on teacher training in Israel.

Chapter 3: Reviews the literature dealing with teacher training, the subject forming the basis of this research.

<u>Section B</u>

Chapter 4: Describes the three pilot studies carried out during the preparation of the research.

Chapter 5: Details the research questions and assumptions.

Chapter 6: Details the relevant variables, the research system, the research population and sample, and the sampling procedure.

Chapter 7: Details the research tools and data collection process used.

<u>Section C</u>

Chapter 8: Summarises the findings dealing with the first research question.

Chapter 9: Summarises the findings dealing with the second research question.

Chapter 10: Summarises the conclusions resulting from the findings.

Chapter 11: Deals with possible future applications, and possible directions for continued research.

The next chapter will deal with the individual reality of the State of Israel and the Israeli educational system. Special emphasis will be placed on teacher training in Israel.

CHAPTER TWO: BACKGROUND OF THE STUDY

Since this thesis focuses on a case study in Israel, a background of the unique Israeli reality and the Israeli educational system must be given. Without this background, the reader will have difficulty in understanding the different components of the researched situation.

2.1   THE STATE OF ISRAEL

Israel is a land and a people. The State of Israel was founded in 1948. With Lebanon to the north, Syria to the northeast, Jordan to the east, Egypt to the southwest, and the Mediterranean Sea to the west, Israel covers an area of 10,840 square miles (27,800 sq. km.) within its boundaries and cease-fire lines. Long and narrow in shape, the country stretches over a length of approximately 280 miles (450 km.) and a width of approximately 85 miles (135) at its widest point (see Figure 1).

Figure 1: Israel and neighbouring countries
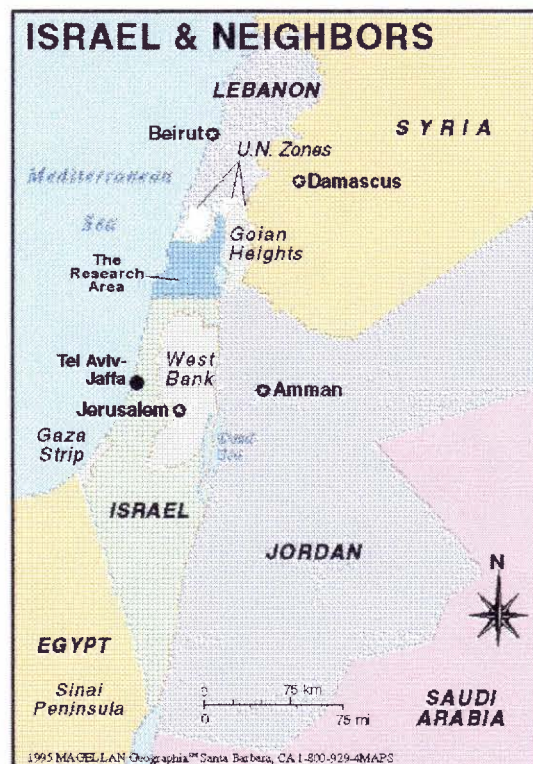
Over the centuries, the Land of Israel had been known by many names, among them "Eretz Israel" (Land of Israel), Zion, Palestine, the Promised Land, and the Holy Land.

More than five million people live in Israel today. The majority are native-born, while the rest come from almost every country around the world, comprising a mosaic of people from different religious and cultural backgrounds. Lifestyles range from modern to traditional, from urban to rural, and from collective to individual. More that 90% of Israelis are city-dwellers and the remaining live in rural areas. Over 6% of them live in two unique cooperative environments - the Kibbutz and the Moshav.

The research to be described was carried out in the Oranim School of Education, located in northern Israel. As may be observed from Figure 2, the country's northern region is populated mostly by rural-agricultural settlements. The cities, considered small also by Israeli standards, are primarily located along the region's periphery (Haifa, Acco, and Nahariya to the west, and Tiberias to the east).

Figure 2: Map of Israel's northern region
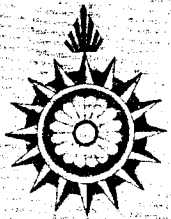
galilee
touring map

Mediterranean Sea
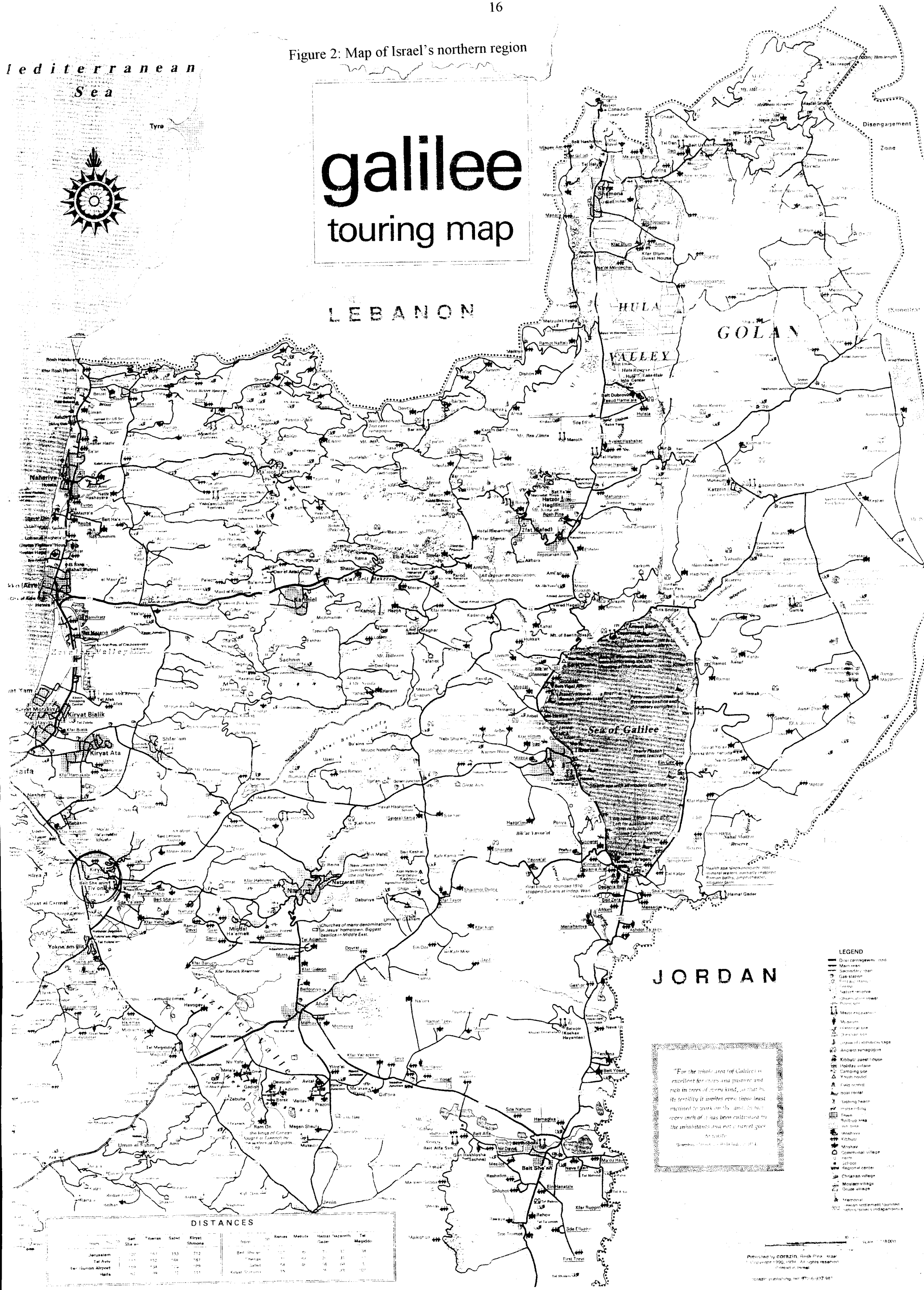
LEBANON

HULA VALLEY

GOLAN

JORDAN

Sea of Galilee

DISTANCES

Population of the region accelerated during the 1960s, when the Jewish sector started the trend of moving from city to country. As illustrated on the map, the region is populated today by many small settlements.

The rural nature of the region is constantly changing due to the difficulty in making a living just from agriculture, but the size and character of the settlements have remained practically the same. This fact has also had an influence on the different community institutes such as schools established by these settlements, as will be clarified later.

The Oranim School of Education, which plays a major role in this research, is situated in the southwestern area of the northern region, approximately 30 kilometers from Haifa, and adjacent to the town of Kiryat Tivon (circled on the map). A description of Oranim and its association with schools is provided in section 2.6.2 on Teacher training Colleges.

Israel is a parliamentary democracy consisting of three constituents: the Legislature (the Knesset - the Israeli Parliament), the Executive (the Government), and the Judiciary (the court system), as illustrated in Figure 3. The country is governed based on the principle of division of power, whereby checks and counterbalances are built into the system.

Figure 3: The three constituents of Israeli democracy

HEAD OF STATE

| PRESIDENT |

LEGISLATURE	**EXECUTIVE**	**JUDICIARY**
SPEAKER	PRIME MINISTER	COURT SYSTEM
KNESSET	GOVERNMENT	ATTORNEY GENERAL
COMMITTEES	MINISTERS	
MAYORS AND COUNCIL HEADS	STATE CONTROLLER AND OMBUDSMAN	
LOCAL COUNCILS		

| ELECTORATE |
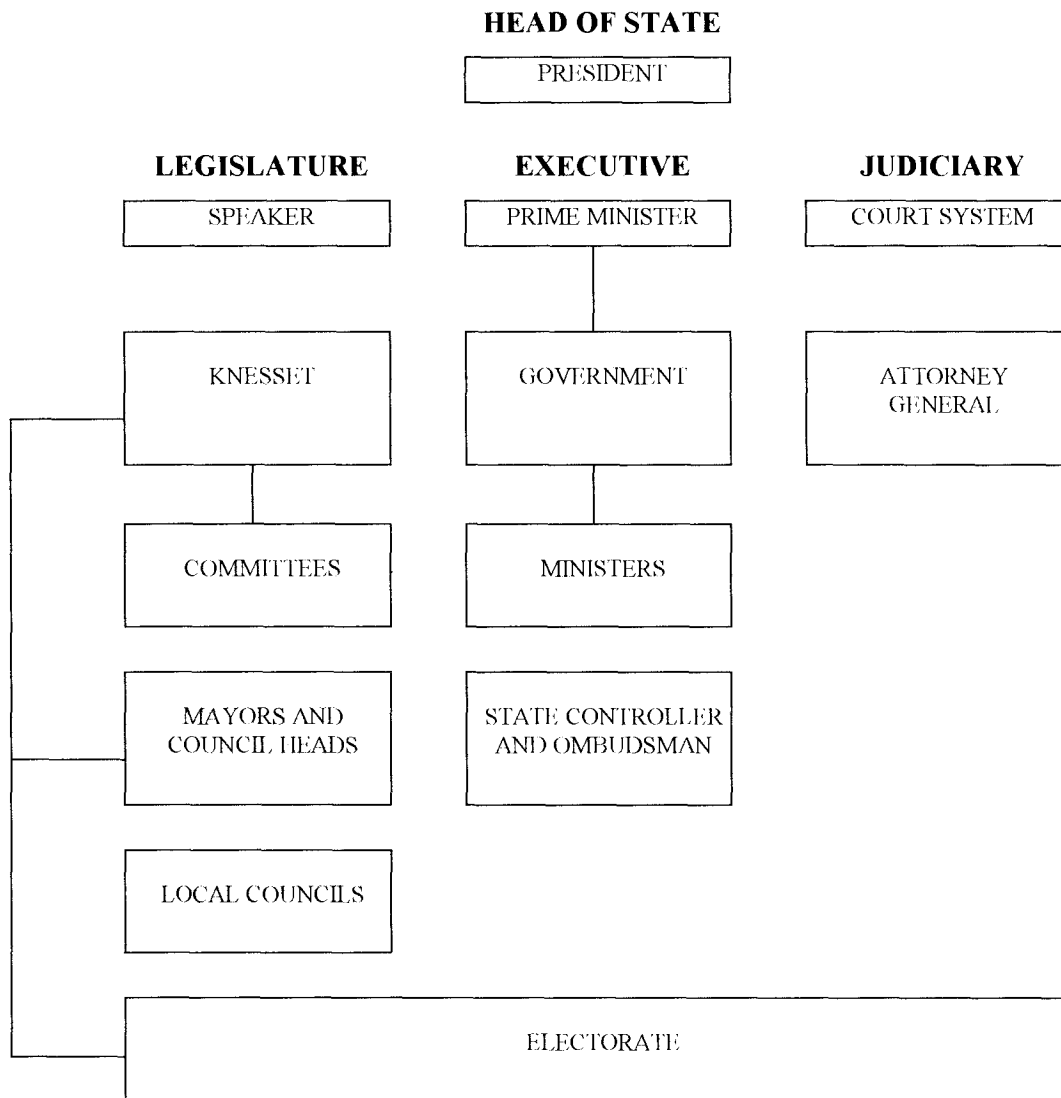
Source: Author

The President primarily fulfills ceremonial functions as Head of State, and is above and beyond party politics.

The 120 Knesset members are chosen every four years in country-wide secret elections involving proportional representation. To date, no one party has received enough Knesset seats to form a majority government. Consequently, Israel has always had to form a multi-party coalition government.

2.2   EDUCATION IN ISRAEL

Israel must demonstrate equality of opportunity to all, regardless of social background. An educational system that fails to consider the prevailing social climate or which restricts career mobility of some sections of the community, could create division in the fabric of society and act against the establishment of a cohesive nation since accessibility to such positions and status could appear to be discriminatory.

The elected government recognises this problem. It is indisputable that at the national government level, education is regarded as an instrument by which the shape of society can be formed and the eradication of social disadvantage achieved. The fundamental prevailing belief has been that the most effective way of improving educational services is to change what is taught and how it is taught. There is little evidence to support this belief and one can point to various educational programmes, particularly in the United States, where, despite the considerable financial support made available, there has been little noticeable effect on performance since changes were not made in the structure of education (Guri, 1990; in Hebrew). Given the fact that education is subject to the open political system in which it operates, and is therefore nourished and polluted by a wider political and social environment, it appears that as reforms infiltrate into the political system of balances and checks common to any democracy, they are compromised and watered-down by accommodating the views of those numerous groups and individuals who seek to influence educational policy.

The structure of democratic educational governance restricts the full implementation of reform programmes by reducing the tenets of reform to the lower common denominator acceptable to the public - politicians and professionals. They exert a kind of incremental inertia or rocking-horse phenomenon - little significant forward movement.

The strategy employed by the Israeli government through its Ministry of

Education in its attempt to implement the 1968 Reform (described later in detail in Section 2.3) involved addressing issues in addition to the content and method of education. The Minister of Education (Rash, Adler, Chen and Inbar, 1979; Mincovitch, Davis and Bashi, 1980) was adamant in his opposition to Teachers' Associations and sought to modify the planned structural changes for which he received Knesset support. Structural changes were thus approved and accepted by junior high schools, with the intent of achieving specific social and educational goals, thereby emphasising the demands and expectations made upon and of them.

The provision of educational services is regarded by all nations as being vital; it is the foundation upon which the future is built. This is critical in a developed nation such as Israel owing to the social, economic and military functions of education, as well as its intrinsic value to the individual in assisting the realisation of aspirations and ambitions.

The question as to whether Israel is a developed nation or a developing nation is open to argument. With respect to its technological development in terms of industry, transportation, and agricultural production, health care services, education, social security and conditions of freedom of the individual, Israel is defined as a developed nation. However, with respect to the country's Gross National Product, its average per capita income level and per capita consumption, employment opportunities, lifestyles and other factors, Israel is still in the developing stages.

Under normal circumstances, educational policies are determined through consultation and dialogue with groups and individuals in appropriate political forums or through the media. However, recognising the developing nature of Israel and its national needs, policies must be subject to the overall direction, approval and control of the elected government. The Israeli government does not hesitate to discharge its responsibility and function to direct; the "deliberate cooperation or phasingdevelopment" being the critical responsibility of a central government. Amongst politicians and administrators, it is presumed that

individual and collective values of education are the same as national values. However, as previously stated in the Introduction, once the immediacy of external threat to the stability of the nation has been removed, divisions appear in the social fabric.

Should a long period of military and geopolitical security ever come to the region, this presumption may prove to be too simplistic. Only then will it be possible to assess whether the difficult, seemingly contradictory and perhaps impossible balances sought in educational emphases have proven effective; whether the disparate elements of society have formed a relationship in which ethnic origins and cultural plurality are respected; and whether the needs of the individual and of the nation have been satisfied. We may then be able to see whether the controlled influence of education on the development of the individual has counter-balanced the undeniable force of influences such as socio-economic background, home life, peer groups and the media.

It would be impossible to cover the full complexity of the Israeli educational system in the context of this paper, but its content and essential character will be described below.

2.3 STRUCTURE OF THE EDUCATION SYSTEM

When the State of Israel was founded, a fully functional education system also existed. In certain aspects, the Hebrew education system in Israel was a continuation of the educational autonomy which the Diaspora Jews created for themselves.

During the British mandate rule in Israel, Hebrew primary education was divided into different types based on ideology and the outcome of the political-ideological split in Jewish population in the Land of Israel. For example, the "Eastern Stream" represented the educational system of religious Zionist parties. This stream was obligated to enrich the identification of pupils with traditional Jewish heritage - history, principles, values and symbols,

normative lifestyles, and ethical leadership. The "Workers' Stream" represented the working movement's independent educational system. In its curriculum from kindergarten to high-school, this stream emphasised physical labour, current events discussions, Israeli geography and history, and the birth of Zionism and the work movement. In social science studies, the values of the work movement were emphasised.

With the establishment of the State of Israel in 1948, the Ministry of Education took responsibility for educating the general population, both Jews and non-Jews alike. This proved to be the beginning of a complex process of developing an educational system which would meet the needs of a western democratic country having accelerated development in the fields of science, technology, industry and society.

In parallel, it had to deal with problems unique to Israel which included: providing education during perpetual emergency situations and conditions of war; a lack of financial resources for huge defence-related expenses; a gap in the educational level between the hundreds of thousands of immigrants from many countries; and social tensions between veteran and disadvantaged populations, religious and non-religious sects, Jews and non-Jews, etc.

This process of establishing an educational system in Israel is still continuing. Alongside some of the more impressive successes were also failures, and to date, no suitable solutions have been found for some of the problems mentioned above.

Owing to the extreme complexity of the situation in Israel, many bodies are involved in the decision-making process on the subject of education in Israel, as shown in Figure 4.

Figure 4: Decision-making process on the subjects of education in Israel

| LEVEL 1 | | Government | | Media |

Minister of Education · Minister of Finance · Minister of Labour · Minister of Housing · Minister of Industry

| LEVEL 2 | Director General | Parents |

Primary/ Secondary — Pedagogical Secretariat — Education Admin.

Profes-sionals

Training & Extension Studies Div. · Curriculum Division · Religious Education Division · Settlement Education Division · Arabic Education Division

Foreign Bodies

| LEVEL 3 | Course Coordinator Supervisor | Districts |

District Supervisor

Local Authority

General Supervisor · School Principal

| LEVEL 4 | Course Coordinator |

Course Supervisor · Teachers

Pupils

Source: Open University (1978)

This figure describes four decision-making levels in education, emphasising the fact that the Israeli educational system is a centralised system (although attempts have been made to provide more autonomy to the schools). Teaching policy in a centralised educational system is defined by general broad objectives. A conversion to operative objectives could be carried out at different levels of the educational system.

On the other hand, it is important to point out that the Minister of Education is primarily responsible for educational policy making. The political views and personality of the Minister influence the way the objectives of education are interpreted, and the emphasis he places on specific contents is more pronouned than others.

A practical example of this occurred recently (summer of 1995) when government rule in Israel changed and a leftist-liberal party head serving as Minister of Education was replaced by a rightist-religious party head.

In 1949, the compulsory education law was passed in Israel. In the first stage, compulsory education was required for children aged 5 to 13, and for youth aged 14 to 17 who had not completed their studies in primary school. Schooling is provided for free. Pupils aged 5 to 13 were required to study one year in kindergarten and eight years in formal primary school (recognised by the State). Youth aged 14 to 17 were required to study in schools for working youth.

There are two exceptions in this law despite existing procedure in developed Western countries:

Compulsory education for 5-year old children in kindergarten: children receive essential preparation for formal studies in primary school. This preparation is required as a result of the arrival of a huge amount of immigrants who did not know Hebrew, the country nor its customs, and they were not familiar with modern education methods.

<u>Compulsory adult education</u>: study towards completing basic education.

In 1969, compulsory education was extended for another year until Grade 9, and in 1978, by two years until Grade 10. Youth aged 16 and 17 were not required to study in secondary schools but they were eligible to study for free.

During the 10-year period prior to 1968, educationists from the Ministry of Education and university departments, aware of the deficiencies in the educational service and consequential social implications, had argued for structural reforms. They considered that the seventh and eighth grades in existing first to eighth grade (6-14 years) primary school frameworks represented wasted educational time.

While little evidence supported this view, except for a high drop-out rate of pupils failing to continue their education after 14 years, it was nevertheless felt that pupils aged between 12 and 14 could progress from the general towards the specific. Therefore, specialist study in schools suitably equipped for increased specialisation was implemented, rather than delaying this specialisation until transfer into the ninth grade in secondary schools. It was considered educationally desirable to raise the school leaving age from 14 to 16 by extending the Compulsory Education Law. Furthermore, it was socially desirable to institute changes in the structure of schooling to facilitate the continuing integration of pupils from different national origins and cultural backgrounds. By implementing such legal and structural changes, it was believed that the process of social integration could be accelerated, and that instruction, learning and achievement levels of pupils, particularly those of Sephardic (Oriental) origins, could be improved. The structural changes are shown in Figure 5.

Figure 5: Structural changes in the Israeli educational system before and
after the 1968 Reform

Age	Before 1948	Before 1968	After 1968	Grade
18		Army service	Army service	
17				12
16	High School	High School	High School	11
15				10
14				9
13			Secondary School	8
12				7
11				6
10	Primary School	Primary School		5
9				4
8			Primary School	3
7				2
6				1
5		Kindergarten	Kindergarten	

☐ Compulsory for Jewish youth (male and female)

☐ Compulsory for children who didn't have a primary school education

☐ Compulsory

Sour: Taylor (1982), Apanasewicz (1977)

The structural and legal changes were thought to assist in the realisation of
the goals outlined by the Minister of Education in his speech. They were to
provide continuous education at all levels, expanding secondary sector
education by increasing school leaving age to 16. It was believed that in
changing the structure of schooling, education would be a more suitable vehicle
for attaining educational and social goals, and would improve the range of

curricula and quality of instruction.

By restructuring education to provide secondary schooling for Grades 7 to 9, and by providing a middle or junior high school framework for Grades 7 to 12 in a comprehensive school, the intent of bringing together pupils from a wider geographical area than that of neighbourhood primary schools became evident. It was clear that populations from similar cultural and ethnic backgrounds tended to form communities served by neighbourhood primary schools, where the prevailing atmosphere and ethnic culture reflected community values.

By attracting children from wider geographical areas of cross-cultural communities, the secondary schools could accelerate integration of the diverse populations.

Data from the Ministry of Education reveal that integration in schools is still far from being complete (Rich, 1996; in Hebrew). Factors encouraging integration include the willingness to promote interaction between different communities, great dwelling mobility, and geographical proximity between neighbourhoods and settlements having different ethnic compositions. Factors preventing integration include high concentrations of disadvantaged pupils in one settlement, and budgetary problems in constructing schools in places requiring them. In 1989, only 56.8% of pupils studied in secondary schools and the remainder continued studying in the pre-1968 educational framework.

Reform actually took effect in those places where it was easy to implement (particularly in those places where there was no serious opposition). In places where integration was incorporated, it appeared that integration between Sephardic and Ashkenazi Jews did not significantly change academic achievements without requiring additional educational intervention. In addition to this, it appeared that bringing children together from different neighbourhoods under one roof did not influence the type of relationships between them (Klein and Eshel, 1980).

A gap still exists between pupils from well-to-do and disadvantaged

families, and has not been reduced by the desired amount.

The greatest critics of the educational system in Israel claim that the system did not fulfill its great promise (the promise to provide education, acclimatise immigrants to the modern world, promote equality, reduce gaps, establish a "melting pot" producing Israelis of equal status), and it serves today to classify and differentiate between groups and sub-groups (Svireski, 1994; in Hebrew).

Therefore, it is still not possible to characterise the educational system in Israel as universal. A teacher in Israel must deal with differences between pupils and accordingly apply different teaching methodologies. In many cases, the teacher feels that he/she is not equipped with the proper tools to carry out this difficult task.

2.4 THE CURRICULUM

A. State Education

In 1953, the state education law was passed. This law uprooted existing trends in education and generated overall state practice, involving state education and state religious education. The law defines the nature of the two types of education in the following manner:

State education: provided by the state based on a curriculum; has no connection to a political body, ethnic body or organisation outside of the government; is under the supervision of the Minister of Education or an individual authorised by him/her.

State religious education: emphasises religious fundamentals with respect to lifestyle, curriculum, teachers and supervisors.

This law even determines that the objective of education is to "base the educational infrastructure in the country on Israeli cultural values and scientific achievements, on the love of the land, and loyalty to the state and the people of Israel, on consciousness of the memory of the Holocaust and heroism, on belief

in agricultural work, on pioneering efforts, and on the society's ambition to encourage freedom, equality, tolerance, mutual understanding and the brotherhood of man." These objectives are stated in the most general terms. The reason for this may be that they were formulated at a legislated level. When objectives are accepted at a legislated level and in a political context, they help preserve a uniform framework, on the one hand, and cultural, religious and political pluralism, on the other hand.

In the field, this is expressed through the establishment of schools which differ in type, orientation, teaching methods, the extent of the existence of individual curricula, the extent of involvement of parents, etc.

State Education. State schools follow curricula developed and approved by the Ministry of Education - 75% obligatory and 25% supplementary, the latter determined by the Ministry based on recommendations made by local education committees or by parents. If parents are interested in supplementary curricula studies exceeding the 25% limit, they must share the costs with local authorities and other governmental and voluntary bodies. Kindergarten and primary school pupils attend schools closest to their homes. Teachers are employed and paid by the Ministry of Education.

State Religious Education. State religious schools are staffed by teachers who are observant Jews employed by the Ministry. The schools maintain a religious way of life and follow special religious curricula. The Ministry of Education is advised on the administration and curricula of these schools by the State Religious Education Committee. Supplementary subjects exceeding the 25% limit are provided at the parents' expense and mainly emphasise Jewish and religious studies. Registration of pupils is by district.

B. Independent Education

Independent Education (Hinuch Atzmai). Independent schools follow curricula in accordance with the tenets of orthodox religious education. They are controlled by the Independent Education Central Committee, which

appoints teachers under the supervision of the Independent Education Department of the Ministry of Education. Greater emphasis is placed on religious education than in state religious schools.

Independent Recognised Schools. These schools are recognised by the state and base their work on national curricula, but they nevertheless follow their own beliefs and employ methods according to parental and staff demands. They also appoint their own staff. Most schools in this sector are private; pupils are selected; tuition fees are charged; and registration does not depend on districts.

Over the past few years, there has been a appreciable trend to establish schools which specific cultural themes (for example, schools promoting the values of the Labour movement) and schools specialising in a certain area (such as schools for the arts and nature schools).

Kindergartens: Kindergartens serve as a bridge between life centered around the family and life in a cooperative setting with peers. The kindergarten's main goal is not just to teach fundamental reading and writing skills - it also provides an introduction to the Hebrew alphabet and numerical concepts.

2.5   SCHOOL ORGANISATION

The organisation and provision of education attempts to maintain a balance in meeting individual, parental, community and national needs. Parental and community demands are not ignored and it is possible for the community to apply pressure on the local Department of Education to make changes in curricula of the different grades. Local Departments themselves enjoy a certain amount of autonomy: they are generally responsible for pre-school, kindergarten, special and social education, and for a certain proportion of high schools. The are responsible for registering children in primary schools, implementing policies of integrat, providing extra-curricular activities and

summer camps, and effectuating the reform programme (although it is the Ministry which allocates funds for building projects and approves building designs prepared by the local authorities). Local authorities are naturally responsible for local planning and administration, for which the system of local government is similar in structure to that of the United Kingdom, having a Mayor, Deputy Mayor, Council and Service Committee sub-structure.

In summary, much has been said in the literature on comparative education regarding the distinction between centralised and decentralised systems of education, but in practice, the way in which democracy provides educational services for its population rarely falls neatly into one category or another. By "centralised," we mean the concentration of decision-making and localising executive and administrative power in one place (generally at the national government and its agencies level); and by "decentralised," the distribution of authority among various levels. Therefore, the Israeli system is a combination of both - education is clearly a locally administered national responsibility. However, Israel is significantly different from the United Kingdom and the United States in three important respects: (1) the curriculum is by and large centrally controlled; (2) teachers are appointed by the Ministry, not by local authorities, and thus, there is considerable central control over working conditions as well as salaries; (3) there is a high degree of central authority over budgets.

Control of these three areas is critical to a developed nation like Israel which may, out of necessity, need to quickly and radically alter the emphases on its educational system in order to accommodate sudden changes or fluctuations in its economic, militaristic or social conditions.

Naturally, there is growing criticism among Israelis regarding the balance between the areas studied and the level of updating the educational system to meet the needs of the general public, society and the army, which are becoming increasingly demanding and complex.

This criticism resulted in a phenomenon defined in Israel as "grey

education," where parents organise to provide their children with enrichment classes within the regular study framework by extending the school day. The Ministry of Education is in opposition to this activity but the phenomenon still exists.

2.6 TEACHER TRAINING IN ISRAEL

2.6.1 Introduction

The Ministry of Education also oversees higher education in Israel through its Council for Higher Education and the Planning and Budgeting Committee. The Council deals with higher education in Israel and was established in order to coordinate between institutions, to maintain their level of academic excellence, and to serve as a pipeline for the transfer of funds from public sources and supervise their allocation.

The Minister of Education is responsible for implementing the Council for Higher Education Law, and important decisions of the Council, such as accrediting institutions for higher education or not recognising institutions, require government approval.

This study primarily focuses on teacher training institutes, and in this context, it must be pointed out that the Council determines, for example, if a teacher training institute can offer a B.Ed. degree or a "senior teaching" degree instead.

There are two main types of teacher training institutes in Israel - teacher training colleges (which significantly differ from one another), and university departments of education (see Table 1).

Table 1: Teacher training institutes in Israel

	Universities	Secular Colleges	Religious Colleges	Independent Colleges (Orthodox)
Number	6	16	10	7

Despite the difference in nature between these types of institutes, there is a common denominator in the teacher training programmes. Firstly, a distinction must be made between pedagogical studies and disciplinary studies. Secondly, in the majority of training institutes, the traditional "layered structure" approach applies (Zeichner, 1990). Based on this approach, the programme is structured according to the first foundation layer of studies (educational psychology, educational sociology, etc.); the second layer of economic pedagogy (teaching theory, curriculum, organisation and classroom administration, etc.); the third layer of course teaching methodology (teaching of mathematics, teaching of Bible, etc.); and the fourth layer of practical classroom teaching experience.

The two main types of teacher training institutes are briefly described below.

2.6.2 Teacher Training Colleges

Teachers are currently trained in either three-year or four-year programmes. Graduates are qualified to teach in kindergartens and primary schools. According to Ministry of Education regulations, kindergarten and primary school teachers must complete the three-year programme. Teachers preparing for special subjects (such as physical education, arts and crafts, etc.) in the three-year programme will be qualified to teach their specialties in the upper grades of secondary schools.

There are variations in college programmes, ranging upwards from the minimum standards required by the Ministry. Teacher training colleges are

divided into two categories:

1. Colleges providing three- or four-year programmes, both programmes, or specialty programmes. Students successfully completing the three-year programme receive a diploma and qualify as teachers. Pupils completing the four-year programme receive a diploma and a B.Ed. degree.

2. State colleges, state religious colleges, or ultra-orthodox colleges. Their status does not affect educational standards, but the state religious and ultra-orthodox colleges are more oriented towards the religious aspects of education.

The curriculum includes a foreign language requirement, Hebrew language, pedagogy, practical subjects, specialised subjects and electives, as well as practical teaching experience, with variations to meet the specific requirements of a particular institution. Teaching practice is an integral part of the Israeli system of teacher preparation. It differs from teaching practices in many other countries in that it is carried out on a regular weekly basis during the entire programme, as opposed to practice concentrated in one or more areas.

The development of teacher training colleges in Israel is characterised by continuous change. The most prominent aspect of this process of change is the existence of external committees which are appointed by the government. Their objectives include enabling teachers to be trained in order to receive an academic degree; improving the practical aspects of teaching, recognising the need for different types of teacher training institutes; and in general, improving the teacher training system to ensure an increase in the level of education in the country. The establishment of these committees occurred as a result of dissatisfaction with the existing situation. The effect of change recommended by the committees was not immediate, but it is absolutely essential.

The teacher training system did not initiate nor does it support the establishment of these committees, but it responds to the social system and to social changes in Israel. The result of this response is not always positive from the point of view of quality of teachers and of teaching.

The process of training teachers to enable them to attain academic degrees is in an accelerated implementation stage and marks a prominent and paramount change in the teacher training system in Israel, both regarding regular pupils, and in particular, veteran teachers completing their studies towards a B.Ed degree (Rehimi, 1995). The basic premise of this is that colleges provide better teacher training and consequentially a B.Ed. degree. While it is difficult to measure the extent of the contribution of colleges to improving the quality of teaching, their contribution may be appreciated in terms of improving the level of education. In addition, an academic degree represents a status symbol in Israel. A teacher's status will be determined, amongst other th, by the extent of his/her progress in attaining these "status symbols" (Israeli, 1990).

It is hoped and expected that the process of training teachers with the objective of attaining an academic degree will provide the incentives required to turn the teaching profession into a prophesy and in particular, to improve the quality of teaching.

Oranim School of Education

The Oranim School of Education was established in 1950 by the Kibbutz Movement, with the objective of responding to the needs of northern Israel's educational system. Oranim combines, under one roof, training programmes for early childhood teachers, kindergarten teachers, primary school teachers, and secondary school teachers. Teachers can study most teaching subjects at Oranim, as well as participate in professional development courses within the framework of their teaching work.

Academic studies are combined with studies in education already at the beginning of the training programme and thus also serve as educational learning tools.

Students from the country's entire northern region attend Oranim, culminating in a diverse population in terms of socio-economic background,

religion, educational perspectives, etc. This fact poses challenges for students and teachers alike regarding accepting the abnormal and the unknown, recognising the rights of others, cooperation, responsibility, etc.

Oranim's teachers and management invest great efforts in creating a pluralistic and democratic teaching environment, at the basis of which lies an atmosphere of mutual trust and respect.

In addition to the dissemination of knowledge, Oranim encourages the development of critical thinking, openness to different attitudes, sensitivity to individual needs, and creativity. Therefore, most of the courses incorporate workshop activities.

Over the years, Oranim developed teacher training disciplines for study towards a B. Ed. degree, for kindergarten teachers, for primary school teachers, and for special education teachers. Other disciplines, such as teacher training for arts teachers, for teachers of the Arabic language, and for teachers from the Bedouin sector, are currently undergoing formal academisation. In addition, pre-university programmes are offered in preparation for studies in institutes of higher learning.

In 1971, a university division was established within Oranim, conferring a B. Sc. degree in the science teaching and a B.A. in Humanities. Graduates of these disciplines are awarded a teaching certificate, enabling them to teach in secondary schools.

This research study focuses on the training courses offered within Oranim's professional development division for teachers and kindergarten teachers. This division, operating within the Institute for the Improvement of Teaching Methods, enables teachers to complete their education, study towards an academic degree, enrich their knowledge, and expand their horizons. This Institute houses a teaching centre containing diverse teaching aids, a pedagogic laboratory including a large collection of didactic material on various subjects, a computer centre incorporating the use of computers in education, a curriculum development centre , and an audio-visual centre .

All of these units function within one independent body managed by one administrative body responsible for all of Oranim. This responsibility covers the fields of administration, teaching, and academia. In addition, the administrative body is responsible for coordinating between the different units, determining developmental disciplines, promoting research, and establishing the infrastructure required for all of the above. Oranim's relationship with the schools is detailed in section 10.4.

2.6.3 University Teacher Training Programmes

In order to be qualified to teach in secondary and high schools, teachers must acquire a Bachelor's Degree as well as either a secondary school teaching certificate or a teacher training college certificate. Six Israeli universities offer programmes leading to a Bachelor's Degree (B.A.) in Education.

Prospective secondary school teachers may follow two main routes upon graduating from secondary school and receiving a matriculation certificate:

1. They could enter university and obtain a B.A. Degree in three to four years. In the meantime, they could participate in a two-year teacher training course as part of the Bachelor's programme in order to acquire a secondary school teaching certificate. This course includes theoretical subjects (such as educational psychology, teaching methods, theory of education) and practical training (observations and practical teaching) in a department of education within an institute of higher education.

2. They could enter a teacher training college and acquire a teaching certificate. Afterwards, in order to obtain a B.A. Degree, they would enter a university and complete the remainder of the degree requirements within one to two years, depending on the length of the teacher training course and the amount of transferable credits approved in individual cases.

2.7 INSET (In-Service Education and Training) COURSES IN ISRAEL

2.7.1 The Rationale Behind INSET in Israel

The continuous changes in technology, social behavior and employment trends typifying our times have made INSET programmes absolutely imperative.

In Israel - where environmental changes take place quickly, the use of computerised data bases and advanced technologies is developing at an accelerated pace, children are increasingly being exposed to communication methods, and there is still a large gap in different pupil populations - there is increasing pressure being placed on educational institutes to undergo revisions, improvements and change in order to meet these evolving needs.

Recognising the need for change is not just an answer to pressures from the outside. The educational system, with its different components, is very familiar with this need, even if the subject of change evokes many arguments, pressures, frustrations and even opposition. This awareness also includes the understanding that the process of instigating change requires that it be systematic, and instill comprehension, knowledge, and the acquisition of relevant skills.

School principals and teachers actually requested the process of change, and so they must be properly trained and not just depend on their personal experience, the knowledge they have amassed during their initial training, and/or their intuition. The need to instigate change is therefore a central component of the rationale behind the need for INSET in Israel.

Teaching, like various other professional occupations, requires constant review, updating and appraisal if teachers are expected to perform

satisfactorily. The Israeli Ministry of Education regards INSET courses as a mechanism for manpower development within the educational system itself. In-service teacher training courses form an integral part of a comprehensive trend, starting with basic training in teaching institutes and ending with the completion of a teacher's career.

Two primary needs may be determined from the discussion above - the teacher's professional development, and in parallel, the school's development and change. Teacher training courses provide the foremost solution to meet these needs: courses focused on the teacher, and courses focused on the schools. The emphasis on teacher training courses in Israel wavers in content between practice and theory, and the proper proportion has still not been defined (it may be impossible to decide upon a permanent, decisive and uniform proportion).

Schools are seeking "solutions" through teacher training institutes. This phenomenon recognises that it is impossible to place demands on schools to instigate change without providing the proper support. Teacher training institutes are required to provide support of this type, and the Ministry of Education encourages the establishment of ties between schools and colleges.

In parallel, there is a growing belief that the school itself needs to be a school-based training centre. Behind this belief lies the concept that everything studied in teacher training courses must be to teaching in schools and to the needs of the school.

All these created two main models of teacher training courses in Israel - teacher training institute courses and school-based training.

This study focuses on a specific type of professional development course which attempts to intertwine the two. Teacher training courses, however, are attended by teachers from different schools (and not groups) in teacher training colleges, but course content is focused on classroom teaching.

2.7.2 The Objectives of INSET

The principal objectives of INSET, as specified by the Training Department of the Ministry of Education (Malkiel, 1987) are detailed below:

1. By updating and reviewing new developments in science with the view to regenerate interest and energies, teachers quantitatively improve their skills and knowledge through continuous and methodical studies. Teachers are familiarised with new developments in fields such as psychology and behavioural science, and are provided with the opportunity to implement them in their schools. They also become increasingly aware and involved in social matters relating to the country and its culture as a whole, and the principles of a democratic society.

2. Attitudes and/or responses of teachers, particularly with respect to personal inter-relationships, teacher-pupil relationships, working relationships of staff, and self-awareness, are influenced in turn, resulting in effective changes.

3. Teachers participate in personal development and self-improvement programmes in order to enhance their ability and merit as tutors, so that pupils can identify with a more accomplished and proficient role model even beyond the immediate discipline of their teaching. This should also enable a teacher to explore teaching materials from different perspectives. A unique personal training programme was therefore developed in Israel whereby every teacher could choose courses of his/her choice offered by a vast spectrum of teaching institutes.

4. Teachers are updated on new professional developments including teaching programmes and didactic materials in order to improve their teaching skills. Teachers are also provided with the opportunity to received further training and obtain university degrees.

5. Teachers are trained for administrative positions (such as principals, coordinators and supervisors) and for specialised educational projects. Those

teachers currently working within the educational framework who are currently unqualified, undergo vocational training to provide them with proper qualification.

The main objectives of teacher training programmes in Israel were reviewed in this section. This research study focused on a specific teacher training programme in which most of the above-mentioned objectives were included. The teacher training programme introduced new teaching-learning methods for which the teachers had to constantly be updated and learn, and be aware of a change in approaches to the pupil, to the study material, and to their own role. Teacher training is intended to contribute to the professional development of each programme participant.

2.7.3 INSET Policy Development in Israel

A. Background

In the past, INSET programmes in Israel were linked to formal requirements which were particularly professional in nature.

Due to the rapid growth and expansion of the educational system during the 60's and 70's, most teacher training programmes were specifically aimed at obtaining a formal teaching certificate, which resulted in the employment of unqualified teachers. Since the principal objective was providing licensing solutions, INSET courses aimed at improving the quality of teaching hardly held any weight, if at all.

The qualitative changes in INSET policy only came to light when educational authorities realised that the policy should not be based exclusively on uniformity in essentials of education, but must also adapt to the teacher, taking into account personal capabilities and trends. New professional goals in areas of curriculum, school structure, learning and teaching methods, etc. were created through a policy of improvement, as well as the need to resolve achievement problems while simultaneously striving for social integration. This

hierarchic and professional change created modern developments in INSET courses, and as a result, brought about a new era of growth and expansion within teaching institutions (Reshef, 1986).

B. Subject Matter and Themes

Most INSET programmes cover vocational information and subject matter in all teaching subjects. Courses are aimed at updating teaching programmes, including current scientific and technological developments, as well as refreshing basic subjects which were either neglected or forgotten (Avna, Goblentz, Meron, Inbar and Rothchild, 1988).

Recently, there has been a move from concentrating on subject matter to placing an emphasis on pedagogical, didactic, social and moral matters, attitude trends, and operational workshops for school rejuvenation. These include exercises in self-awareness, active listening, measuring and appreciation, analysing teaching programmes, micro-teaching, clarifying models for teacher-pupil behavioural changes, etc. Planners however, disagree as to whether to teach subject matter and pedagogy separately, or whether to model the course in a way where methodology-didactics is part of the course subject matter.

Two further areas of development in recent years are social values and moral aspects. The Ministry of Education requires that schools teach major yearly subjects chosen by the establishment, thereby necessitating further training for teacher preparation. For example, subjects chosen include the teaching of democracy, Arab-Jewish relations, legal justice, 100 years of pioneering settlements in Israel, etc. Other subjects not necessarily related to the national curriculum are aimed at enhancing the teaching and learning skills of both teacher and pupil, such as positive media and TV consumerism, art appreciation, drama, etc.

An additional aspect gaining popularity is the analysis of new teaching programmes and didactic materials through experimenting and understanding

the basic principles behind them. The primary objective was the correct application of teaching programmes, whereby the teacher acts as the devisor and the course supplies the appropriate tools.

Further progress has been made with the provision of inter-disciplinary courses, where tutors/instructors from different fields collaborate. A good example of a course of this type is the sex education course which incorporates the subjects of biology, psychology and sociology. The rationale behind these courses is the mutual educational process between the different subjects, as well as the establishment of a broader point of view.

Today, increasingly diverse subject matter and themes are being devised based on teachers' requirements and needs in the field. These include comprehensive courses (for which a special committee was appointed to supervise procedures), offered on a yearly basis and attended by teachers from all over the country. Some examples include reformative teaching, computer science, sex education, etc.

A new INSET course model still in the initial planning stage concentrates on the teacher and his/her needs during different periods in his/her life. The model offers a number of teaching subjects which could be integrated into all other existing courses. This "hidden programme" is aimed at improving the teacher's professional quality. It is not designed as a course in itself but proposes incorporating additional subjects into each of the teacher training courses (Malkiel, 1987).

C. Teaching Methods in INSET

The area of teaching methods in courses has moved from teacher-oriented to a fusion of discussions, workshops and lectures on different levels. Greater use is made of a variety of teaching aids, such as closed circuit television, cassettes, video demonstrations, etc.

Other methods having undergone vast improvements in recent years include:

- Trips to locations relevant to the course subject (special schools, geographical trips, etc.)

- A "visiting class" togetherwith the teacher to enable participants to examine working practices (a special method carried out in Bar Ilan University)

- Guided tours in museums

- Workshops for improved teaching practices

- Group dynamics

- Simulation games and role games

- Teaching through analysis of events

- Closed circuit television recording of a lesson in progress, accompanied by feedback on the teaching method

2.8   INSET STRUCTURE

2.8.1 Introduction

The elements of INSET are described below:

A.   Target Population

Teacher training courses are divided into the following categories:

- Courses for teachers skilled in their own subjects

- Courses for professional assistants in the school (advisors, subject coordinators, etc.)

- Courses for head teachers (courses of this type have increased in recent years).

- Courses involving the participation of all staff members of the school

- Courses to train teachers and instructors, especially in technology

- Courses for teachers working in disadvantaged areas

- Courses for all teachers, for example in basic computer skills

B. INSET Bodies

The number of institutes operating INSET courses is on the rise, including universities, colleges, government offices, and specialised bodies such as museums. The Open University and the Broadcasted University have also started to design INSET programmes and will eventually resolve problems faced by teachers living in remote areas.

In recent years, there has been a move towards regional INSET as well as courses held in individual schools, where the school represents a socio-educational entity dealing with educational, intellectual and structural targets. The rationale behind it is that the focused approach of INSET does not make full use of the collective professional potential in teaching staff, and that courses should therefore be designed according to the participants' qualifications and abilities to improve professional performance in their field (Reshef, 1986).

Within the framework of institutional INSET, emphasis is placed on promoting autonomy within the school itself. Discussions are held on specific subjects brought up by the individual school's needs or on general subjects introduced by the Ministry of Education and other bodies.

C. INSET Duration

Course length is determined by the course's objectives, targets and content, and can be categorised as follows:

- Lengthy INSET courses held once a week and which extend throughout the academic year.
- INSET days having a specific structure for teachers specialising in the same subject and which extend throughout the academic year involving monthly or bi-monthly meetings (regular INSET days, the number of which has significantly reduced in recent years, have been found to be less efficient)
- Short intensive courses held during the summer vacation

- Extended courses (one year or longer), which have been on the decline in recent years.

D. Sabbatical Year

For the last 10 years, Israeli teachers have been enjoying a "sabbatical" once every six years. During a sabbatical year, the teacher stops formal teaching activity but is required to participate in INSET (either in Israel or abroad) on full pay.

About 12,000 teachers take sabbatical leave annually (Agid, 1988). The main objective is self-improvement, thereby avoiding "professional erosion," and in some cases, obtaining university degrees.

The notion is that when a person improves himself in areas he has dreamed of and for which he has previously not had time, that person will return to work refreshed and full of new energy.

Over the years, different teaching bodies have begun to offer a variety of courses in diverse subjects as a result of funding allocations by the Ministry of Education. The diversity of bodies, as well as the choice of courses, create competition which in turn promotes an attractive alternative for teachers. However, the competition results in lowering of standards with regard to participants' qualification requirements in order to accommodate larger numbers.

It should be noted that several teachers participate in courses not specifically aimed at teachers, such as tourism, mass media, etc.

2.8.2 Teachers' Motivation and INSET Benefits

Attracting teachers to participate in INSET in Israel has proven difficult for a good many years. Only recently has there been an apparent and gradual move whereby teachers are beginning to show interest and participation in a variety of INSET courses.

This is partly due to an improved level of understanding and awareness on the part of teachers as to the importance of development both on a personal and professional level, and is partly related to incentives introduced by the education authorities (Malkiel, 1987).

A. INSET Pay

The offer of INSET pay was one of the principal reasons for increase in participation. Today, in principle, every teacher can attend INSET courses on any subject related to his/her work. Based on course attendance, the teacher will then be paid with an INSET salary.

For 112 hours of study (provided that 56 are allocated to seminars, examinations and awarding grades for the course), a teacher will receive 1% of his/her salary. In general, the teacher can accumulate INSET pay equal to 10% of the salary.

Authorisation of courses offering INSET pay is made by Ministry of Education inspectors, based on criteria determinded by a joint committee of the INSET Department and Teacher's Association.

Entitlement to INSET pay is subject to proof of participation in a recognised INSET programme for at least 80% of the amount of teaching hours and fulfillment of course requirements (examinations or seminars).

B. INSET Bonus

In addition to INSET pay, the participating teacher is entitled to an INSET bonus. This bonus represents a deduction of four hours of salary from the

INSET account, while at the same time, the teacher receives full pay. An inspector authorises bonus allocations.

Criteria for receiving this bonus are based on the objectives of the INSET programme:

1. First priority is given to courses offering teachers extended training in their specific field, and to courses leading to higher academic degrees.

2. Second priority is given to courses for professional coordinators, specialised training (science, democracy, etc.), and for secondary school teachers studying towards a Ph.D. degree.

3. Third priority is given to courses retraining teachers from one subject to another.

4. Fourth priority is given to studies leading to a "Rav" (Rabbi) diploma in Yeshivas; to extension courses not related to the educational system; and to self-growth studies.

C. Fees and Expenses Allowance

An additional incentive offered to teachers for participation in INSET is through an allowance allocated to teachers studying relevant subjects in institutes of higher education.

D. Sabbaticals

In addition to self-improvement in a variety of subjects which acts as protection against "professional erosion," a sabbatical year enables a teacher to apply for a university degree course, from which he/she will benefit from more lenient academic requirements compared to other pupils.

2.8.3 Intrinsic Incentives for INSET

In a survey (Kaniel, 1985) studying INSET participation, it was found that self-improvement and functional reasons had top priority. In categorising targets and subjects of INSET, there appears to be a distinct preference for subjects of methodology, changes of attitudes, and outlook according to new programmes,

In another survey (Kaniel, 1984) conducted by the Centre for Educational Studies in the Hebrew University in Jerusalem, the motives for attending INSET were studied. Among other findings, the following priorities transpired:

1. Personal interest in the subject and broadening of horizons.
2. Dealing with pupils' difficulties.
3. Learning in order to teach.
4. Personal motives.
5. Suggestions of the head teacher or the inspector.
6. Financial benefit.
7. The wish to obtain a coordinating status in the school.
8. Personal advancement.

The detailed description presented in this chapter shows that Israel, despite the fact that it is a relatively young country, has a developed and comprehensive teacher training programme, both in terms of teacher preparation and in-service training. Thimay be attributed to the great importance the country holds with respect to the subject of education.

2.9 CONCLUSIONS

This research focused on a case taking place in Israel. It is impossible to understand all aspects of this case without a sound understanding of the unique Israeli reality. The objective of Chapter 2 was to provide the reader with this essential background. The chapter described the State of Israel, in general, and the entire Israeli educational system, in particular, relating in detail to the teacher training system. On the subject of teacher training, focus was placed on INSET courses, the rationale and objectives of which were reviewed, as well as the subjects studied, the teaching methods used, the structure, and benefits provide to the teachers. As clarified in Chapter 1, the problem around which this research revolved is that of effectively of a specific teacher training programme (the extent of the influence on the teachers and the classes in the Israeli educational system). The next chapter will add another layer to this thesis and review the literature dealing with teacher training on a universal level rather than just on national level.

CHAPTER THREE: LITERATURE REVIEW

3.1 INTRODUCTION

In this chapter, only literature dealing with In-Service Teacher Education and Training (INSET) was reviewed. Other relevant bibliographical details are incorporated in all of the subsequent chapters.

Teachers are only able to fulfill their educational duties when they are both well-prepared for the profession and capable of improving skills through life-long education (Petracek, 1990).

The term 'lifelong education' assumes that teacher training does not end with graduation from teachers' college. Rather, it is a process that begins earlier (students may have taught for a period of time prior to studying the profession) and continues with theoretical and practical training in college, including classroom experience.

If a teacher remains in the same position during his/her entire in-service career, something is not correct with the system. The professional development of teachers varies for different teachers psychologically, cognitively, intellectually, ethnically and morally. This development is a result of a learning process defined by gaining knowledge, in-sight, opinions, and diverse skills needed by the teacher in order to carry out daily tasks.

The different models of professional development of teachers may be classified into three types: psychological, professional, and sociological (Huberman, 1989, 1993; Levinson, Darrow, Klein, Levinson and McKee, 1978; Sikes, 1985; Adams and Martray, 1981; Burden, 1990; Cristensen, 1985; Fessler, 1985).

1. Psychological: this model investigates the professional development of the teacher with respect to his/her age and personal needs. The age factor affects problems, worries and fields of interest during the different stages

of his/her life. The teacher's career develops from adolescence to old age - at the career entry stage, the teacher is in the socialisation period; later, the teacher is in the stabilisation stage, representing the peak years in terms of involvement, ambition and self-confidence. Between the age of 40 and 50, the teacher is busy balancing out his/her life, reviewing achievements and level of fulfillment of his/her expectations. Over the age of 50, teachers' energy level decreases and most plan to retire or retrain for other positions. The different stages are characterised by different needs. The personal needs of teachers develop and change with a transfer of the focus onto the self, onto the focus on a task, then onto the focus on learning (based on Fuller's model, 1970), representing the mature professional stage.

2. Professional: this model deals with professional development resulting from the learning process. This process includes gaining knowledge and in-sight; formulating ideas regarding education, in general, and teaching, in particular; and the control of behaviours required by a teacher in day-to-day work. This focus emphasises the differences occurring in the quality of a teacher's teaching during the different stages - increasing the level of teaching skills, flexibility in implementing teaching programmes, and expanding the repertoire of teaching methods; boosting self-confidence and career security, etc. Age also plays an important role in this focus, but, more than anything, teaching experience is the most prominent.

3. Sociological: at the basis of this model lies the assumption that the surroundings influence the individual, and significant stages in life are influenced not only by personal events, but also by external events (such as change in government rule, for example). Professional development starts while interaction occurs with the teacher's surroundings.

Despite the variability in the different bases of origin, a similar course of development may be seen in all of the foci. The first stage of career entry deals with reality and socialisation. The second stage is characterised by balance and stabilisation (this period may influence the next period in two ways: positively, whereby the growth and renewal are felt; and negatively, whereby routine, regularity or career frustration are felt). The last stage is characterised by a decrease in activity and retirement.

The following figure (Huberman, 1993, 1998) describes the career development stages of teachers and the feelings accompanying them.

Figure 5: Career development stages of teachers
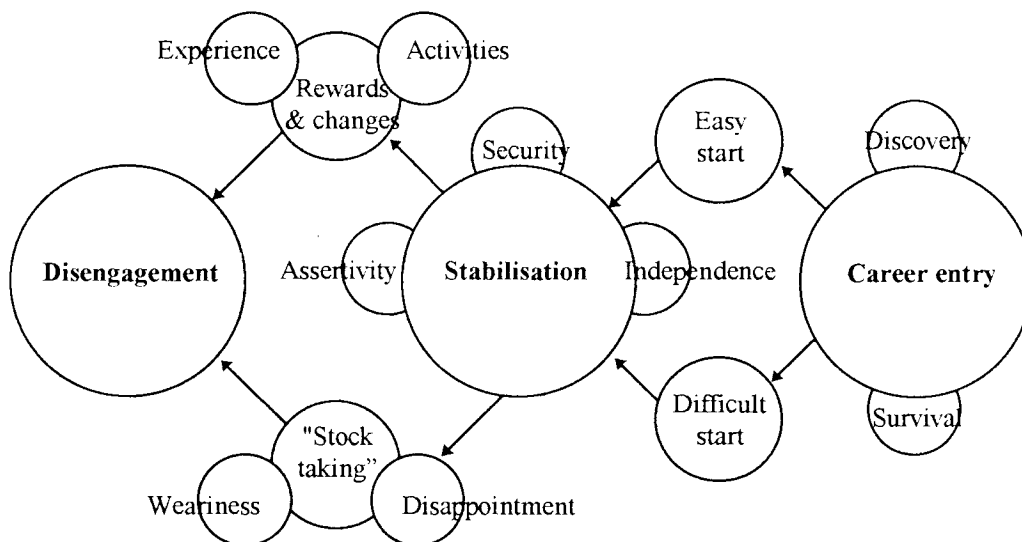
Source: Huberman (1989, 1993)

All training programmes must take into account the developmental stage of the teachers who plan to attend these programmes. The main part, however, both with respect to time span and effectiveness, is in training programmes in the course of actual teaching activity.

INSET is one way in which a life-long education is provided. This study aims to provide and test practical ideas for teachers interested in in-service

training and in school improvement. This chapter attempts to define INSET, clarifying its goals and the factors influencing it.

3.2   DEFINITIONS

Educationists and researchers use the term 'in-service education' for individual development arising from a whole range of events and activity, whereby working teachers can extend their understanding of educational competence and of educational principles and methods (Stephens, 1989; Porter, 1990).

Another definition interprets INSET to be any activity that a teacher undertakes, after he/she has begun to teach, which is concerned with his/her professional work (Henderson, 1978).

The American Department of Health, Education and Welfare describes INSET as a programme of systematised activities, promoted or directed by the school system, that contributes to the professional or occupational growth and competence of staff members during the time of their service in the school system (Henderson, 1978).

Eggleston (1965) defines INSET as courses leading to recognised qualifications. Morris (1966) is concerned with curriculum development He refers to the type of in-service training that stems from the teacher's self-motivation to participate in the continuous process of curriculum renewal and to increase his/her capacity to develop the maximum potentialities of the pupils he/she teaches. (Previously, the teacher acted as a mediator between the curriculum and the pupil. Experts designed the curriculum based on their considerations, and the teacher chose the subjects to be taught to his pupils from the curriculum and determined how they were to be taught.)

Despite variations in the definitions, all are concerned with activities designed to improve professional performance. Moreover, most definitions stress the professional development of the individual teacher, which raises

several questions. Does the focus on the professional needs of the teacher act against a focus on the needs of the school? Can both foci be addressed at the same time? Can professional development take place while the school is changing? The teacher expects to develop throughout her/his professional career, a necessary condition for school development. But is there not some restriction on individual development in school-based programmes?

In Israel, as elsewhere since the 1980's, the focus has moved from the individual teacher to the teaching staff as a whole. The school is perceived as a system to be transformed into an organisation that is learning and developing. If in-service training is tailored to school needs and conducted within the school, it will be more relevant to the teachers' needs, and obstacles to implementation will be reduced.

It seems desirable, therefore, to extend the definition of INSET to include not only individual development, however important, but school-based in-service training programmes as well. These include all long-term educational activities that focus on the needs, interests and problems that directly relate to day-to-day teaching and learning, and to the system of allocating labour and responsibility within the school staff (Caspi, 1990, 1993; in Hebrew).

3.3   GOALS

INSET systems are oriented towards the changing requirements that socioeconomic and cultural development impose on educational systems, tand other staff members; and towards the changing qualifications for teachers dictated by developments in educational theory, and by the higher level of performance now required of teachers.

In principle, anything concerning human knowledge or activities can be taken up by the teacher as a self-educational task. In fact, however, the subjects that such a task involves, correspond mainly to the needs of the educational system in which the teacher works. Examples of subjects in which the teacher

participates include innovative teaching methods, specialisation and renewal in subjects to be taught by the teacher, training to fulfill a specific position in the school such as principal, course coordinator, instructor, subjects relating to special education, etc. The following indicators for selection stand out (Petracek, 1990; Chin and Benne, 1972; Watson, 1972):

1. The educational significance attached to new scientific knowledge, discoveries, art forms and phenomena in social life, in general, and in the life of youth, in particular.

2. Experimentation, and the value attached to producing new curriculum materials, educational technology, teaching methods, etc.

3. Disseminating innovations concerning content, methods and organisation in education.

4. Improving professional skills.

The goals relate both to training programmes focused on the individual teacher and in the schools, highlighting their interdependence. The teacher will obviously have difficulty in changing her/his working methods in the absence of development among the teaching staff.

Unfortunately, the educational authorities in Israel do not yet perceive this interdependence. There are still head teachers who play down the importance of training programmes that do not relate directly and concretely to the life of their schools. At the same time they complain of difficulties in persuading staff to actively participate in school-based training programmes.

5. The ever-changing reality of the 21st century requires that teachers be trained for mapping, organising and rebuilding their knowledge in a concise and effective manner. It also requires training the teachers to cope with threatening situations, the contexts of which are changing and relevant, by defining complex problems and examining alternatives from different perspectives, with awareness and insight serving as the base

6. The teacher must learn to investigate processes about himself and his pupils. His professional development depends on perpetual study of the learning-teaching culture.

3.4 DIFFERENT FORMS OF INSET

The term 'course' is the first that comes to mind for many teachers, INSET planners and providers, in discussing INSET (Williams, 1991). Courses are indeed the commonest form of INSET. However, there are other types, such as workshops within the school, Open University and Action-Research (Williams, 1991). A classification of forms of INSET follows.

3.4.1 Forms of INSET

1. School-based INSET, focusing on school improvement. School improvement is defined in the ISIP (International School Improvement Project) as "a systematic, sustained effort aimed at change in learning conditions and other related internal conditions in the school, with the ultimate aim of accomplishing educational goals more effectively" (Hopkins, 1989). School-centred INSET deals with subjects related to school improvement. In dealing with the individual teacher, it has a relationship to school improvement.

2. Individual choice, which emphasises teachers' needs and enables them to chose subjects relevant to their interest area, level of professional development, etc.

Both forms exist in Israel: school-based programmes became compulsory in 1994, a policy superseded by voluntary programmes in 1995. This, in itself, is a sign of a system in flux and change. There are, necessarily, experiments, errors and questions. While more and more schools have initiated school-based

programmes, there is also an extensive system of individual training programmes (Hayes, 1995; Lamb, 1995).

3.4.2 The Role of the Teacher

The differences between the various types of INSET emanate, among other things, from the role given to the teacher participating in the courses: the teacher as the receiver of INSET, and the teacher as the designer of INSET.

1. The teacher as receiver of INSET: In this approach, the INSET institution assumes primary responsibility for designing INSET. Teachers are passive receivers of knowledge, accepting or rejecting the programme, but without a personal share in it. They carry out instructions, without explicit freedom to incorporate their problems and experience.

2. The teacher as designer of INSET: Here, teachers take the primary responsibility for their continued education. They determine the objectives, content, methods, standards and organisational framework. This concept sees the teacher as an active participant, and the INSET institution takes on the task of supporting the individual.

The first form is more prevalent in Israel. In school-based programmes, one sometimes finds a group of teachers delegated to choose subjects for training programmes and appoint leaders for them. Possibly, the other teachers' lack of involvement in planning courses is a factor in the numerous complaints of their irrelevance.

3.4.3 Strategies in INSET

Zoltan (1989) identifies three basic strategies in teacher training:

1. A role model strategy focusing on training prospective teachers to emulate experienced masters of their craft, and thus, to reproduce their activity.

2. A so-called "corrective" defensive strategy attempting to compensate for deficiencies and shortcomings in public education.

3. An offensive or constructive strategy concentrating on producing new values and qualities.

INSET usually combines all three strategies. The latter two are particularly evident in Israel.

The first strategy, based on emulation, is problematic. In fact, may teachers do actually try to imitate the successes of others in carrying out a particular plan or activity. Some are interested in finding solutions to problems they themselves have encountered, while others are looking for instant solutions. Training centres bring in experienced teachers so that they will share successful experiences with trainees. The danger lies in the latter trying to implement what they have learned from another teacher, without relating it to their specific class situation. Teachers must exercise professional judgment, and if not, they are likely to fail. "It doesn't work with me," or "It isn't for my pupils," are frequent complaints, and a source of many failures for innovating within Israeli schools. The latter two methods are better suited to introducing changes and improvements into the Israeli educational system.

In addition to what has been previously mentioned, it is important to emphasise the fact that the ever-changing Israeli reality places demands on building a more flexible society. The educational system is responsible for preparing the next generation to live within this dynamic society. Teacher training programmes are intended to help teachers adapt to this reality. They should help the teacher cope in terms of educational values required in a complex society, to teach them to deal with knowledge in a different fashion, to equip them for reflective and meta-cognitive thinking for studying the processes involved, and to improve their diagnostic ability. The purpose would be to enhance the qualities of the learner, the class, the school, the teacher himself, and his colleagues. In light of the above, a completely different design of teacher training programmes must be considered. Models of programmes such

as these should be structured which would work, in the most part, on the perception of the teachers' role, and on his beliefs and values (Lamb, 1995; Hayes, 1995).

3.4.4 Location of INSET

The institutions in which INSET takes place and their locations affect the character of teacher training. In Israel, as in many other countries, teacher training programmes take place in diverse locations and institutions.

1. INSET institutions -university departments and colleges.

2. Local authority - in the best position to assess the needs of teachers and schools.

3. Local education authorities (LEA) - have made arrangements to provide INSET for teachers in their places of employment (Williams, 1991).

4. Schools - creates a means of solving problems in the schools and provides professional development of the staff as a whole (Easen, 1985).

While INSET courses take place in all four locations in Israel, most are in INSET institutions. Increasingly more courses are now being held elsewhere, particularly in the schools. In Israel during the 1990's, there was a cry for autonomy by the institutes of education. Autonomy of this type is interpreted to mean providing schools with the opportunity to develop school teaching programmes and integrative subjects based on the special needs of the school

The introduction of the system of teacher training can help in this case. This training includes those continuous educational activities which focus on the needs, the subject and the problems directly related to day-to-day teaching activity, to the scope and the system of dividing up job responsibilities of the school staff. At the heart of the training lie the problems of the school and areas of improvement that the teaching staff requested to learn about, improve and advance. In order to achieve this, it may be possible to seek the advice of experts from outside the school. Many educators see, in training of this type, a lever for professional development and advancement of the educational institute

(Caspi, Cola and Lev, 1990, 1993; Keast, 1982; Bolam, 1983, Holly and Southworth, 1989). This type of training emphasises the processes of having the staff evaluate the situation and introduce changes suitable for the problems revealed, and, therefore, the entire staff must be involved.

Section 3.4 presented the different types of INSET, each with its advantages and disadvantages. The extent of the success of INSET affects other factors as well, excluding structure, strategy, and location. These factors will be discussed in detail in the next section.

3.5 FACTORS AFFECTING THE SUCCESS OF INSET

In clarifying the INSET concept, we must also clarify the factors affecting its success.

Factors relating to the national context include: the level of coordination between pre-service and in-service training (Petracek, 1990); the reward pattern, involving praise and promotion; and the timing of curriculum, textbook and examination changes (Eraut, 1990).

In Israel, where the educational system is still very centralised, such factors have a strong influence.

Other important factors are related to attitudes and opinions of those who carry out INSET, e.g. teachers' attitudes towards the INSET concept and their role in its implementation.

For instance, school norms may inhibit attempts at change. The school may not provide sufficient time to seriously consider them, nor occasions to share experiences with colleagues. The school may not provide teachers access to learning opportunities suited to their individual needs. Administrative support may not be provided for inter-class visits. A teacher wanting change is frequently pressured by those who try to keep him/her within the norms. This leads us to look at INSET not only in terms of individual learning, but in terms of social interaction (Crahag, 1990; Eraut, 1990; Petracek, 1990).

Professional development should be firmly based on identifying and meeting the needs of the individual teacher, but must incorporate institutional, LEA and national plans for the educational system (Maclure, 1989). Identifying teachers' needs, is, however, of paramount importance. Where relationships between management and staff are poor, the prospect of open and cooperative identification of needs is slim. As long as a teacher is made to feel an outsider in his/her own school, it is unlikely that he/she will be able to play an active role in his/her own professional development.

The issue of the individual teacher's needs as opposed to those of the system is much on the minds of teacher trainers in Israel (Peles, 1992; Caspi, Cola, and Lev, 1990, 1993).

The system itself has been known to create conflict. On the one hand, individual development is encouraged (the academisation process, development within a given field). On the other hand, entire school staffs are encouraged to study school-related subjects together. In some schools, this results in exhausted teachers who display no interest in further in-service training, and it is very difficult to make them enthusiastic about developing new ideas. The school suffers in this case, since teachers will prefer to invest their very limited time and strength in courses they personally consider rewarding.

Up to now, different factors affecting the success of INSET have been discussed. The success of INSET depends, to a great extent, on its measure of effectivity. To this end, the following section intends to define what effective INSET is.

3.6 WHAT IS EFFECTIVE INSET?

Various studies show that effectiveness is assessed as a function of empirically demonstrable relationships with academic achievement measures (Shulman, 1986). That is to say, effectiveness should be assessed in the light of the outcome of training.

Effects of training can be divided into several levels of impact (Hopkins, 1989):

* Awareness - realising the importance of an area and focusing on it.

* Concepts and organised knowledge - providing intellectual control over relevant content.

* Principles and skills - providing tools for action.

* Applications and problem-solving - transferring the tenets of the concepts and the skills to the classroom.

While these categories are very important, the problem is how to test for them and determine who is testing?

All levels can be found among teachers who have graduated from the same course, therefore, it would be difficult to assess effectiveness in this way. An alternative would be the normative conception of effectiveness, in which a given example of instruction is compared to a model. (Shulman, 1986), Bolam (1988), Robson (1988), Joyce and Showers (1980), Hopkins (1989) and others have attempted to establish such models, as shown below.

Bolam (1988) characterised good courses as having the following features:

* Collaborate planning involving course leaders, LEA sponsors and former or prospective participants.

* A clear focus on participants' current and future needs.

* Careful preparatory briefing for participants several weeks prior to the course, with opportunities for pre-course work where applicable.

* A programme which is structured but has enough flexibility to allow for modifications in the light of monitoring and formative evaluation.

* A programme which is oriented towards experience, practice and action and using learning, action research, performance feedback and on-the-job assistance as appropriate methods of action.

* A 'sandwich' timetable including course-based and job-based experiences.

* Careful debriefing following the course and continued support.

This model relates to the preparatory stage before the course, to the training programme itself, and to the support and follow-up afterwards. Conspicuous attention is paid to the needs of the participants and of the schools they come from both in terms of planning and carrying out the programme, as seen by these options for flexibility. Participants are required to become involved and accept responsibility starting at the planning stage, and, later on, by participating in activities and offering examples from personal experience.

Training programme planners in Israel would do well to note the importance attached to cooperation in the planning stage, since there is much that could be improved. The idea of participants doing preparatory work before the course starts should be reexamined as well. No mention is made in this model of the identity of trainers or trainees. Is the model suitable for all teachers or for elementary school teachers only?

Robson et al. (1988) present a checklist for short course providers. Below are soof their ideas that have not been previously raised:

* A one-time course (i.e. a one-day conference, a single summer course) is unlikely to be effective. Follow-up activities are important. A course should be part of a wider programme of planned development.

* Effective courses are those that lead to changes in practice. Follow-up support is necessary for this to take place.

* Courses involving teachers from different schools (or authorities) need to recognise the different settings to which they return.

* Effectiveness is increased if, during and after the course, teachers can and actually do interact with each other, share ideas and help one another.

* The course leader is responsible for ensuring that each stage of the planning and implementation of the short course has been carefully thought out.

* Without some form of evaluation, one has no way of assessing the effectiveness of a course.

Today, it is obvious that one cannot demand change in a school or a group of teachers without equipping them with suitable training and long-term professional support. Robson's model relates to this issue, emphasising the need for support. With that, the value of short-term training programmes cannot entirely be ignored. They open up new horizons, spur participants on to think in new ways, and refresh and stimulate them to pursue further study. They also provide the opportunity to meet colleagues, to which Robson later refers in his model.

He also stresses the importance of the training programme leader. He/she is not merely an administrator but must be acquainted with every stage of the course curriculum and the extent to which it is applied. While this model also relates to the need for evaluation, it does not relate to the identity of the participants or to what evaluation tool to use. This component should be dealt with in detail and expanded on since there is a tendency to ignore or evade it.

McTaggart (1987) adds a few other ideas:

* Courses should be research-based. He emphasises two kinds of research: action research on teaching, and case study research on the curriculum and the role of the school in the community.

* Courses should be practice-based.

* Courses should provide a series of tasks or experiences from which students are able to construct their own model.

The new element here is basing the course on research. The methods proposed are **qualitative**. In view of the doubts and reservations that quantitative research arouses among the trainee population in Israel, it may be worthwhile to examine this proposal seriously, and to try to apply it.

Joyce and Showers (1980) distinguish between five principal training methods or components, and argue that all are necessary for lasting impact in the classroom:

1. Presentation/description of new skills and underlying theories (lecture, discussion).

2. Modelling the new skills (live demonstration).

3. Practising the new skills in simulated and controlled conditions (with peers or with small groups of children).

4. Feedback on the use of new skills in simulated and/or real settings.

5. Teaching for application, transfer to and integration into the classroom and the school, assistance from peers and trainers.

Joyce and Showers relate to teaching-learning methods in the training programme itself. They construct a model that includes familiarity with the method or skill, understanding of its advantages, drawbacks, and underlying rationale. Experience is gained in applying the system to simulated conditions, apart from classroom experience, with follow-up and support from colleagues and trainers who are experts in the field.

This model strongly resembles the systematic process whereby skills are acquired in the classroom. The particular training programme that our research deals with is constructed in a similar way.

But not all training programmes deal with building skills and so, active experience methods are not always suitable. Nonetheless, experience shows that the workshop method, and directing teachers to try to transfer what they have learned in training programmes in their own classrooms, has proven to be effective.

Crahag (1990) discusses the need to provide teachers with tools that are immediately usable. Posch (1989) stresses the importance of letting the teacher design his/her own INSET instead of being merely the receiver of INSET. Petracek (1990) mentions the need for exchange of experience and the opportunity for visiting other places, as well as the need to balance an approach centred on the cognitive change of the individual with one oriented towards interaction.

Four approaches emerge from the foregoing recommendations:

1. A cognitive approach - the need for professional knowledge and skills.

2. A psychological approach - the resistance to change (Watson, 1972).

3. An environmental approach - the situational learning conditions (Adar, 1976).

4. Planning through feedback and adaptation.

This chapter cannot be concluded without expressing some skepticism, as does Collins (1991). We do not know that in-service training yields benefits: we can only hope that it will. Jackson (1971) argues that awareness of the latest thinking and initiatives in education may in fact contribute little to the work for which the teacher is paid. That is, implementing the material learned in the courses and introducing change in the school involve considerable emotional and physical efforts. The teacher must cope with the fear of the unknown (for example, results of the change), and with a lack of confidence in the methods and the new didactic materials. In addition, the teacher must invest time and effort in the process of learning and preparation. It is doubtful if many teachers are ready for an investment of this sort without being rewarded accordingly.

In conclusion, it is important to emphasise that as long as no change in the teacher's beliefs and in how he perceives his role will take place, there will be no real implementation of innovative teaching methods studied in the training programmes. The "lofty" objectives expected of the teacher during the 21st century will remain solely at a level of declaration.

3.7 EVALUATION OF INSET

Several possible ways of evaluating INSET include:

1. **The effect of training**: Coffey and Goldern (in Henderson, 1978) deal with the measurement of changes occurring as a result of INSET. They identify

four distinct areas of change which the individual may undergo as a result of exposure to in-service training: knowledge, teaching skills, attitudes and internalised feelings, and motives and aspirations. However, measurements of how individual course participants compare with each other do not necessarily provide useful information about the quality of the in-service programme.

2. **The goal-oriented evaluation model**: evaluation by objectives or goals involves a five-stage process (Henderson, 1978):

a. Identifying the objectives to be achieved.

b. Defining the objectives in terms of the behaviour that would characterise them.

c. Developing appraisal instruments to study this behaviour.

d. Examining the data gathered in the light of the norms by which the adequacy of the behaviour may be judged.

e. Making final decisions regarding value in relation to the original objectives.

The difficulty is that not all kinds of INSET, e.g. a workshop in which a group of teachers plan aspects of their school's curriculum, lend themselves to evaluation by means of the above model.

3. **Taking into account the complex, dynamic nature of education**: Stakes (1967) mentions three bodies of information that must be linked for full evaluation: antecedent, transaction and outcome data.

Antecedents are any conditions existing prior to teaching and learning that might bear on the outcome. Transactions are all the encounters that comprise the education process. Outcome data include measures of the impact of instruction on teachers, administrators and other staff as well as on students.

The evaluator's task involves both description and judgment. Stake's term 'intents' includes objectives in relation to student outcome, and the teacher's

planned use in a given environmof subject matter and teaching methods, as well as plans and goals of others.

This chapter deals with a survey of literature relevant to the research subject. Since the research is a case study of a specific teacher training course and of its objective, in order to actually investigate the level of effectiveness of this course, the literature survey concentrated on broadly defining the concept of "teacher training" and in describing the various factors influencing it.

Teacher training is an important component of the teacher's professional development and, therefore, the literature survey begins by dealing with this concept and examining it from different points of view. Several comments concerning the situation in Israel were also incorporated into the survey, since the research work deals with an Israeli case study.

The relationship between the teacher training and the process of introducing changes in the schools is prominent in the literature survey. This relationship requires, among other things, strengthening the skills of teachers by introducing them to new sources of knowledge and different ways of thinking. Teacher training plays an important role here, and in order to ensure that this course will fulfill its objective, it must reach a balance between theoretical study and practical experience.

Theory and the professional literature are also referred to in other chapters as related to the particular subject of each chapter. Based on the literature reviewed in this chapter, and taking into account the fact that the material studied in the teacher training programmes in Israel is not implemented enough in the field (as described in Chapter 1), a preliminary data collection was made. After a preliminary field study, the subject of this research was chosen and research questions were formulated. The next chapter will describe the first pilot study, as well as two additional pilot studies carried out during the process of this research study.

3.8 HOW INSET IS PERCEIVED BY THE TEACHER

Up until now, the issue of INSET has been discussed from a theoretical-objective perspective. In order to complete the picture, INSET must also be reviewed from the point of view of the teacher undergoing the training. A teacher's professional development may be illustrated below in step form (Thomas, 1997):

			In service training and education
	Initial teacher training	Teacher induction	
Pre-teaching preparation experience			
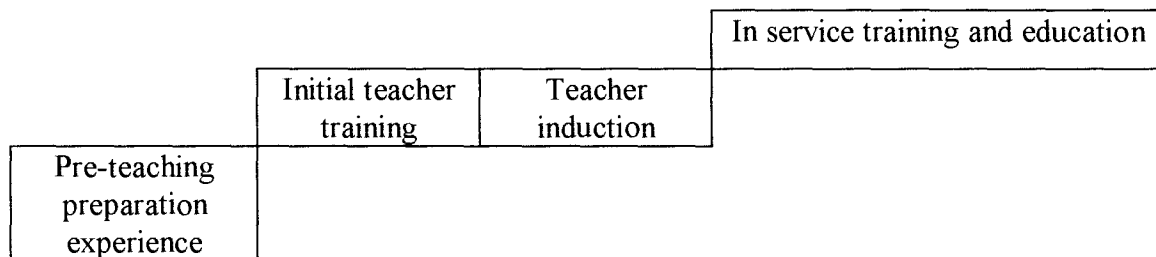
The teacher training programmes discussed in this chapter are located on the upper step; the step that actually continues until the teacher retires from the teaching profession. Most of the teacher's professional development activity takes place on this step. This development is influenced by the culture of the school where the teacher works, the teacher's personality, and many other variables, including the courses and training programmes in which the teacher participated (Fullan and Hargreaves, 1996).

In terms of INSET contributing to professional development, it should be remembered that teachers differ in terms of their origin, career development stages, ambitiousness, opportunities, courses taught, etc. The teachers' inner world, and their attitudes and perceptions are a type of "sieve" through which the teacher training course components, the changes required as a result, and all other teaching components, pass. Hence, the way teachers that perceive course content does not necessarily conform to the objective reality, rather to the subjective reality depending on the personal experiences, the ways of absorption, and attitudes of each individual (Steffe and Gale, 1995; Duffy and Jonassen, 1992). The training course places the teacher in the student's

position. However, the teachers participating in the courses are adult learners. They are already in, and not at the beginning of, the growth stage: they bring with them a wealth of experience and values that represent part of their identity; they have different reasons for participating in the course, some vague and some very specific; they bring their expectations of the learning process; they hold different types of job positions (therefore the study process is at times secondary compared to their other job-related issues); and they have a preferred learning style (Rogers, 1996). The disparity between the learners will be expressed, starting from the choice of training course to implementation of the material learned.

Course planners and instructors cannot ignore these issues. During course planning, ignoring the fact that the learners are adults will adversely affect the effectivity of the learning process. These facts must also be considered when analysing the contribution and influence of the course.

Course instructors disseminate knowledge to the participants in an area that has been predetermined. The knowledge could be in theoretical or specific areas, but is normally generic in nature and does not necessarily meet the teacher's particular needs. As clarified in section 3.6, the basic expectation of the training programme is that the course will really influence the participants and result in a change in the teacher's thinking process and work methods. Four possible levels of influences were discussed in section 3.6: awareness, concepts and organised knowledge, principles and skills, and applications and problem-solving. The basic difference between these four levels is the assumption that the course enables the teacher to understand the system of concepts and principles of the theory or theories, it provides him with the opportunity to apply the teaching models in practice, and it expands his range of deliberations.

After imparting this new knowledge to the learners, the course lecturers must follow-up using feedback and reflective processes. These processes will enable the learner to choose his preferred teaching method from the possible

alternatives, reformulate his previous knowledge, offer solutions that he had previously not thought of, and develop a new understanding and concepts. The reflective process includes a reconstruction of the learning process, an explanation of the circumstances and reasons for choosing certain solutions during the learning process, and critical thinking and drawing conclusions by the learner (Perkins, 1992).

Time constraints, a heavy work load, and the belief that practical experience represents the basis for a growth in the teachers' professional knowledge greatly hamper the development of a systematic, critical, reflective framework, which should also be a constructive and supportive one. Normally, an individual does not tend to observe himself or his actions. The course provides the teacher with the opportunity to observe and understand himself from the side (Bengtsson, 1995).

Teachers need two types of knowledge – practical and theoretical. Course planners and instructors must raise the knowledge hidden behind the teacher's work to a level of awareness by using theoretical knowledge, while combining practical experience and an understanding of the theoretical material (Shulman, 1988). Teacher training programmes can help teachers to become practical, reflective individuals, capable of changing and improving the educational system. Hence, there is a need for proper structure and strategies in the course system.

CHAPTER FOUR: PILOT STUDIES

4.1 FIRST PILOT STUDY: "INSET" AT THE ORANIM SCHOOL OF EDUCATION

During the process of each pilot study, many decisions were made. Already at the outset of the studies, questions were asked such as: What research topic will I choose? What data should I look for? What approach should I take? If we attempt to carry out research using the "right" answers to these questions, we could easily err. Decisions must undoubtedly be made, however, the concept of right or wrong is not necessarily applicable (Zabar Ben Yehoshua, 1990, in Hebrew).

A qualitative researcher decides on a research problem based on the reality around him and introduces numerous problems for investigation.

In this research work, the general topic, teacher training programmes in Israel, and the "research environment," the Oranim School of Education (where the researcher is a member of the teaching staff) were chosen. The objective of the first pilot study was to localise possible research directions and pose relevant questions. All the reasons why the teachers participated in teacher training programmes in Oranim were therefore investigated first.

The first pilot study was carried out at Oranim. It involved unstructured interviews with a sample of 17 teachers attending INSET courses there and four members of the teaching staff. The interviewees were chosen randomly from a list of teachers registered for teacher training programmes who were in Oranim during the time the interviews were held.

The following questions were formulated as to the motivation of teachers to participate in INSET at Oranim:

- What was the motivation behind taking an INSET course?
- Why was Oranim chosen?

- How does INSET at Oranim differ from INSET in other educational institutions?

4.1.1 Population and Sample

The participants were divided into two different categories according to places of origin and choice of courses. This categorisation was chosen since teachers come from different communities and display different needs and motives. Places of origin and number of participants are shown in Table 2.

Table 2: Actual number of participants in INSET at Oranim according to places of origin

Population	No. of Participants
Kibbutz	511
Moshav (communal village)	170
Cooperative settlement	121
Jewish town	562
Arab city	98
Arab village	178
Total	1,640

Courses chosen included: arts, subjects in the school curriculum and subjects outside of the school curriculum, training towards fulfilling administrative/professional positions, special education and therapy, computers, teaching methods, etc.

The stratified sample, taken from the population described above based on places of origin (and not courses) was proportional to the population numbers (Burroughs, 1975).

The sample was drawn at random and is described as follows. A list of participants was obtained from the data bank of the training programmes department. This list is generally organised according to courses, but using a relatively simple computer programme, a list of participants according to places of origin was extrapolated. The names of the participants were laid out in six piles representing the six different types of communities. Names were drawn randomly from each pile in proportion to the total number of participants from that type of community. A total of 17 names were drawn, as illustrated in Table 3.

Table 3: Population and Sample

Population	Sample
Kibbutz	5
Moshav (communal village)	2
Cooperative settlement	1
Jewish town	6
Arab city	1
Arab village	2
Total	**17**

4.1.2 The Interviews

The interviews took place at Oranim during the course of a regular working day. Tutors assisted in locating the pupils, defining the objective of the interview, and requesting their participation in the pilot study. The interviewer arranged a comfortable and quiet room close to the classrooms to hold the interview.

The interviews were unstructured in that each individual case determined the way in which the interview would proceed (Keats, 1993). An open and flexible approach was necessary in order to encourage the interviewees to talk freely and to provide the interviewer with as much data as possible.

A. Interview Procedures

A post-hoc examination of the interview proceedings and contents helped to recognise a similar configurative structure throughout (Keats, 1993). The sets of questions revolved around the following themes:

1. What was the motivation behind taking an INSET course?
2. Why was Oranim chosen?
3. How does INSET at Oranim differ from INSET in other educational institutions?
4. Relevant personal information.

The interviews were taped and transcribed upon their completion. All responses to a particular question were collected for comparison with a view to find common ideas and opinions. In this way, the researcher hoped to define the main characteristics of the Oranim training programme as seen by the participants and the course directors. These characteristics were to form the basis of the main research study designed in the next stage.

B. The Interviewer

The interviewer introduced herself and explained a little about her connection to Oranim and her current studies at the Institute of Education in London University. She outlined the general purpose of the research and the aim of the pilot study interview.

The interviewer questioned the participants on the subjects and classes they taught, the kind of school in which they taught, where they received their initial

qualifications, and whether they had taken or were taking any other courses prior to or during the current academic year.

The following questions dealt with the main objective of the study:

●What was the motivation behind taking an INSET course?

●What was the reason for their particular choice of subject?

The next group of questions related to the reasons for choosing Oranim. The last set of questions dealt with the differences between INSET at Oranim and INSET in other educational institutions.

4.1.3 Discussion of Results

The results of the study are outlined in a question and answer format below:

Question No. 1: What was the motivation behind taking an INSET course?

Responses

A: Updating, refreshing and supplementing knowledge on a chosen subject

Seven of the interviewees considered this to be their principal motive; two, their secondary motive. The teachers expressed a desire to update and refresh their knowledge for several reasons:

- Lack of background or preparatory material on the subject taught (for example, mathematics).

- New developments either in the teaching field or in science and technology (for example, computers).

- A need expressed mainly by inspectors and position holders to keep abreast of changes in order to better understand what the teachers are doing and to help in monitoring their work.

- A number of teachers pointed out that certain terms used by education authorities were incomprehensible to them and that the course was helping

them become updated and familiarised with the terminology. It should be noted that two instructors saw this as an extremely important motive for teachers to participate in INSET courses.

B: Mastering new teaching methods

Six teachers considered this to be their principal motive. The need to acquire new teaching skills arises both from difficulties experienced in the classroom and the desire to understand and experience the new methods constantly being introduced in the education milieu in Israel. Most classrooms in Israel are large (30-40 pupils), and teachers feel that a teacher-oriented method of teaching is insufficient when one aims to reach out to each individual pupil.

Furthermore, inspectors and head teachers frequently use teaching method terminology such as "individual work," "group work," "ability group," etc. They expect the teachers to apply these methods in the classroom but do not instruct them on how to implement them.

C: Qualification

Three teachers considered this to be their principal motive. One teacher explained that being qualified to teach mathematics in a secondary school would give her an advantage over other teachers invillage school where she teaches. This qualification would enhance her prospects of finding a teaching position in better schools.

A head teacher from a Kibbutz pointed out that qualifying for a managerial position would open new doors and enable her to apply for senior management positions in other schools (the "rotating " system in the Kibbutz means that she would be required to leave her position after a few years).

A third teacher stressed the importance of having a qualifying certificate even if the need for it would not arise in the near future.

D: Retraining

None of the interviewees considered this to be their main motive, but two teachers acknowledged it as important and claimed that even if they had no immediate plans to retrain or try out other vocations, they believed that it would be prudent to prepare a viable alternative.

E: Reinvigoration

None of the teachers considered this to be essential but three considered it important. They all come from small schools (from a Kibbutz or from Arab villages) and leaving the school for one day a week enables them to "take a deep breath," take time to reflect, and sometimes helps them to view the school and the classroom from a different perspective.

It is interesting to note that two of the instructors interviewed considered this to be a highly significant motive. One of them went as far as describing it as very enjoyable and a refreshing break from day-to-day routine.

F: Persuasion by the head teacher

One interviewee, a young teacher having three years of experience, said she would have preferred taking another course but the head teacher urged her to take a course which might be useful for the school. At this stage of her career, she felt that she was not in the position to refuse.

G: Sabbatical

Two of the interviewees are taking the course during their sabbatical. However, they did not consider this as their principal motive.

H: Remuneration

Three teachers considered this to be an important factor, but it was not imperative for the majority of the interviewees. Only two participants brought up the subject of remuneration on their own initiative. Others dismissed it as insignificant in response to the interviewers' persistent questioning. They

claimed that the pay is of little significance and that it would be a long time before they could actually benefit but agreed that it was an added incentive.

I: Meeting colleagues

None of the interviewees considered this to be a motive. Only when pressed by the interviewer did they agree that it held limited significance. One teacher pointed out, however, that meeting colleagues could be done under different circumstances. Another teacher claimed that unless the interaction is effective, this meeting of colleagues does not develop further than a social gathering and exchange of small-talk.

One instructor working with nursery school teachers felt this was extremely important since these teachers do not have access to a staff room nor the opportunity to meet colleagues on a daily basis. She pointed out that they often feel isolated and starved of peer company.

J: Setting an example

One head teacher considered this to be a motive and claimed that by insisting on taking INSET courses in different subjects every year, she is setting a personal example to her teaching staff.

Question No. 2: Why was Oranim chosen?

Responses

A: Quality of studies and teaching

All 21 interviewees, without exception, referred to the reputation of Oranim as an institute having a high-quality teaching level. Quality of studies and teaching are manifest in the subject matter taught and in the teaching methods. All the interviewees commented on the highly professional teaching level, and interest and enthusiasm shown by the lecturers and most interviewees considered this to be the main reason for choosing Oranim.

B: Previous experience and links to the schools

Five out of the 17 teachers are graduates of Oranim, and together with four other participants, felt strong links and held deep regard for the school. The continuity of studies in Oranim is seen as a natural progression.

C: Atmosphere

Seven interviewees praised the unique atmosphere of Oranim and referred to the special teacher-pupil relationship and interrelationships between the pupils. All seven commented on the respect, understanding and good-will shown on the part of the teachers and course organisers towards the pupils, an attitude they did not encounter in universities or other teaching institutes.

Interviewees favourably described the warm friendships created between Arabs and Jews, between Kibbutz and city teachers, etc. For most, this is a unique opportunity to meet and associate with different groups of the country's population coming from diverse origins and backgrounds. They claim that the place itself, the structure of the study programme, and the teaching methods promote and encourage positive relationships and create a pleasant atmosphere. One participant noted that the beauty of the location had a favourable effect on both pupils and teachers alike.

D: Qualifications

Four interviewees emphasised that Oranim awards an approved diploma/certificate in the subject of their major (mathematics, group leadership, school management, etc.). Other institutions offering similar courses are either not recognised by the Ministry of Education or do not award formal certification. This was one of the main reasons why most chose Oranim. Only one interviewee considered this to be the principal reasons for choosing Oranim.

E: Variety of Courses

Three interviewees mentioned that Oranim offers a greater variety of courses in comparison to other similar institutions. Most teachers on sabbatical or those interested in one day of studies a week can find courses in Oranim that meet their particular requirements.

F: Improvement of Hebrew language proficiency

Three Arab interviewees expressed their desire to improve their knowledge and proficiency of the Hebrew language. They believed that since Hebrew is the mother tongue of most participants, teaching in Hebrew would improve their command of the language. This was the main reason for not choosing courses offered by the Seminary for Arab Teachers.

One of the instructors noted this preference amongst Arab teachers, who consider studies in Hebrew amongst Jewish pupils to be of superior quality to studies in an Arabic institution.

G: Persuasion by the head teacher

Two interviewees admitted to having been persuaded by their head teacher to apply for courses at Oranim on the grounds that the school offers high-quality study programmes and courses meeting the school's requirements.

H: Advertisement

One interviewee explained that he arrived at Oranim after reading about the School in a brochure in the staff room.

Question No. 3: *How does INSET at Oranim differ from INSET in other educational institutions?*

<u>*Responses*</u>

A: Quality of material and teachers

All 21 participants expressed doubts as to the ability of schools to provide high-level INSET. Courses of this kind require experienced and highly-qualified lecturers and instructors, as well as proper teaching facilities including videos, computers, etc. Not all schools can offer the variety and level of teaching aids required. The interviewees felt that highly-qualified instructors would not come to schools, especially not those far away from the county's center and those less accessible. This means having to settle for less competent lecturers or with local resources. Large institutions, on the other hand, always have the resources and facilities available, and the best lecturers will fill the teaching positions.

B: Certification

All 21 interviewees approved the awarding of certificates by institutions. Schools do not award comparable certification for their courses. Most teachers commented on this difference.

C: Study application

Six interviewees noted that teachers returning to schools had difficulties in implementing their studies in institutions. Moreover, they could not share the knowledge they acquired with other lecturers. They sutINSET at Oranim could help in creating a common school language and meet the particular needs of the school and the teaching staff.

D: Effectiveness

Seven interviewees expressed doubts as to whether INSET at Oranim would be as effective. This was mostly attributed to fatigue at the end of a working day. In addition, teachers might feel forced into participating in a

course which was not of their own choosing. They might even over-react and be uncooperative or disruptive.

On the other hand, teachers taking courses outside of the school framework could choose their own courses and suitable time and place.*E: Getting out of the school*One teacher stressed the importance of a change of atmosphere when taking a course in an institution. A course within a school involves the participation of the same teachers who meet on a daily basis in the staff room and the school's corridors. An outside institution offers a different type of exposure, providing an opportunity for meeting other teachers which could prove productive, rewarding and offer new perspectives. (Note: interviewees did not consider meeting colleagues to be a motive for choosing INSET, but when asked about the differences between INSET in schools and INSET in educational institutions, several brought up the subject).

4.1.4 Conclusions

As this research study progressed, the focus became clearer. If the research subject had, at the outset, been more general - INSET in Israel - it became evident to me later that there were interesting and important problems related to the research on INSET in northern schools alone, in particular, in Oranim (which is the center for INSET in schools in the country's north). It was at this stage that a need arose to firstly determine the motives for teachers to participate in INSET in general, and at Oranim, in particular, and then their expectations from these courses.

The pilot study made an additional contribution by formulating the central research question. This research demonstrated two main points as expressed by the interviewees:

    a.   Study implementation - teachers found it difficult to implement their studies in schools.

b. Effectiveness - teachers expressed doubts as to whether school-based INSET would be effective. Similarly, the effect of college INSET was not clear.

From the literature, we learned that these two factors are interrelated and that the effectiveness of a specific course is related, to a great extent, to the ability to implement the material studied (Joyce and Showers, 1980; Shulman 1986, 1986; Hopkins, 1989; Crahag, 1990).

Since Oranim offers a large variety of courses in diverse topics, it is clear that the teacher's ability to implement the material studied in the courses will be expressed in different ways. For example, the ability to implement the method of reading skills, learned in a special course for Grade 1 teachers, will differ from the ability to apply the knowledge obtained in a course on literature. In order to be able to methodically relate to the problems brought up by the interviewees in the pilot study, focus must be placed on a specific course and research questions relating to it formulated.

Since this line of thought leads us to an additional focal point (specific mention was made during the interviews as to difficulties in implementing methods learned in the courses), INSET dealing with teaching-learning methods must be investigated.

This focus even determines the specific type of research - the case study - which, in addition to focusing on a specific course in a specific college, will bear the character of an ex-post-facto-design research. This type of design was found to be the most appropriate.

That is, INSET served as a type of "treatment" received by the teachers. The research actually began at this point and dealt with the results of this treatment, in an attempt to seek the reasons for these results.

The research procedure and the actual questions will be described later. This section describes the process which brought on their integration.

As shown by the responses, teacher trainees afforded great importance to Oranim as a source of training programmes.

Trainees noted difficulties in applying the material they had learned in the field and in sharing the new teaching methods with colleagues who had not participated in the courses. Nonetheless, participants believe that Oranim offers training programmes at a higher level than what could be offered within a school. Teachers expect that Oranim will help them keep abreast of change and master the relevant new knowledge and methods acquired. They could expect formal certification for their studies, which is not given for training classes in schools despite that fact that these classes are essential for professional development.

Interviewees held great expectations for Oranim in providing training programmes based on the school's previous experience and its reputation of many years.

Therefore, there is a need to investigate whether Oranim lived up to its expectations and effectively met the needs of the teachers training there. Since trainees referred to difficulties in implementing the material they had learned, the sources of these difficulties should be examined and plans developed to make the courses more effective so that the material taught is more readily applied in the field.

On the basis of the above, together with first-hand knowledge of the gap between material learned in Oranim and implementation in the field, the research questions were formulated with the help of colleagues at Oranim.

4.2   SECOND PILOT STUDY: "INSET" AT THE ISRAELI SCHOOL IN LONDON

Following the interviews conducted in the first pilot study and based on literature in the field, an open questionnaire was drafted and given to teachers at the Israeli School in London (see Appendix 2.1).

As the research developed in terms of its character and its objectives regarding which direction would be taken in this study in terms of the type of

research (qualitative), the research questions, the objectives, etc., it became clear that there would be a need to approach a large number of teachers. The use of a questionnaire is one of the most effective tools for accomplishing this. During the preparatory stage of formulating the detailed questionnaire, several open questions were drafted, from which elements of the final questionnaire were derived.

In addition to forming the basis for drafting the questions, this pilot study represented an attempt to investigate the teachers' reactions to being involved in the subject and being requested to respond to the questionnaire.

In order not to "neutralise" the teachers from the target research population (teachers interviewed in the pilot study could not be included in the research population), there was a need to turn to a different population of teachers. Teachers from the Israeli School in London appeared appropriate for this purpose since they did not represent part of the target research population, and were available to the researcher, who was residing at the time in London and serving as principal of the school.

In order to describe the type of teachers interviewed, a short explanation of the Israeli School in London follows.

The Israeli School in London was established by the Israeli embassy over 20 years ago. It consists of nine primary school classes operating only on Sundays and three secondary school classes operating during the entire week.

The School is intended for children of emissaries residing in London for a period of several years. In comparison to other Sunday schools, the Israeli School does not teach religious and traditional Jewish studies. Instead, it teaches particular subjects from the Israeli school curriculum. Its main objective is to help children close the gap created during their stay abroad, thereby facilitating their integration into the Israeli educational system upon their return. The School prepares 16 to 18 year olds for their BAGRUT examinations (they are exempt from the British A-Level examinations for special reasons) which they take in the Israeli embassy.

School's teaare Israelis residing in London who are familiar with the Israeli school curriculum. Not all the teachers are certified since, often, as a result of lack of manpower, Israelis who are not certified teachers are employed.

The questionnaire described below was given only to certified teachers and to those who had participated in INSET in Israel (n=10).

4.2.1 The Questionnaire

The questionnaire in its entirety appears in Appendix 2.

The first five questions are background questions regarding type of training, experience, teaching subjects, grades taught, and current teaching position. The other five questions deal with the teacher training programmes in which the teachers participated in Israel and are listed below:

6. Which of the INSET courses you participated in do you consider most beneficial?

7. Please give details of benefits of each course.

8. Please describe the main changes in your work and ideas as a result of the course (at the school and in the classroom).

9. Are you considering taking other INSET courses? Please give details.

10. If you were to persuade other teachers to take INSET courses, what argument/reasoning would you employ?

4.2.2 Findings

The sample included teachers who taught Grade 1 to high school grades, who taught all types of courses, and who had from 2 to 15 years of teaching experience. Six teachers were certified in Israel from colleges and four, from universities. After all the questionnaires were collected, the responses were organised separately for each question.

Question No. 6: Which, of all the INSET courses you participated in, do you consider most beneficial?

Responses

Seven of the teachers considered the courses involving different teaching methods (reading-writing teaching methods, special methods for teaching mathematics, various methods for teaching Hebrew language and comprehension, use of the computer in the classroom, group work, and individual work) to be the most beneficial. Two teachers felt that the enrichment programmes enhanced their intellectual abilities (for example, the Jewish Bible and history). One teacher who had undergone retraining from the research field to teaching, felt that the retraining courses were the most beneficial for her.

Question No. 7: Please give details of benefits of each course.

Responses

All ten teachers considered updating and refreshing their knowledge to be very beneficial. The seven teachers who referred to the courses involving different teaching methods considered acquiring tools and skills for classroom teaching to be very beneficial, knowledge which they felt they were missing after completing their initial teacher training. Three teachers considered "expanding horizons" and developing new trains of thought to be significant benefits from the courses in which they participated.

Question No. 8: Please describe the main changes in your work and ideas as a result of the course (at the school and in the classroom).

Responses

In the school: two teachers claimed that after completing a certain course, they understood the need for a change in work methods in all schools, but did not feel they had to power to implement this change. The others did not respond to this question.

In the classroom: four teachers claimed that after completing the courses, they were more capable of diversifying their teaching strategies. Two teachers stated that they started to completely reorganise their daily routine in the classroom, by being more flexible with their time and providing pupils with the opportunity for making choices. One teacher claimed that she started to see better results in acquiring reading and writing skills as a result of the method she learned in the course and consequently implemented in the classroom. Three teachers answered that they did not implement any change in their classroom teaching.

Question No. 9: Are you considering taking other INSET courses? Please give details.

Responses

All ten teachers claimed that they plan to continue attending INSET courses in the future. Some of them indicated their plans to pursue more than one direction in continuing in their studies. Four teachers intend to continue to study towards an academic degree. Six teachers plan to take computer courses. Five teachers intend to keep abreast of new teaching methods. One teacher plans to undergo vocational retraining into the field of special education or educational consultation during the course of her sabbatical year.

Question No. 10: If you were to persuade other teachers to take INSET courses, what argument/reasoning would you employ?

Responses

All ten teachers claimed that a teacher must be updated in new teaching methods and programmes. Five teachers also afforded great importance also to attaining an academic degree. Three teachers stated that taking INSET courses was refreshing and varied their standard daily routine.

4.2.3 Discussion

As previously mentioned, the main objective of this questionnaire was to form the basis for drafting a detailed questionnaire, to serve as one of the research tools. Obviously, from this random sample, it will not be possible to make definitive conclusions or extensive generalisations. In addition, through this questionnaire, it will be possible to emphasise points requiring clarification or more in-depth study.

The responses to questions 6 and 7 indicate a need to investigate, in a more comprehensive manner, the benefits of INSET as perceived by the teacher. Do the benefits manifest themselves in the ability of a teacher to implement the material learned in the course in the classroom or in the enrichment of a teacher's personal knowledge outside of the teaching profession? Do the benefits manifest themselves in teaching methods or programmes or also in other facets (such as meeting with colleagues, dealing with academic duties, etc.)?

The responses to question 8 indicate the need to check that if the teacher has benefited from a certain course, this is expressed through implementation in the classroom and the school. There is also room to investigate how the teacher faces change after completing the course, both in terms of school and classroom levels.

Questions 9 and 10 again require that we investigate the level of importance the teacher affords to the courses and to what type of benefits he expects.

4.3   THIRD PILOT STUDY

Based on results of the second pilot study, the relevant literature, and suggestions of colleagues in Israel, a closed questionnaire was then drafted. The questionnaire was sent to Israel for the pilot study and given to a group of teachers in the "Alternatives in Teaching" course at Oranim during the 1994-1995 academic year (this group was included in the actual study). A coding frame was developed at the same time.

Owing the relatively lengthy questionnaire of this pilot study, only the question topics are listed below (see Appendix 3 for the entire questionnaire).

1. Classes taught.
2. Subjects taught.
3. Years of experience.
4. Previous courses taken by the respondents.
5. Courses that were very beneficial.
6. Type of benefit.
7. Expectations from the course.
8. Fulfillment of the expectations in various areas.
9. Teaching methods used in the course.
10. Areas in need of improvement.
11. Ways of improvement.
12. Frequency of using various teaching methods.
13. Frequency of using various methods.
14. Ways of planning a lesson.
15. Feeling while using various teaching methods.
16. Level of feeling freedom in school.

17. Teacher's perception of the head teacher's attitude.

18. Teacher's relationships with various bodies.

19. Ways of assessment.

20. Ways of dealing with the assessment results.

21. Changes during the past three years.

22. Areas that had the most considerable improvement.

23. Evaluation of the recent changes.

24. Factors influencing the changes.

25. Reasons for not making changes.

4.3.1 Summary

This pilot study differs from the previous ones in that it investigated the level of clarity of the research tools (the questionnaire) during its final design stage. An additional objective of this pilot study was to test the coding frame and the data collection table.

The detailed findings are presented in Appendix 3, where the responses are summarseparately for equestion. The findings may be classified into two categories:

1. Content - findings which represent a partial answer to the research questions.

2. Formulation - findings which relate to the formulation of the questions and to the extent of their clarity to the research.

Since only 19 respondents returned the questionnaire, and since the main objective of this pilot study was to investigate the level of clarity of the questions, the questions did not provide a basis to draw conclusions on which generalisations could be formed regarding the research questions. From this aspect, it was, therefore, only possible to procure some indications regarding the responses expected in the research itself.

Regarding formulation of the questions, based on the returned questionnaires, most of the questions as well as the way in which they were to be answered (marking the appropriate place in the table, open questions, etc.) were understood.

In some of the questions (8, 10, 11, 12, 14), several sections were left unanswered. In all of the above questions, there was room for a negative answer, i.e. "No," "Never," or "Not at all." An additional explanation regarding filling out the questionnaire was therefore required. In the Hebrew version, an explanation was added saying that a negative response would also be included and should therefore be marked.

Minor changes were made in several of the questions (the changes were incorporated into the Hebrew version):

Question 8: In the light of the fact that not all of the respondents answered all sections of the question, an explanation of the intention regarding use of time and administration was given.

Questions 10, 11: These questions dealt with the need for improvement in the course. Here, also, many respondents did not answer. In addition to the above explanation regarding the negative response, this response will also be checked in the interviews with teachers from Group A. This will serve as a good example of the way in which the various research tools complement one another and help in creating a fuller picture.

Question 12: Many respondents also did not answer this question. The question is very important and should not be excluded. Dividing it up into sub-questions may cause awkwardness and increase the size of the questionnaire, which is already too long. The negative response explanation also applies to this question, whereby the appropriate column must be marked even if the certain method is not used at all.

As mentioned, the coding frame and data collection table were also examined in this pilot study and were found to be efficient and easy to use.

4.4 CONCLUSIONS

This chapter effectively shows the qualitative nature of this research study. Initially, the general research subject was chosen and preliminary questions were asked.

The first pilot study exemplified this stage, and was a form of preliminary encounter with the situation on which the research is based. In this stage, following a stay on the research "site" and choosing part of the data, the research subject was formulated in a more focused fashion and the preliminary research questions were drafted.

The second pilot study took place after the subject, the questions and the research population were defined. It was already clear in this stage that there would be a need for a questionnaire and/or interview in order to research the subject from the point of view of the teachers and the principals. The questions asked in this pilot study concentrated on the subject of teacher training courses only, which is the subject of the research. The responses of the research population at this stage were used as a basis for the final draft of the questionnaire, which represented one of the main research tools of this research.

The third pilot study took place during the final stage and its objective was to examine the questionnaire prior to its distribution.

As mentioned, in a conventional research study, the researcher starts with defining the problem, making assumptions, determining operative definitions, designing the research tools by which the data are collected, analysing the data collected, and drawing conclusions.

This is a linear continuation, which usually begins and ends at a fixed stage. In this research, the progress is not linear and it includes many repeated attempts and experiments in order to focus the research questions.

The pilot studies described in this chapter demonstrate this process.

CHAPTER FIVE: RESEARCH QUESTIONS AND HYPOTHESES

5.1 INTRODUCTION

Quantitative research evolves from the theoretical to the data collection stage, qualitative research evolves from data collection to the theoretical stage, based on day-to-day reality (Sabar Ben-Yehoshua, 1990; in Hebrew).

The quantitative researcher formulates hypotheses based on theoretical and research literature and draws up the research questions from the hypotheses. The main objective is to prove or contradict the hypotheses. Therefore, quantitative research questions are formulated in detail in advance and are defined as the research progresses.

In contrast, the qualitative researcher commences the research work through interactions examined in relation to the general type. The qualitative researcher formulates research questions, but these are preliminary questions which present the general problems to be detailed as the research progresses.

Guba and Lincoln (1981) present three possible types of qualitative research questions:

1. The Conceptual Question: develops from a vague, unclear or blocked situation from the conceptual or theoretical point of view. This situation must be elucidated.

2. The Action Question: develops from the need to choose between alternative possible methods of action as a result of different assumptions regarding a specific situation.

3. The Value Question: develops when an unwanted result occurs in the value concepts and a way to avoid this must be found.

This research will ask questions which combine the first two types. The questions evolve from a situation requiring clarification - a situation in which the reality within the school and the educational system itself require change in teaching-learning methods, but the change does not occur, and if it does, not at

the required rate and extent.

The educational system offers training programmes to schools and teachers through which they will learn how to change their work methods, but alternative ways of introducing the required change must also be investigated by first examining the programmes offered up until now.

The nature of the research questions will determine their limitations. This research will focus on a specific type of teacher training programme and even if the programmeand the questions are of interest in themselves, they may detract from the focus of the research.

The questions are drawn from the reality reflected in the first pilot study and the day-to-day work in the field, a reality which teaches about the difficulty of implementing new teaching methods in the existing system. Together with this, the literature dealing with the subject is not ignored. The research and theoretical literature covered in the third chapter deals with the subject of teacher training programmes, the level of their effectiveness, and the proper way of structuring them. The literature provided tools for focusing on the central problem (where the temptation to be drawn to focal points of interest revealed in the field on a day-to-day basis is great). It will later provide tools for designing the analytical categories.

As previously stated, this is a case study based on a specific teacher training programme.

The research questions will focus on the extent to which this particular training programme was applied, as observed by the teachers themselves and their principals and supervisors.

The research questions relate both to course content and the expectations of teachers who chose this programme (a gap between expectations and what the course actually provided could have an effect on applying what was learned).

The research questions will also reflect on the differences in work methods adopted by teachers who participated in the course, and those who did not.

The research questions are organised around two dimensions:

a. Implementation.

b. Differences in performances.

The principal research question (the first question in each group) is followed by secondary questions emerging from it or related to it.

Definitions relating to concepts contained in the list of questions are provided later with a view to clarifying the concepts within the context of this research.

Direction of the questions are detailed in Table 6, which explains their importance and contribution to the attainment of the research goals.

A scheme for mapping the factors relevant to the extent to which teaching methods acquired in training programmes are applied is described in the hypotheses section.

The hypotheses reflect the main gist of the research questions however, general hypotheses evolving from preliminary observations from the pilot study data and from day-to-day work in the Israeli educational system may also be presented.

5.2   THE PROBLEM AND THE RESEARCH QUESTIONS

The central problem is as follows: Why, despite heterogeneous classes (the marked difference being in pupils' socio-economic levels, capabilities, skills, fields of interest, etc.) that require individualised methods, despite declared support from at least some senior officials in the Ministry, and despite the varied training programmes offered in Israel, do so few schools apply methods and curricula suited to meet their pupils' needs systematically and on a long-term basis?

Owing to the complexity of this question, the answer may also be assumed to be complex and include many different aspects, starting from the level of the

political system, and ending with the level of the individual teacher in the classroom. This research will be devoted to a specific type of teacher training programme only. The assumption is that teacher training is one of the most important and effective tools for introducing change into the schools.

The theoretical literature points to the different factors involved in determining the level of effectiveness of the teacher training programmes. The research questions were formulated using the literature and data collected from the interviews with the teachers.

Principal research question A: To what extent is the college course material perceived to be implemented?

Secondary questions:

1. What is the rationale and nature of INSET courses at Oranim?
2. What were the expectations of teachers in choosing the course?
3. To what extent did the courses respond to the teachers' needs and expectations?
4. To what extent was the course material implemented in the field? (based on personal reports of teachers, viewpoints of head teachers and school inspectors, and classroom inspections of - detailed in the section on "Research tools").

Principal research question B: Could one detect meaningful differences between the two groups of teachers?

Secondary questions:

1. What are the differences in using diverse teaching methods?
2. What are the changes in working methods over the past five years?
3. What are the changes in working methods in the two groups?
4. What are the reasons for the changes?

5.2.1 Definitions and Clarifications

The questions formulated above include several concepts and issues requiring clarification. The following definitions and clarifications are related to these concepts.

a. In the first group of questions, the concepts "rationale" and "nature" of INSET courses at Oranim were mentioned.

   Rationale refers to: aims, central subjects and emphasis of INSET planners.

   Nature refers to:

   - Subject matter - details of subjects taught and the time allotted to each subject (assuming the length of time given to a particular subject implies its significance).

   - Teaching/learning methods - the way in which the courses are taught.

   - Activating participants - demands on participants, whether or not they have any bearing on the subjects taught, and how active they are (beyond listening) during the course.

   - Time framework - length of course and period during the day (one day a week, after school hours, etc.).

   - INSET instructors - their functions (such as specialists in particular subjects, head teachers, senior teachers, etc.)

   Effectiveness refers to: application and problem-solving (Hopkins, 1989).

b. It is important to point out that Questions 2, 3 and 4 in principal research question A are based on the perspective of the interviewed teachers and the pri, as well as on observations in the field. Importance is placed on the subjective perspective of the interviewees.

c. Questions 1 and 2 in the second group of questions may seem identical but

attention must be paid to the fact that Question 1 deals with work in the present and Question 2 deals with the process of change which the teachers underwent (or did not) during the five-year period.

d. The five-year time framework was defined based on the fact that the first group of teacher trainees included in the research took courses during the 1991-1992 academic year. If the process which the entire treatment group underwent is to be examined, it is important to relate to the time period during which all course participants studied, and the minimal time frame for this is five years. The aspiration for a time period which is not too lengthy results from the desire to avoid questions which would be difficult for the interviewees to answer owing to forgetfulness, therefore, the time period was limited to a reasonable minimum. A shorter time period would not have covered the entire research population and may not have been effective in showing the process of change.

Table 4: Outline of research questions

Principal Research Question A	Secondary Research Questions	Why the question is important
1. What is the rationale and nature of INSET?	• Who are the designers? • Who are the participants? • Do the participants take part in the design process? • What are the objectives? • What are the central ideas? • What are the main subjects? • What are the teaching methods used in the course?	To examine the measure of implementation of the material taught in the course. To examine participants' interest and the extent of their involvement in planning and teaching methods used which may reveal factors promoting and/or hindering implementation.
2. What were the expectations?	• What expectations were anticipated: Preparation? Subjects? Delivery?	To determine if teachers' expectations meet with the planners' objectives. Expectation is a crucial factor in measuring implementation.
3. To what extent do the courses respond to the teachers' needs and expectations?	• What are the needs related to day-to-day work in the classroom? • What are the needs related to general professional progress? • What are the other needs?	The point of view of participants is important. A teacher is not likely to implement material which he considers inappropriate.
4. To what extent was the course material implemented in the field?	• Did teachers utilise a wide variety of teaching methods? • Did teachers balance the physical organisation of the class with learning tasks and interests of the class? • Could teachers justify choice of a particular method for a particular target?	The measure of course success and its viability lies primarily on the teachers' ability to implement the material studied in it.

Principal Research Question B	Secondary Research Questions	Why the question is important
1. What are the differences in using diverse teaching methods?	• Which teaching methods are being used? • Can teachers justify their choice of a particular method? • Are teachers confident in implementing different methods?	It is important to check whether the course had equipped participants with material and subject matter that was not available elsewhere. If there are no clear differences between the groups, it would mean that non-participants had achieved the same goals through other means, or that participants are incapable of applying the materials the course was supposed to have given them.
1. What are the changes in working methods over the past five years?	• Do teachers use more teaching methods? • Do teachers use less teaching methods? • Are there outdated methods? • Are there methods that teachers use more often?	It is important to check whether teachers who participated in a course on teaching methods really demonstrated proficiency in that area (more than others).
1. What are the changes in working methods in the two groups?	• What are the changes in emphasis? • What are the changes in subject matter? • What are the changes in pupils' age groups? • What are the changes in job satisfaction?	If participants in the course, as a group, differ from other teachers, the course itself may have been instrumental in the differences.
1. What are the reasons for the changes?	• What are the changes as a direct result of the course? • What are the changes related to the school the teacher works in? • What are the personal reasons? • What are the other reasons?	It is important to check whether and if the course is seen as instrumental in changes in the working methods. The course is only effective when participants consider it to be effective.

5.3 HYPOTHESES

5.3.1 Hypotheses of the Implementation of INSET Material

As previously mentioned, hypotheses are formulated based on theory in quantitative research while attempting to find a relation between the variables; qualitative research hypotheses are preliminary and general, and only during the progress of the research is the level of their detail clarified (Erickson, 1977).

The hypotheses are based on work experience in the field and on answers of the interviewees in the first pilot study. Interactions between the different factors of the Israeli educational system (related to teacher training programmes) are described in Figure 7. The hypotheses also deal with these factors.

Figure 7: Factors relevant to the measure of implementation
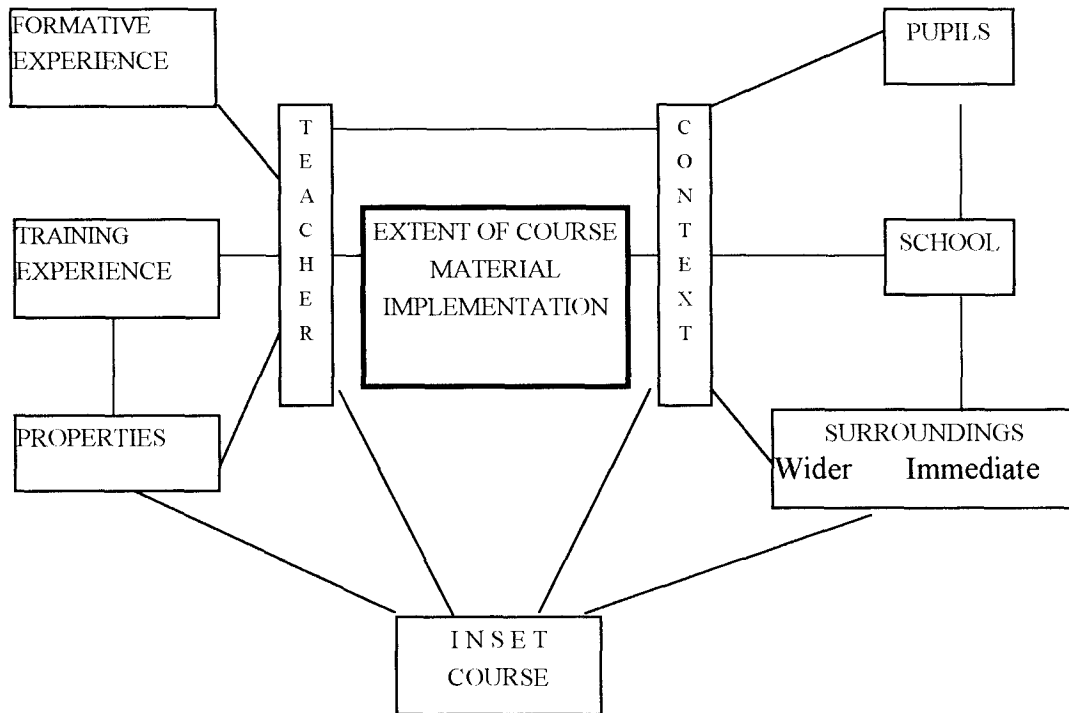
Source: Author (based on the literature survey, work in the field, and the
first pilot study)

5.3.2 The General Hypothesis

1. **The extent of implementation is related to the teacher's personality**.
The term "teacher's personality" includes his/her training and experience,
as well as openness, leaderships style, ability to communicate with the
surroundings, etc. These elements may be revealed through observations
in the classrooms, an interview with the teacher, and a questionnaire
including questions pertaining to training, the work itself, and opinions and
feelings of the teacher in this respect.

2. **The extent of implementation is related to the system in which the
teacher works.** The term "system" appears here in broad terms, starting
with the student population, the nature of the school, the way the school is
managed, the principal-teacher staff relationship, and ending with the

relationship of the surroundings (parents, local council). Information from observations, combined with information from questionnaires, interviews with teachers and interviews with school principals, may help in understanding the reality being researched.

3. **The extent of implementation is related to the courses in which the teacher participated.** The extent of the teacher's involvement in course planning, teaching methods and subject matter, and the extent of support upon completion of the course.

Information with respect to these hypotheses may be obtained by investigating course curriculum and from questionnaires for course graduates.

5.3.3 Working Hypotheses on Differences Between Groups A and B

1. Teachers from Group A will implement a wider variety of teaching-learning methods in the classrooms than teachers from Group B. This will be revealed through observations in the classrooms.

2. The two groups will differ in terms of the extent of familiarisation with the variety of teaching methods and of confidence in implementing these methods. These differences will be revealed though observations in the classrooms, interviews with the teachers, and questionnaires for teachers from both groups.

3. Differences will be expressed in the teacher's ability to explain and clarify his/her choice of certain methods based on questionnaires from both groups and after observation in the classroom. Teachers from Group A will be able to describe their reasons for making a choice in more detail.

4. Teachers from Group A will consider the INSET courses at Oranim to be an important element in changing and improving their work methods.

Note to the reader: Group A comprised teachers who participated in the course on alternative teaching methods(aopposed to the traditional teaching method). Group B comprised teachers who did not participate in this course. Group B teachers were matched to Group A teachers, i.e., every Group A teacher was matched to a similar teacher in terms of school, class, subjects taught, and years of experience, but differed with respect to treatment received. The treatment, as previously described in this research, was the special teacher training course on alternative teaching methods.

CHAPTER SIX: RESEARCH DESIGN

This chapter will describe the research structure and present the relevant variables, the research system, the research population and the sampling procedure. It will also review the relevant characteristics of the qualitative research.

6.1   INTRODUCTION

The choice of a teaching method represents a broader research approach than that of using the simple questions of research methods. By discussing quantitative and qualitative research methods, we are, in essence, dealing with fundamental approaches. These approaches involve considerably more than data collection techniques, analysis and presentation. They include a system of assumptions that are philosophical and ideological in nature (Sabar Ben-Yehoshua, 1990).

Quantitative research supervises, isolates and processes the many factors characterising the situation being investigated. It may be assumed from the research designs based on pre/post tests that, other than the manipulation itself, little else occurs. The superficiality of a research system of this kind neglects subjective, anecdotal or opinionated data.

A possible example of quantitative research (a hypothetical example, not a precise research study) involves examining pupils' achievements in a particular class in a particular course. In parallel, the achievements of pupils from another class taking the same course are examined.

During the "treatment," the teaching method of the same course in one class is modified. After a specified period of time, the pupils' achievements are reexamined within the two classes. The objective is to determine whether the teaching method affected the pupils' achievements. By relating only to achievements, data such as class environment, teacher's personality and

behaviour, relationship of the pupils to the specific course, feedback from parents regarding the course and the teaching method, etc., are ignored.

As shown in Figure 6 (p. 103), the reality with which this research deals is a complex reality. By only relating to the "treatment" component and ignoring the other components shown in figure, an incorrect picture is created.

The research presented here deals with the naturalistic-qualitative approach. This approach focuses on man's understanding through his language, opinions, approaches to values and events, expectations, etc.

Qualitative research is interested in understanding the phenomenon of quality and its significance. This understanding may be presented by penetrating the day-to-day world of the individuals being researched. The reality is found to be a complete entity that is impossible to divide, therefore, all the data are collected and recorded, including atypical results. Qualitative research observes and records different phenomena occurring in the investigated reality, while relating to the significance of different events as perceived by the individuals being researched.

Since this research was initially planned using a qualitative approach, the main properties of qualitative research may be described in detail as follows:

1. **Qualitative research derives its data from a natural system.** Human behaviour is influenced by conditions, and hence, the types of behaviour under study should be observed in their natural surroundings. This study will investigate both teacher training programmes, and the classes and schools to which trainees returned and where they are to implement their ideas from what they have learned. The researcher will interview the trainees and observe them in the classes.

2. **The research is in the main descriptive.** Qualitative data is collected mainly in written format and the results are drawn from interview transcripts, recorded observations, document analyses, etc. This research

affords importance to interviews with teachers, principals and supervisors; to questionnaires containing open-ended questions; and to classroom observations. In addition, the training programme, whose pupils form the research population, was analysed.

3. **The qualitative approach attaches importance to research subjects' perceptions.** The qualitative researcher strives to understand what the subjects think. This priority is based on the assumption that behind any overtly expressed behaviour, there are personal opinions, intentions and beliefs. It is important for the qualitative researcher to discover and understand them. The perceptions of the subjects are revealed by means devised for this purpose.

The question is posed as to whether it is possible to ascertain the natural advantages of each method and to create a synthesis between them. Several researchers (Goetz and Le Compte, 1984; Jick, 1979; Scriven, 1972) recommend combining the two methodologies - quantitative and qualitative, what has been called "triangulation." There is generally a tendency to combine them in order to strengthen the internal and external validity of the research. For example, open interviews, normally used in qualitative research, are accompanied by closed questionnaires. The questionnaires enable reaching a larger population than through interviewing, and the interviews help to better understand the responses being investigated.

Another example is observation, normally used in qualitative research, in order to understand the relationship between variables that showed statistical correlation in the quantitative research better. Qualitative research methods sometimes use this phenomenon as a preliminary investigation. At a later stage, will be investigated to a greater extent using quantitative methods.

The combination of the two research approaches may be expressed in two ways:

a. Completion of data collection and validity of the data while using the two approaches.

b. Use of patterns (such as analysis) existing in one approach which affect data collected using another method.

The choice of research method - quantitative or qualitative - must be determined by the nature of the research and its objectives. Therefore, in many cases, use may also be made of the two combined approaches, while paying attention to the different characteristics.

This research is designed as a case study. The case study researcher typically observes the characteristics of an individual unit - a child, a class, a school, a community, etc. The purpose of such an observation is to probe deeply and to analyse intensively the multifarious phenomena that constitute the life cycle of the unit (Cohen and Manion, 1989).

The case study is a method of organising social information and data in a way that preserves the special characteristics of the research subjects. The data is qualitative and has not been manipulated.

The content of this research allows readers who were not present to form an impression and arrive at a better understanding of the phenomenon under investigation (Kenny and Grotluschen, 1984; Sanders, 1981; Shaw, 1978).

It also focuses on the specific case of one training programme at a particular college and the teaching methods. It attempts to follow-up the extent to which the methods learned in the programme were implemented, and how teachers, principals and supervisors explained this.

This research focuses on the way teachers perceive the possibility of implementing teaching methods learned in training programmes using questionnaires, observations and interviews to disclose their perceptions. It seeks to reveal the problems and difficulties encountered by teachers, and then to modify the structure and content of the training programme in a way that best responds to teachers' needs.

Use of different means for investigating the same issue (questionnaire + interview + observation) is one way which the qualitative researcher examines the perceptions of teachers being investigated.

During the pilot studies, it appeared that there was a need to use triangulation in two main ways:

1. Comparison to the control group - in order to get an idea of the "treatment" required by the treatment group (the particular course), a need arose to compare the teachers being researched to the teachers who were not exposed to the "treatment."

2. Data collection and organisation - in order to avoid on overflow of data which could adversely affect focusing on the problem being researched, a need arose to use well-known tools (observations, questionnaires, interviews) and data collection in tabular, coded and quantitative form.

The need for quantity again arose from the desire to get an idea of the number of individuals being researched who have specific views, use certain methods, and apply certain approaches. These numbers are significant since the final objective of the research is to suggest ways of improving the teacher training system. In order to support the suggestions in reality and especially the needs of the teachers, there is a need to relate to the number of teachers showing a particular need or approach.

The effectiveness of triangulation rests on the premise that the weaknesses in each single method will be compensated by the counter-balancing strengths of another. The various methods together produced largely consistent and convergent results. In fact it can often turn out to be an opportunity for enriching the explanation (Jick, 1979).

This chapter will present different relevant research variables, as referred to by the interviewees in the first pilot study.

Stages of the research system follow. The research population is described and the sample and sampling process explained. Research instruments are described in a separate chapter.

6.2 MAPPING OF THE RELEVANT RESEARCH VARIABLES

The relevant research variables determined from the pilot study, the research literature, and the experimental work in the field are described in Figure 8.

Figure 8: Relevant research variables

Were changes implemented in classroom and school?
Were new teaching methods utilised?

E

114
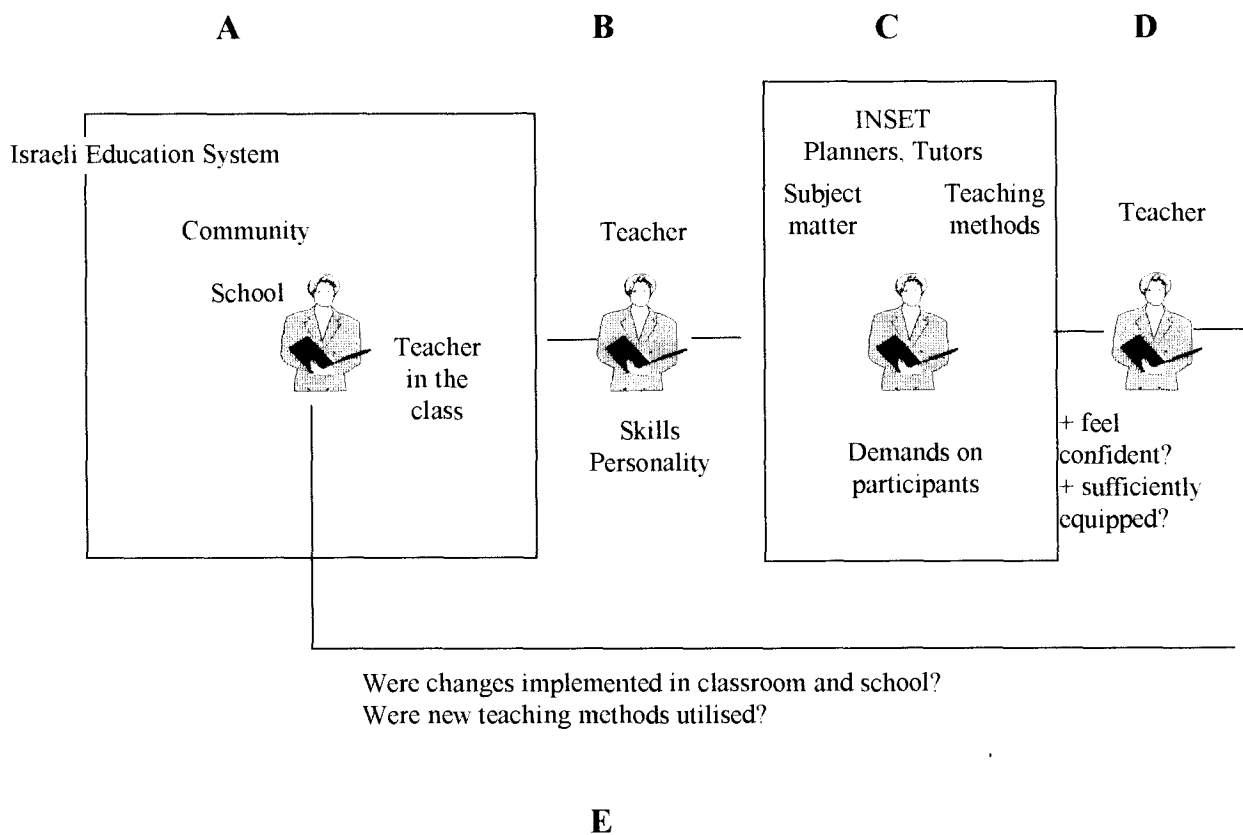
<u>Figure explanation</u>

A. The teacher functions from within a complex system. He/she teaches a class having a heterogeneous student population in several different aspects (fields of interest, social class, abilities, knowledge). The class is located within a specific school having unique characteristics from the point of view of size, population, atmosphere, norm, etc. The school does not function within an empty space; it is located within a specific community (veteran neighbourhood, disadvantaged neighbourhood, Kibbutz, Moshav, Arab village). It also represents part of the Israeli education system, which, as previously explained, is a very centralised system.

B. From this system, the teacher participates in certain advanced teacher training courses in order to learn diverse teaching-learning methods. Prior to participating in the courses, the teacher already has inherent teaching skills and personality traits.

C. In the courses, the teacher is exposed to variables starting with all INSET factors from the initial planning stage through the administrative stage, and ending with the final summation; as well as the targets, the INSET programme and its planners, the subject matter, the teaching methods, the measure of involvement and participation of pupils, etc.

D. The courses are completed after one year of study (four 1-1/2 hour classes a week). The questions arise as to whether the teacher finishes the courses with a feeling that he/she is equipped with the proper tools to choose the right teaching methods to meet different objectives, and if he/she feels more confident in implementing the different teaching methods in the classroom.

E. The teacher returns to the classroom and to the complex system from where he/she came. The questions arises as to whether changes were made in his/her working pattern, and to what extent he/she is implementing the knowledge acquired in the courses. In addition, the question is asked how

the teacher and additional bodies from within the system (principals and supervisors) explain the same level of implementation.

6.3   RESEARCH DESIGN

As described above, the independent variables in the study are the INSET courses at Oranim, and the dependent variables are the measure of implementation by the participants. Since the variables either already exist or are in the process of evolving, the researcher is unable to design or direct them. The researcher will, therefore, need to study these variables in retrospect for their possible effects on the dependent variables (Cohen and Manion, 1989; Kerlinger, 1970). The ex post facto design seems adequate in this instance:

$$X_2 \text{------------------} O_1$$
$$X_0 \qquad\qquad\qquad O_2$$
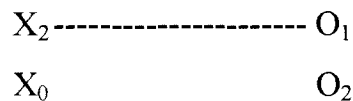
where:

X_2 refers to the treatment group of teachers exposed to a certain type of training programme.

O_1 refers to the test on the treatment group to determine the extent to which teachers in the group are implementing the methods they learned in the training programme.

X_0 refers to the control group composed of teachers who did not take part in the training programme. As much as possible, the teachers in this group are to be identical to those in the treatment group with respect to the relevant variables of seniority, education, place, and the subjects, as well as material and grades they teach.

O_2 refers to the test of the control group to determine to what extent they implement methods learned in the training programme.

Based on the definitions of these variables, the researcher can now describe the stages involved in the research system:

A. Locating Group A (treatment group X_2)

$\downarrow$

B. Locating Group B (control group X_0)

$\downarrow$

C. Examining the performance of Group A _____ O_1

$\downarrow$

D. Examining the performance of Group B_____ O_2

$\downarrow$

E. Comparing the performance of the two groups: $H_0 : O_1 = O_2$

$H_1 : O_1 \neq O_2$

$\downarrow$

F. Conclusions and recommendations

6.4 POPULATION AND SAMPLE

INSET participants represent the research population. Operatively, the group of teachers chosen were those who participated in the "Alternatives in Teaching" course at Oranim during the academic years 1991-1992, 1992-1993, 1993-1994 (n = 90). Therefore, the population cannot be chosen by random.

The research population is very diversified, including Jews, Arabs and Druze, religious and secular individuals, rural and urban dwellers, etc. Despite the great disparity, several common characteristics may be discerned: in terms of professional development, all of the research subjects had completed the initial teacher training stage and the teacher induction stage (Thomas, 1997). They participated in the course during their work day; a very significant fact in terms of implementing the material learned. The teachers are graduates of teaching training colleges or university-based teacher training departments.

Hence, psychology and educational philosophy theories are not foreign to them, or the relevant course models, such as Bloom's textonomy or Dale's etching. The objectives of the participants attending the course differ, but all attend of their own accord and are not forced to do so. In addition, according to academic regulations, they must participate in at least 80% of the course lessons; all participants fulfilled this criterion. The teachers were aware that Oranim is a pluralistic college encouraging joint study with individuals from different religious backgrounds, settlement types, etc.. They registered for the course knowing that they would be required to study in heterogeneous groups. The fact that they chose this course in particular, and Oranim in general, reflects their openness or at least willingness, which is not very common among teachers in Israel.

It may be thus seen that the teachers differed greatly with respect to most of the characteristics, and it was not possible to draw a uniform profile of "the teacher participating in the teacher training course."

Limiting the research period to three years is based on the introduction of a new technique programme during this time.

In addition, during the 3-year period of the research study, the researcher was residing in London to complete her academic studies. Therefore, during this time, she neither taught training courses nor was involved in running courses of this type. The physical distance enabled the researcher to observe objectively from the side. Without this element of distance, her direct involvement might have adversely affected her ability to evaluate and criticise.

Owing to the comparatively small number of participants (n=90), the research will take into account the whole population, hereinafter referred to as Group A. The research design will also include a control group, Group B.

The matched sample will be used to ensure that the two groups are as comparable as possible. The matching process introduces control into the research, since the error variance is smaller than between two different groups (Burroughs, 1975; Cohen and Manion, 1989). Matching will be based on the

same attributes (matching variables such as qualification, seniority, school location, subjects and classes taught). This procedure is problematic since the groups are not chosen indiscriminately and will be taken into account during the analytical stages and the conclusions.

All efforts will be made to match pairs which are identical with respect to most of the relevant attributes except for the unmatched element - participation/non-participation in the "Alternatives in Teaching" course at Oranim.

6.4.1 Sampling Procedure

Group A is an existing group. It will also determine whom to include in Group B. A matching procedure which is sufficiently difficult in practice is therefore required (Burroughs, 1975). Neither group is chosen at random, and the researcher is well aware of the possible difficulties in drawing scientifically valid conclusions (Burroughs, 1975). However, this is a case study, and as such, its conclusions and speculations will be made with extreme caution. Control may be introduced into the investigation by stating and testing the alternative hypothesis that might be a plausible explanation for the study's outcome (Cohen and Manion, 1989).

In order to achieve some kind of randomness, head teachers of Group A participants will be asked to provide a list of teachers who could be matching partners for the relevant variables. The partner will then be chosen at random (names will be written on notes and drawn out by a neutral party). This procedure may present the following problems:

a) Head teachers may refuse to cooperate.

b) Head teachers may not be able to find suitable matching partners.

c) Partners may refuse to cooperate (for fear of being judged inferior, etc.).

School inspectors (those interested in the study) will be required to provide assistance in this matter. Head teachers will be given detailed explanations and

the study will not be presented to participating teachers as a test case for participation or non-participation in a particular course. In order to avoid sidestepping teachers' reactions, the study will aim at examining work practices and attitudes of teachers from different training backgrounds. The researcher realises that teachers working in the same school and in corresponding classes may exchange notes about the questionnaire and/or interview, and about the study in general. This must be taken into account in the final data analysis and summation.

6.5   CONCLUSIONS

This research is a case study, that is, a qualitative research study by nature. For this reason, this chapter presented a general introduction of the typical approach and the main characteristics of qualitative research. Since several quantitative tools were used in the research, this chapter also investigated the possibility of incorporating the quantitative approach into the qualitative approach. After the general introduction, the relevant research variables were then described in detail and a map of the research procedure was presented, as well as how these variables were incorporated into it.

The research procedure was also presented in this chapter, accompanied by an explanation on the ex post facto design, which was found to meet the needs of this research. The research population, the sample and sampling procedure were also described. The instruments used to investigate this population and the data collection method will be described in the next chapter.

CHAPTER SEVEN: INSTRUMENTATION AND DATA COLLECTION

This chapter will present the research instruments used and describe their formulation, the solution to the problem of validity and reliability, and the method of collecting data using these instruments.

7.1 INTRODUCTION

Data collection is a lengthy and very significant stage whereby the researcher records background information, behavioural patterns, problems and results in order to understand them. Its purpose is to describe an innovation or a developing process in a way that will be useful to planners of teacher training programmes. The three types of data (Goetz and Le Compte, 1994) are:

1. **Base data,** referring to the background of the research subjects and their surroundings. These data are collected to enable comparison to be made between subgroups in the research population.

2. **Process data,** referring to what is going on in the classroom during the course of implementing new teaching methods and the way in which these processes are perceived by the participants. These data will help to evaluate the extent to which new methods are actually implemented.

3. **Value data,** referring to the opinions and perceptions of teachers, principals and supervisors. They have implications about the classroom reality.

This research is triangulation in nature and its purpose is to disclose reality as it appears to the research subjects by using instruments that are themselves characteristic of qualitative research — observations, questionnaires, interviews, and text analysis. Thus, researchers using qualitative methodology are encouraged to systematize observation, to utilize sampling techniques and

to develop quantifiable schemes for coding complex data sets (Jick, 1979). For this reason, quantitative methods were also used for collecting and processing the data. Each will be described at length. In each case, questions that the particular instrument is designed to answer are posed, and our methods for processing the data are explained.

7.2 VALIDITY AND RELIABILITY

Validity and reliability are measures of "good research" and determinants as to whether the research will be qualitative or quantitative in nature. Reliability is defined as the extent to which it is possible to use the same research methods and instruments in another study and obtain identical findings and interpretations. In a qualitative study, especially a case study, it is difficult to foresee that identical results will be obtained among different researchers, since the researchers differ in nature, and have varying backgrounds, fields of interest, and research sources. In addition, every research phenomenon is unique. Reliability based on a qualitative research approach is firmly anchoured in what is going on at the research site and in the researcher's report. This internal reliability relates to the question as to whether the number of experts dealing with the research subject agree with each other regarding data collection and analysis.

Validity is defined as the agreement between the description and the scientific explanations of the researched phenomenon. Here too, qualitative research characteristics investigate internal validity, that is, to what extent does the researcher measure what he really intends to do. The weakness of internal validity in a research study of this type lies in its most important characteristic - the researcher's presence as an observer on the research site and the documentation methods. The interviews and observations that are the source of feedback for the data represent, on the one hand, the source of the method's strength, and on the other hand, the source of its weakness.

In order to overcome the problem of validity and reliability, the researcher relied on "expert judgement." The Oranim School of Education (where the researcher worked) provided a support group to offer help and guidance on all matters regarding research writing. The support group comprised lecturers who were also carrying out research on different aspects of teacher training. The group was supervised by a advisory lecturer who had undergone special training in research writing. The questionnaire, the observation tools, and the interview questions were reviewed by the group of experts, who were requested to relate to the following questions:

*   To what extent does the research instrument investigate what the researcher really wants to investigate?

*   To what extent do the details comprising each research instrument (for example, the questions in the questionnaire) reflect the research goals and design?

*   To what extent does the structure of each research instrument investigate the phenomenon that the researcher really wants to investigate?

All of the research instruments described here were used after thorough discussion and approval by the group of experts.

7.3   RESEARCH INSTRUMENTS

The investigative instruments for this type of research consist mainly of questionnaires, interviews and observations (Hemerson, Morris and Taylor, 1990). Course programme analysis will necessitate the use of content analysis techniques (Guba and Lincoln, 1981; Holsti, 1969).

7.3.1 Questionnaires

An open questionnaire was drafted and given to ten teachers at the Israeli School in London (Appendix 2) following interviews conducted in the pilot

studies (Chapter 4) and based on literature in the field. A closed questionnaire was then drafted (Appendix 2) based on their answers, the relevant literature, and suggestions of colleagues in Israel. The questionnaire was sent to Israel for the pilot study and given to a group of teachers in the "Alternatives in Teaching" course at Oranim during the 1994-1995 academic year.

The questionnaire was returned and analysed with the aid of a coding frame (Appendix 2). In so doing, special attention was paid to the cases in which participants did not answer, or, if they did, only partially. The responses were reworded.

The final version of the questionnaire was completed and sent to the research population.

7.3.2 Interviews

The interviews target two principal objectives:

(a) To obtain information from head teachers and inspectors who will select a random sample (n = 18) from a list of schools in which the participants were teaching. This number was taken from a relative proportion of teachers from the different research populations. Group members will be asked to list the benefits they see in participating in the "Alternatives in Teaching" course such as: Could they pinpoint certain changes in the school or in particular classes as a direct result of teachers taking part in the course, and if not, why? Could they pinpoint differences in attitude and work practices between teachers in Groups A and B and if not, why? If there are differences, what are they?

The interview will also seek information from head teachers and inspectors with respect to participant registration (how involved they are in the choice of course - do they encourage participation, do they promote certain courses, etc.); the course itself (how interested are

the participants in the material taught, do they let teachers experiment, etc.), and after the course (how open are they to implementing new methods, if, and to what extent, are they prepared to introduce changes?). The researcher assumes that an interview seen as a "meeting of equals" (interviewees and researcher) would prove more effective than a questionnaire. An open and flexible approach is necessary in order to encourage candidates to talk freely and to provide the interviewer with as much data as possible (Keats, 1993). However, in order to avoid a situation whereby the quantity of information is greater than the specific data required, it would be necessary to establish some sort of structured interview (Bell, 1987). A semi-structured interview will therefore be used. (see Appendix 3).

(b) To collate information with answers from the questionnaire. It may be necessary to interview a sample of teachers in order to equate the questionnaire data.

Two types of interviews will be carried out:

1. Interviews with teachers from both groups. Questions will be similar to those in the questionnaire. Teachers will be given an opportunity to further elucidate their answers to the main questions as to their satisfaction with the course and implementation of the material taught in class (see Appendix 3).

2. Interviews of a different type will be carried out following the observations (details to follow) with teachers who had been observed.

The aim will be to gather information on decision-making when choosing and planning a certain activity. This information will then be checked against the course programme in order to learn whether or not subject matters taught in the course affect teachers' working practices.

In addition, interviews with teachers from Group A will be compared to interviews with those from Group B in order to establish if there are differences in decision-making and terminology of teachers for both groups. The comparison may also disclose information on the level of implementation in the classroom.

7.3.3 Observations

The classroom serves as the primary source of information. In the classroom, teachers will acquire both the practical experience and theoretical background that will be personally meaningful to them (Wajnryb, 1992). Classroom observations are therefore an important and multi-faceted tool (involving preparation, time spent in the classroom, and follow-up discussion/analysis/ action). Systematic observation in the classroom is based on structured observation procedures in order to collect data on behavioural patterns and interaction in the classroom (Croll, 1986; Sylna, Roy and Painter, 1980; Walker and Adelman, 1975).

In the proposed research, classroom observations in Group A are necessary in order to measure personal accounts of the implementation level of course material. The objective of the observation is to determine if teachers implement the new teaching methods and to what extent. It also aims at determining if they implement the course material (subject, academic level of the class, etc.) correctly and appropriately. In searching for a system of structured observation procedure, the researcher took into account the fact that no single system can measure the total classroom situation (Ober, Bentley and Miller, 1971). In order to focus on the researcher's purposes, however, it is necessary to use a systematic observation procedure in which variables will take the form of categories or a set of categories that reflect the purposes of the research (Ober, Bentley and Miller, 1971; Croll, 1986).

This research will use the instantaneous sampling method whereby the observer codes at set intervals (e.g. every 10 seconds). The codes describe events instantaneously rather than recording retrospectively (Sylna, Roy and Painter, 1980; Croll, 1986).

This particular system was chosen since it enables the observer to categorise fairly complex aspects of occurrences at certain instances. Observation categories were formulated according to classroom factors, a principal topic of the INSET course (see details of course description in Appendix 1). The pilot study was first carried out using an experimental observation sheet that included the following factors: class structure, learning task, pupils' behaviour, and teacher's attitude and role. Each factor is divided into different variables, as shown in Table 5.

Table 5: Observation categories according to classroom factors

FACTOR	CATEGORY	INTERVALS – EVERY 5 SECONDS														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Class Structure	Audience (Facing Teacher)	X	X	X	X	X	X	X	X	X	X	X				
	Individual															
	Groups as Separate Units												X	X	X	X
Learned Task	Uniform	X	X	X	X	X	X	X	X	X	X	X				
	Uniform or Unique for Some												X	X	X	X
	Shared by Group Members Identical Task to all Groups															
	Shared Amongst Group Members and Coordinated with other Groups															
Pupil's Behavior	One or Two Sided Communication Individuality, Privacy	X	X	X	X	X	X	X	X	X	X	X				
	One and Two Sided Communication; Beginning of Interaction of Pupils; Comparing Results and Mutual Exercise															
	Multi-Sided Communication Inside the Group Cooperation												X	X	X	X
	Multi-Sided Communication Inside and with Other Groups; High Degree of Coordination															
Teacher's Attitude and Role	Lecture, Assessment Questions	X	X	X	X	X	X	X	X	X	X	X				
	Planning the Tasks, Pupil Assessment and Supervision												X	X	X	X
	Advising and Guiding the Groups															
	Advising and Guiding the Groups Coordinating															

Using a digital clock, the observer will check each column at 5-second intervals.

This observation sheet was used during two lessons in two different classes in the Israeli School in London (see details in Appendix 4).

After collecting data from these two observations, there appeared to be a need for additional information regarding the type of task and activity which the teacher and pupils dealt with during observation. The more detailed observation sheet will be used for the observation itself as shown in Table 6.

Table 6: Detailed observation sheet

Class Structure / Teaching Methods	Audience facing teacher	Individual	Groups		
			Homogenous	Heterogeneous	Couples
Asking questions Teacher Pupil					
Lecturer Teacher Pupil					
Explaining subject					
Teacher reads story/song					
Class discussion					
Pupil reads					
Presenting picture, poster, map					
Film/slide presentation					
Listening to tapes/records					
Writing, copying					
Exercise, practice					
Demonstrating					
Pupil reporting					
Experimenting					
Observation					
Working sheets/cards					

The observer will check the right column for each observation unit (at one-minute intervals). At the findings summation stage, the time period devoted

for a specific task will be investigated as well as the extent of compatibility between the different factors.

For example, if during a 10-minute interval, pupils were sitting in homogenous groups in the class and the teacher asked questions of the entire class while standing near the blackboard, this signifies incompatibility between the class organization (groups) and the learning task (the same for the entire class) and between the position of the teacher and the pupil (teacher-centred).

The findings summation sheet could render insight as to the compatibility found with the teacher being observed during a specific class.

These findings will provide a basis for the interview with the observed teacher after the class.

The researcher is fully aware of numerous difficulties that may be encountered during the observations:

(a) Teachers may refuse to accept an observer in the classroom (especially if the observer is regarded as an expert).

(b) Teachers may prepare a special "show" which the observer must be prepared to detect.

(c) A large number of observations may not be carried out in all classes, therefore, drawing conclusions will be difficult.

(d) The schedule does not show occurrences in between coded instances which are not coded (but may still be taken into account).

(e) If other observers are chosen, the researcher must give precise instructions so that all observations record the same behavioural patterns and cover the same sample.

Table 7 charts the overall plan for collecting data.

Table 7: Information collection - overall plan

Data Collection Procedure	1. Rationale and nature of INSET	2. Expecta-tions	3. Response to teachers' needs	4. Implementa-tion in the field	5. Nature of school-based INSET	6. School benefit	7. Differences in diverse teaching methods	8. Differences in changes over the past 5 years	9. Changes in the Groups' work	10. Reasons for the changes
1. Participants completed brief questionnaires at end of course		X	X							
2. Questionnaire to Group A		X	X	X		X	X	X	X	X
3. Questionnaire to Group B						X	X	X	X	X
4. Interview with sample of participants		X	X	X		X	X	X	X	X
5. Interview with head teachers			X	X	X	X	X	X	X	X
6. Interview with school inspectors			X	X	X	X	X	X	X	X
7. Observations in classrooms of a sample from Group A				X			X			
8. Observations in classrooms of a sample from Group B				X			X			
9. Analysis of course programme	X									

7.4 DATA PROCESSING

The research methods chosen are primarily qualitative and will therefore require qualitative methods of analysis. Quantitative data collected from the questionnaires, the interviews and the observations will be processed with the aid of descriptive statistics, since the sample is relatively small and the research is a qualitative case study. The data will be processed in a descriptive and informative mode (Connely and Clandinin, 1984), whereby records of field inspections and interviews with teachers, head teachers and school inspectors

will initially be broken down into subject modules. The aim is to seek factors that are meaningful, important, interesting and repetitious in the data collected. These factors will then formulate the categories for analysis. Categories will be chosen with reference to the research questions. When categories are constituted from the data themselves, the first stage will involve an investigation into repetition and regularity, comparison and contradiction, resulting in a designation which emphasises their substance (Guba, 1978; Patton, 1980).

The categories and variables will be defined by the theoretical framework. Their aim is to demonstrate important directions and relations in the case studied and to equate them with existing theories.

7.4.1 The Questionnaires

A coding frame has been formulated (see Appendix 2).

Stage 1 will summarise the results by counting the number of responses to each question according to the code.

Stage 2 will outline the range of different answers. Since each question is represented by a number, an average can be calculated as follows: the most popular answer (mode), the middle value (median or mean).

Stage 3 will compare answers from the two groups of teachers (A, B). The comparison should provide insight into the difference between the groups with respect to:

- Teaching methods used
- Frequency of using a particular method
- The way teachers feel when implementing a particular method

Stage 4 will summarise the above.

7.4.2 The Observations

An observation sheet has been designed (see Appendix 4) which will incorporate two forms of analysis:

(a) Regarding the observation itself: which sub-factors were used in each factor (for example, in the organization factor, was the class organised as an audience facing the teacher, or were pupils divided into groups?)

The analysis will also include compatibility of the various required factors (for example, a class was organised into groups but the teacher lectured next to the blackboard, evidencing non-compatibility).

(b) Comparison of observation sheets collected from the different classes: an analysis will be carried out with respect to frequency of sub-factors present (for example, prevailing seating arrangement, learning task, etc.).

An analysis will also be carried out of the (average) compatibility level of the various factors during the lessons observed.

7.4.3 The Interview and the Open Questions in the Questionnaire

Techniques of content analysis will be required for both the interview and the questionnaire. The interview will first be tape-recorded and then documented. The units of analysis will be syntactical, i.e. the sentence. Syntactical units are more natural than physical units since they utilise distinction made by the source (Holsti, 1969; Krippendorff, 1980). Words are the smallest and safest recording unit of written documents as far as reliability is concerned. But since the Hebrew word may have a double (or multiple)

meaning, understanding is clarified within the context of the sentence. The sentence will therefore be the segment in the categories.

The hypotheses regarding implementation of INSET material are divided into a number of relevant areas that will serve as categories. By recording the relative frequency of sentences referring to each of the categories, the researcher aims at revealing their importance to both teachers and head teachers, assuming that the recurrence of a certain variable in different connections and relating to different questions shows the weight that the variable carries with the interviewee.

The categories are described below:

a. The Teacher

1. **TFE** - Sentences refer to the Teacher Formative Experience (age, seniority, ethnic origin, place of residence).

2. **TTE** - Sentences refer to the Teacher Training Experience (initial training institution, academic degree, various INSET courses taken over the years).

3. **TC** - Sentences refer to the Teacher's Characteristics (teaching skills, motivation, personality).

4. **TB** - Sentences refer to the Teacher's Benefits.

b. The Pupil

1. **P** - Sentences refer to Pupils (age, social background, abilities, knowledge).

2. **C** - Sentences refer to the Class as a whole.

c. The Head Teacher

1. **HB** - Sentences refer to belief, opinion, thought

2. **HS** - Sentences refer to the management style

.

d. The School

1. **SD** - Sentences refer to the School Data (type, size, population).

2. **SN** - Sentences refer to the School Nature (atmosphere, norms, management style, etc.).

e. The Surroundings

1. **IS** - Sentences refer to the Immediate Surroundings (the community within which the school operates).

2. **WS** - Sentences refer to the Wider Surroundings (the Israeli educational system).

f. The INSET Course

1. **PC** - Sentences refer to the time Prior to the Course.

2. **DC** - Sentences refer to the time During the Course.

3. **AC** - Sentences refer to the time After the Course.

Following is an analysis example of an open question taken from the Pilot Questionnaire (see analysis of pilot questionnaires):

Question no. 28: *If you were asked to persuade teachers to take part in INSET courses, what reasons would you give?*

Sentences	_Category_
1. How important it is for the teacher's in improving knowledge, class atmosphere.	TB, C
2. Freedom.	TC
3. Getting away from the daily hum-drum.	TC
4. Student and trainee.	TTE
5. S/he is central and not on the fringes, if s/he wishes.	TC
6. S/he will get dividends.	TB
7. Improve his/her salary.	TB
8. Better social standing.	IS
9. People would see him/her as open, wanting to learn the new.	IS, TC
10. So at the end it will profit the children.	P

Note: The example chosen at random is probably of an Arab teacher whose mother tongue is not Hebrew (the questionnaire is anonymous, but the written style and the fact that he/she teaches Arabic at an elementary level shows that he/she works in an Arab school. Israeli schools do not teach Arabic at elementary levels). This is meaningful because the sentences are grammatically wrong and the words between full stops are sometimes two sentences. As a result, sentences 1 and 9 both fall into two categories. In fact, both sentences combine two sentences, where each falls into a different category.

There are 12 sentences answer in the example above which include:

Five sentences referring to TC.

Two sentences referring to TB.

Two sentences referring to IS.

One sentence referring to TTE.

One sentence referring to C.

One sentence referring to P.

(In actual fact, the answer only has 10 sentences, where two out of the ten combine two sentences each).

Eight sentences refer to the Teacher, two to Pupils, and two to the Surroundings.

One can therefore deduct that this teacher considers first and foremost, the benefits of INSET to be for him/herself. The benefits to pupils and the way in which the immediate surroundings perceive the teacher are only secondary.

This is of course only an example. Should the pattern repeat itself in other questionnaires, there will be room for the question - what should planners of INSET courses learn from it? On the one hand, their aim is to attract teachers to courses and to fulfill their requirements, while on the other hand, their initial intention is to emphasise the centrality of the pupil. The course's original objective was to train teachers and equip them with the appropriate tools to meet the unique requirements of their pupils.

7.5 PROBLEM OF TRANSLATION

The research instruments described above underwent a detailed process of trans. Initially, the important points and main questions which were to be asked in the interviews and the questionnaires were discussed as well as the focal points for classroom observations. These ideas were drafted in English in order to serve as a basis for discussion with the thesis supervisor.

In the next stage, the questionnaire and interview questions were then drafted in Hebrew. Since the research population is a Hebrew-speaking one, there was a need to approach the individuals in a language that was most familiar to them and likewise have them answer in this language.

The observations in the classroom were drafted in Hebrew so that if the need arose for additional observers (to be determined by the researcher) the observation sheet would be readily available.

The final draft of the research instruments was translated again into English for the benefit of the supervisor and other readers since the thesis will be submitted in Britain.

The researcher used professional translators whose mother tongue was English and who spoke fluent Hebrew so as to produce the most compatible versions.

It is also important to note that translation is not only the correct use of vocabulary. Language is culture-dependent and cannot be translated without taking into account cultural ties. This was particularly evident during analysis of the interviews and questionnaires (especially the open questions in the questionnaires). The participants responded in Hebrew and their answers were analysed by Israelis, but the conclusion and some representative examples were translated into English.

A similarity may be seen between comparative education in general, and the problems outlined in particular. On the one hand, pragmatic and systematic use is made of comparative education in order to compare different educational systems. The pragmatic comparison provides the researcher with a diversity of alternative solutions that are tried under similar circumstances, and often even encourages finding additional imaginative solutions. It enhances an inner search into the goings on within the researcher's home (Epstein, 1990; Leigle, 1990, Robinsohn, 1992).

The systematic perspective in comparative education relates to the attempt to identify hidden forces behind system-building in education, to explain common traits and differences in the interaction between culture and education, to use foreign systems as an "experiment in nature" for testing theoretical assumptions, and to formulate some general principles underlying all variation (Leigle, 1990).

The significance of this in our research is that it is possible to describe the reality being investigated within a specific culture (in this case, Israeli) in terms taken from another culture (British). Here, however, no comparison was made

between educational systems but rather one educational system was presented to readers who are part of another educational system. The comparison is made during the actual reading.

In order to strengthen this claim, it may be said that the widely-accepted opinion today that the world has become a global village through developed communications (at least in Western world countries) and there are no significant differences on subjects related to educational systems.

On the other hand, claims have been made that the entire educational system is anchored in the cultural concept in which it functions. The phenomenon researched will not be well understood if factors behind the scenes that design the unique characteristics of each nation are not be taken into account (Epstein, 1990; Leigle, 1990).

In this research, a case study taken from the Israeli reality will be investigated and it appears that it will be impossible to ignore its unique characteristics. Different factors which have shaped (and continue to shape) this reality include history, geography, society, economics, religion and politics. All affect the structure and character of the education system and it may be assumed that some will be expressed in the responses of the teachers being researched.

For example, when an Arab school principal uses the term "Arab sector," the concept is in itself unique to the Israeli system (see Introduction). If the term is used repeatedly, it will be impossible to ignore during analysis and impossible to ignore the feeling of deprivation of this sector. However, this may be understood only through extensive familiarity with the unique background and reality.

Another example from a different perspective of the translation problem may be described. When a school principal tells the interviewer in Hebrew: "Do me a favor, let's talk after the training courses are finished and see what the other teachers have to say," this implies that the principal is very interested

in meeting again to discuss the subject. However, in the British culture, this is interpreted to be the ultimate insult to the interviewer.

The reader is faced with a dual task - to read the research both as a positivist and a relativist. He must refer to the studied phenomenon as universal, and together with this, not ignore the unique elements.

In order to overcome the problems described above as best as possible, several steps must be taken:

a) Background of the Israeli reality, in general, and the educational system, in particular, must be described for the sake of the reader who is unfamiliar with these details.

b) An attempt was made to avoid making judgmental decisions in formulating the analytical categories. These categories are theoretical-objective and include: activity within the classroom in theoretical and not judgmental terms (what the teacher is doing and not whether it is good or bad); categories for analysing the interviews (sentences related to the pupil, sentences related to the principal's opinions and feelings, etc.) The terms are universal and well-known, at least in the Western world. During the analytical stage, a connection will be made between the findings and the background information, should the findings require this.

c) As previously mentioned, final translation of the research instruments into English was carried out by experts who were very familiar with both languages and cultures.

7.6   CONCLUSIONS

In this chapter, the research instruments that had been used and the way they had been formulated were discussed. In addition, the relationship between the research instruments and the research questions was reviewed. The researcher expected to obtain responses to these questions using the instruments

described. A description of the data collection method and an example of the use of the content analysis technique to analyse the open questions in the questionnaire and the interviews were presented.

This chapter also described in detail the problems involved in translating from Hebrew to English and vice versa, a critical problem in this research. The next chapter will describe the data collected using these research instruments.

CHAPTER EIGHT: FINDINGS (First Research Question)

In this chapter, the findings of the first research question collected using the different research instruments will be presented. The findings will be organised according to the research questions, therefore, a short overview of the problem and the research questions will first be given in the form of an introduction. The findings regarding each research question will be described in detail later.

In many qualitative research studies, a dynamic process of thesis forming occurs with an accumulation of data. From evidence and pieces of information collected during this dynamic process, the grounded theory is established, and in order to formulate it, the research tools and research questions must be perfected (Spradley, 1980). At times during this research study, there was also a need to improve the research tools, to formulate the questions more clearly, to add questions, and to relate to the margin notes (notes by the interviewees, the observer, or the interviewer). These additions and descriptions will be detailed later.

8.1 OVERVIEW OF THE PROBLEM AND THE RESEARCH QUESTIONS

The nature of heterogeneous classes in Israel (containing 30-40 pupils) were described in Chapter 5. The pupils have varying academic achievement levels, different inclinations, attributes and learning styles, and come from different socio-economic backgrounds. Despite the fact that they represent one nation, they portray different cultural groups (from both Jewish and Arab sectors). The Israeli Ministry of Education and Culture is well aware of the problems arising from this situation, and supports (at least some position holders in the Ministry, and as yet, unofficially) various projects involving the introduction of changes into the school system.

In parallel, an extensive teacher training programme is in operation in Israel, both within the schools and outside the formal school framework.

Despite the situation in the classes and attempts to introduce changes into the school system, great inflexibility on the part of the majority of schools is still evidenced. Most schools still base their teaching on the teacher-centred method for a 45-minute lesson duration, whereby predetermined subjects are taught only within the classroom. The system does not accommodate differences among the pupils, the subject content, the methods, the study rate, nor the exploitation of other facilities within the classroom and the school. These are just a few examples.

This research focuses on one element of this painful problem.

The Oranim School of Education, serving as the teacher training centre for northern Israel, offers different types of courses to teachers on new teaching methods and ways to effectively meet the needs of heterogeneous classes. These courses have proven to be successful (their success determined by the satisfaction expressed by the participating teachers and by the great demand for these courses each year).

Despite this success, no meaningful change was noticed "in the field." The teachers returned to their schools and, in many cases, also to the traditional teaching methods they used prior to attending the courses.

This research attempts to study the explanations for this provided by the teachers and the principals.

The research questions arising from the problem are described below:

Principal research question A: To what extent is the college course material perceived to be implemented?

Secondary questions:

1. What is the rationale and nature of INSET courses at Oranim?
   (checked using course curriculum analysis and interviews)

2. What were the expectations of teachers in choosing the course?
   (checked using questionnaires and interviews)

3. To what extent did the courses respond to the teachers' needs and expectations?
   (checked using questionnaires and interviews)

4. To what extent was the course material implemented in the field?
   (based on personal reports of teachers, viewpoints of head teachers and school inspectors, and classroom inspections of - detailed in the section on "Research tools").

(checked using observations in classrooms, questionnaires and interviews)

Recommendation: see also Table 7, p. 129, for the information collection - overall plan.

Principal research question B: *Could one detect meaningful differences between the group of teachers who participated in the course and the group of teachers who did not participate?*

Secondary questions:

1. What are the differences in using diverse teaching methods?

2. What are the changes in working methods over the past five years?

3. What are the changes in working methods in the two groups?

4. What are the reasons for the changes?

8.2 PRINCIPAL QUESTION A: EXTENT OF IMPLEMENTATION OF THE COURSE MATERIAL

The hypotheses of principal research question no. 1, detailed in Chapter 5, are briefly outlined below:

1. The extent of implementation is related to the teacher's personality.

2. The extent of implementation is related to the system in which the teacher works.

3. The extent of implementation is related to the course in which the teacher participated.

In investigating this question, there was a need to relate to several different components (expressed in the sub-questions):

a) The course curriculum.

b) How the teachers related to the course.

c) The extent of implementation of the course material.

The different components of the question required use of various research tools: the course curriculum itself required use of curriculum analysis tools; how the teachers related to the courses was examined using questionnaires and interviews; and the extent of implementation was measured by using questionnaires, interviews and observations.

The findings described below are organised as responses to the sub-questions.

8.2.1 Analysis of the Course Curriculum

The course curriculum and its main components were described in Appendix 1. The course components include:

a. Workshops on teaching methods.

b. Assessment and appraisal in education.

c. Theoretical basis in curriculum planning.

d. Practice in communication techniques.

The course curriculum was examined using two tools - descriptive and judgmental. In addition, relevant portions of interviews with the head-teachers and teachers were used.

A. The descriptive tool reviewed the subjects, the content, the main concepts and ideas included in the curriculum, and the prior knowledge required by the participants. Table 8 presents the first component of the curriculum - workshops on teaching methods - which is particularly relevant to the research problem.

Table 8: Description of the course curriculum dealing with the different teaching methods

CONTENT	IDEAS	CONCEPTS		PRIOR KNOWLEDGE
		Professional	**General**	
1. Teacher-centred: Pros and cons; when and where to use this method.	Every teaching method is legitimate but must be applied at the right time and in the right measure.	Entire class. Group work. Diversity. Teaching style.		Conclusions based on personal experience
2. Group learning: Characteristics of a group task; cooperation levels; skills required for work in groups; teacher's role in group learning; structured examples of group learning; designing and analysing a group task.	Clarification of the term "different cooperation levels"; cooperation impossible without acquiring the required skills; teacher's role changes according to strategies used; principles not internalised unless implemented.	Group input. Uniqueness. Skills.	Levels. Intervention process.	Conclusions based on personal experience.
3. Individual study: What is involved in the transition to individual study; skills of the independent pupil; individual project; grading (re. Difficulty) and diversity of tasks; examination and evaluation methods.	Pupils differ - their diversity is expressed in various ways involving changes in dimensions, such as teachers' role, time, place, teaching methods, etc.; skills for individual study are acquired in stages.	Individual study. Diversity. Skills. Individual project. Control.	Diversity. Self-realisation. Choice. Gradation. Examination.	Conclusions based on personal experience.

Source: Syllabus presented to Oranim administration in May, 1989. The curriculum was devised by a group of Oranim teachers and the researcher.

The curriculum described here deals with three main strategies: teacher-centred; group learning at different cooperation levels; and individual study. For each strategy, different methods are learned, the teacher's role is examined as well as the skills required of the pupils enabling them to use each method. In addition, the pros and cons of each strategy and the right opportunity to apply it are measured.

Each strategy was taught using methods and tools characterising it, i.e. the first strategy was learned primarily through lectures and conversation, the second mainly using different group models, and the third involving individual research, among other things.

From this description, it may be seen that great emphasis is placed on the methods to be used in the class. Despite this, the component dealing with the development of attitudes and opinions believing in certain educational aspects had a lesser impact. The curriculum does not enable much reflective thinking on the part of the teacher, nor the teacher's development as a conscientious professional on a perpetual search for methods of improvement.

There may be a relationship between these facts and the extent of the teacher's ability to implement the material learned in the course. Riki, has been head-teacher of a Jewish development town primary school since the school's establishment over five years ago. This is her first managerial position and prior to this, she taught general subjects in a primary school, specialising in Nature. She participated in a course similar to that described in this research study. Riki described this relationship metaphorically:

"... your course [Oranim's] is like a supermarket. The teacher walks in, looks at the shelves full of beautiful packages, sometimes even reads [the labels] carefully and learns what is written on them, and puts everything he wants into his shopping cart, but he doesn't even know what meal he is planning to make nor does he take into account the people who will participate... Perhaps the goods are not suitable for the diners? And perhaps at home he doesn't even know

what to do with some of the goods he bought? And maybe he doesn't have the proper cooking utensils for these goods?... You didn't spend enough time preparing the "menus," for example..."

B. <u>The judgmental tool.</u> An analysis diagram in Appendix 5 shows the different analysis criteria that are divided into four main fields: goals, subject matter, teaching-learning process, and contact with participants before and after the course. The analysis is judgmental since a particular scale of values is designated for each criterion (Gibboney, 1980).

Table 9 shows the curriculum analysis results relating to the four course components. Each component received a grade for every one of the 15 criterion categories appearing in the analysis. A profile was drawn for each component based on the grades received.

Table 9: Curriculum analysis results: the categories and grades of course components for each category are presented (described in full in Appendix 5). The grade appears numerically (5 is the most positive figure) as well as graphically.

CATEGORIES	COURSE COMPONENTS				GRAPHICAL REPRESENTATION OF GRADES				
	a	b	c	d	1	2	3	4	5
1. Result and process	5	2	2	5					
2. Flexibility	3	1	1	5					
3. Consistency of the goals	5	5	5	5					
4. Relevancy of the goals	4	4	3	4					
5. Immediate value of the goals	5	4	2	4					
6. Content conforms to the goals	5	4	4	5					
7. Meaningful content organisation	4	3	3	5					
8. Up-to-date content	5	5	5	5					
9. Legitimising points of view	4	2	2	5					
10. Relating to student community	3	3	3	3					
11. Teaching methods suited to goals	5	2	2	5					
12. Teaching methods relevant to the pupil	5	3	3	5					
13. Encouraging experimentation	5	4	3	5					
14. Preparation prior to the course	1	1	1	1					
15. Follow-up and support	1	1	1	1					

Legend:
a   Workshops in alternative teaching/learning methods
b   Assessment and appraisal in education
c   Theoretical basis in curriculum planning
d   Practice in communication techniques

In observing the profile of each course component, several interesting findings may be noted which may provide answers, in whole or in part, to the research problem.

a) The components 'workshops on teaching methods' and 'practice in communication techniques' received the highest grades for most of the criteria, while the other components received lower grades. The significance of this is that the workshops appeared to be better suited to the unique needs of the participants, whereby the instructors exhibited flexibility and paid close attention to the needs of the teachers. In addition, there were greater opportunities for practice and more encouragement to experiment and personally examine the models studied in the workshops.

b) Low grades were received for two categories - preparation prior to the course and follow-up after the course. These categories could influence the extent of implementation of the material studied in the course.

Preparation prior to the course - participants were not required to prepare for the course, including reading of relevant literature, carrying out field research in their respective schools, and analysing their expectations of the course.

Follow-up after the course - at the end of the academic year, the participants left their instructors and colleagues and returned to their individual schools and classes. No further meetings were arranged, no follow-up in the schools was planned, and no support whatsoever was provided during the stage in which the teachers were supposed to implement the material studied. In interviews with the teachers, this point was brought up in two contexts. Firstly, teachers stated that they felt the need for immediate feedback regarding practice in the class and encouragement. Haya, a Jewish rural school teacher, has 15 years of teaching experience, all in the same school. She teaches all subjects. Haya expressed the following:

"... I felt that I did not properly construct the tasks and I had no one with whom to consult. After two unsuccessful attempts, I found myself returning rather quickly to familiar and sure methods. I also had no one with whom to consult in this respect, but for these [methods], advice and encouragement were required less..."

Secondly, the need for follow-up and support involved resistance by the educational system. Most of the participating teachers were the sole representatives of their respective schools. In implementing new methods and ideas in their classes, many were faced with a lack of understanding and cooperation on the part of the school management and their colleagues. Gila, a Jewish rural school teacher, taught Vocational Workshop for 10 years, then after the course, started to teach all subjects. She described this situation metaphorically:

"... I felt as though I was facing a wall and you [the course instructor] were not there to help me break it down..."

c) All of the course components received a grade of 3 for the criterion 'relating to student community', meaning that the particular needs of the entire community were only partially met. This fact brings up the question that since in Israel there is a considerable difference in schools which are located in different communities (Jewish/Arab, religious/secular, high/low socio-economic levels, urban/rural, etc.), should a communal course for teachers from different schools be provided? Perhaps it would be better to offer courses of this type to groups of teachers having similar backgrounds. During the course, the participants were requested to discuss examples from their classes and schools. At the end of the course, a final project on implementation of the material studied was required, involving the unique situation of each teacher. In addition, it is impossible to ignore the fact that

these were only responses to the same uniform curriculum presented to all of the participants.

d) High grades were received for all of the course components in two categories - 'consistency of the goals, and 'up-to-date content'. This fact may be attributed to the skills and experience of the course planners in planning the studies, in general, and the teacher's course, in particular.

The course curriculum has now been described and those components that could shed a little light on the reasons for difficulties in implementing the material studied have been emphasised based on this curriculum.

8.2.2 Course Expectations and their Realisation

The teachers related to their expectations of the course through questionnaires and interviews. The questionnaires were sent to 90 INSET teachers (Group A) and 90 teachers who did not participate in INSET courses (Group B - matched samples). The Group A teachers were located through the list of participants on the College's computer. Two versions of the questionnaire, a letter of explanation, and a return envelope were sent to these teachers. In the letter of explanation, the research objective was generally defined as examining teaching methods and opinions of teachers who participated in various types of INSET in order to investigate their effectiveness. The focus on the level of effectiveness of the specific INSET was intentionally not mentioned in order to avoid receiving oppressive responses which tried to please the researcher, or alternatively, to criticise in an inappropriate fashion.

The Group A teachers were requested to give the second version of the questionnaire to teachers working with them having the same years of experience in the same school in parallel classes (more or less). The teachers from the treatment group (Group A) actually had a corresponding control

group teacher. The technique used to sample the control group was the matched sample method. This method was used to ensure that the two groups are as comparable as possible. The Group A teachers were asked to make every effort to match pairs which are identical with respect to most of the relevant attributes except for the unmatched element - participation/non-participation in the course at Oranim. Table 10 shows teachers from the treatment group according to the year of the INSET and settlement type (as previously mentioned, in Israel the settlement type determines the nature of the school to a great extent). In the questionnaires, the research subjects were asked directly or indirectly about their expectations and the extent of their realisation. Only 60 questionnaires were returned (30 respondents from each group).

Table 10: Profile of teachers in the treatment group (Group A) according to year of INSET and settlement type

Year	Kibbutz	Moshav	Jewish City	Cooperative Settlement	Arab City	Arab Village	Total
'91-'92	9	3	7	5	1	5	30
'92-'93	12	7	11	-	-	-	30
'93-'94	4	5	11	-	4	6	30
Total	25	15	29	5	5	11	30

For the direct question (no. 7 in the questionnaire), all the respondents (n=30) answered that they expected to learn new teaching methods. Twelve teachers also included the expectation of updating and refreshing overall teaching methods. In question no. 8, the research subjects were asked about the level of realisation of the expectations. All of the teachers who answered the questionnaire (only 30 from Group A responded) claimed that their expectations regarding teaching methods had been fulfilled. Regarding content, 28 teachers felt that their expectations had been fulfilled; regarding time

utilisation, only 21 responded positively (nine respondents claimed that the time could have been used more effectively).

For question no. 9, "What content did you expect to receive and did not?", only ten teachers responded. It was impossible to determine why the others did not respond and if this may be interpreted as satisfaction from the content that had been provided. However, it must be pointed out that none of the ten respondents indicated other issues, only their desire for additional methods and visits to schools where changes were made.

The teachers were asked indirectly about the courses in which they participated, which courses contributed the most, and which courses made any type of contribution (questions no. 4 and 5). Only 23 of the 30 teachers responding to question no. 4 mentioned that they had participated in the course on alternative teaching methods (even though actually they had all participated). Those teachers who did not mention this course possibly assumed that it was obvious they had participated. Twenty respondents stated that the course contributed the most. As described in question no. 6, the contribution was towards learning about techniques and methods for diversifying teaching methods.

An identical picture was received from the interviews. Eighteen teachers were sampled from the list of INSET participants, based on type of settlement in which they were teaching (an explanation as to the sampling method and its justification will be described in detail in the section on observations). The interviewed teachers are not the same teachers in whose classes the observations were made.

All of the 18 interviewees stated that the courses were effective and helped them as teachers. Zahava, a Jewish urban school teacher with over 20 years of teaching experience, teaches all subjects in the younger primary school grades. She described the course as follows:

"... Finally, one course that didn't' talk 'about' rather taught 'how.'"

These findings show concrete expectations and focus heavily on methods and ways, not on theory or educational outlooks. These concrete expectations were fulfilled.

The teachers were interviewed using the questions described in Appendix 3. The structured interview, which was planned in advance, represented only a basis for conversation. During the course of the interview, the need arose for many additional questions and a more open approach. Haya, a Jewish rural school teacher with 15 years of teaching experience, frequently used the following metaphor:

"...I feel that I am trudging all the time in the same swamp, and I need someone to pull me out and pour refreshing water over me..."

The researcher of this study used this expression in successive interviews. It appears that this important technique of using metaphors, which transforms consequences, enables a deeper understanding and a greater insight both on the part of the interviewee and the interviewer.

As previously mentioned, the researcher, as for the case of qualitative research, was required to refer to the professional literature in order to learn how to effectively use metaphoric tools. There are different types of metaphors, all of which may be used in interviews: concrete metaphors (objects are used to express a certain meaning); kinesthetic metaphors involving touch, body posture and movement; visual metaphors involving painting, sculpture, image and fantasy; as well as verbal metaphors involving acting, drama, stories and fairy tales (Elizur, 1986, in Hebrew). The interviewees drew on images from many diverse fields, and from this it was possible to point to similar directions.

Following are several comments by interviewees regarding their expectations of the course and the level of their realisation.

Amal, an Arab city primary school teacher with 10 years of teaching experience, teaches Arabic as a second language to Arab children:

"I felt like a small child who knows where to go but seeks the shortest and most interesting way to get there. The course showed me some of these ways."

Mahmud, an Arab village primary school teacher with over 20 years of teaching experience, teaches various subjects:

"I felt like a diver diving over and over again, and every time drawing different things out of the water."

Mina, a Kibbutz primary school teacher, immigrated 10 years ago from the former Soviet Union. Owing to language difficulties, she specialises in teaching math:

"I possessed the awareness but needed something else, just like the girl who is accepted in terms of her character but requires cosmetics..."

Hanni, a Jewish rural primary school teacher with over 10 years of teaching experience, teaches all subj. She taught for five years on a Kibbutz and then started teaching in the Kibbutz school:

"I felt that I had bought a present for my pupils. The present was 'change'."

Iris, a Kibbutz primary school teacher with over 15 years of teaching experience, teaches all subjects:

"In the beginning, I felt like a turtle crawling into his shell so that no one would be able to change me; afterwards, like a cat with claws; and finally, like a carefree bird."

Rachel M., a Jewish rural primary school teacher with six years of teaching experience, teaches Nature and Computers:

"I feel as if I received a covering, cosmetics..."

Rachel H., a Jewish urban primary school teacher with over 30 years of teaching experience, teaches all subjects:

"I feel like a tall cypress tree which started to dry out, ate itself from the inside, and has now started to grow again."

These metaphors also illustrate the teachers' feelings that the course taught them new teaching methods and was refreshing and diversified. The interviewed teachers did not relate to a change in their thinking, the education system, or their jobs.

Both the questionnaires and the interviews illustrate the teachers' concrete expectations - to acquire "tools," i.e. to learn new teaching methods and to diversify their existing methods. These expectations were fully realised.

Most of the teachers did not specify problems which disturbed them and for which they expected to learn solutions in the course, except for the need to refresh and diversify their teaching methods.

The teachers did not even perceive themselves as school emissaries. They came to enrich their knowledge and not to fulfill the role of "agents of change" in the school. Despite the fact that none of the interviewed teachers remarked on additional expectations from the course, the interviewer chose to ask them if

they felt the course dealt with "recipes" but not founding an educational outlook.

With the exception of two teachers, all of the interviewees said that even though there was truth to this claim, they had clear outlooks of their own and chose material from the course which was suitable for their outlooks. Zahava, a Jewish urban primary school teacher with over 20 years of teaching experience, teaches all subjects in the younger grades:

"... A teacher must acquire as many tools and methods as possible and implement what he sees fit in his class...."

Five teachers even added that the course "opened their eyes" to help them understand that it is not only possible and they must work differently, and it encouraged them to find solutions.

Only two teachers responded that a course of this nature should be developed based on personal research to be carried out by each participant in order to clarify the classroom situation, the attitudes and the opinions that they had upon starting the course. Only afterwards could methods be presented which would recommend solutions to problems encountered by the teacher in his research. Research of this type would legitimise the marked difference between teachers and schools in which they teach.

Iris, a Kibbutz primary school teacher with 15 years of teaching experience, teaches all subjects in Grades 4-6:

"...We learned a great deal from the course, but in the form of patchwork. We were unable to form an outlook which would accompany us over time, rather, we dealt with finding solutions from one day to the next..."

It is important to note that these two teachers related to the topic only after the interviewer brought up the question. They initially only mentioned the need to diversify and refresh their teaching methods.

The idea that the participating teachers might become "agents of change" may have been introduced by the course initiators (supervisors and administrators from Oranim's teacher training department) and by the course planners, but these expectations were not clearly formulated or elucidated to the participants. It may be assumed that had they been clearly formulated, the course programme would have been modified and other topics dealing with training teachers to become "agents of change" would have been added.

In a previous section (8.2.1), emphasis was placed on the disadvantages of the workplace in the development of a reflective teacher and on formulating a clear educational outlook. It appears here that the teachers did not expect to deal with the subject, just the opposite, they welcomed the fact that the course dealt with the technique and not the philosophy from which it evolved.

This conflict brings up the questions as to what extent the curriculum must be structured according to the expectations of the participants, and what is the correct dose of theory and practice. Moreover, the conflict brings up the question as to what dose will, on the one hand, maintain satisfaction and relevancy and, on the other hand, work on the essential change in concepts and outlooks through thinking.

8.2.3 Extent of Implementation

This is, of course, the central question dealt with in the research and is investigated through the use of observations, questionnaires, and interviews.

The question was investigated from two aspects using the following research tools:

a   Extent of implementation as observed in the field.

b. Explanations by the teachers, principals and supervisors regarding this implementation.

The extent of implementation was investigated directly in the field through observations, and indirectly through questions asked of the research subjects both verbally and in writing.

The answers from the research subjects are, of course, closely related to the image chosen by the teacher appearing before the interviewer: the teacher fighting for what he believes in; a "know-it-all" teacher who has seen and heard everything and "knows" that in the end, the teacher will always return to the old familiar ways; the teacher who adapts himself to the environment or tends to attribute the reasons for his working methods to the environment; etc.

For balance, use was also made of observations. However, this use was limited due to the extensive amount of time required, the great distances between the different schools, and primarily, the fact that is was impossible to observe every treatment group for an extended period of time. Only sample observations in one class for each teacher were made.

In the first stage, the findings regarding the extent of implementation according to the research tools through which they were collected will be described. In the second stage, a synthesis will be made between the findings so that it will be possible to draw conclusions.

A. Extent of Implementation as Observed in the Field

A.1 Observation Findings

The schools in which the observations were made were sampled according to the list of teachers in the treatment group. Since in Israel, the type of settlement where the school is located (e.g. city, village, Kibbutz, Arab village) influences its character to a certain extent, the schools that the INSET teachers attended were sorted according to settlement type.

Several schools were chosen randomly from each settlement type, in proportion to the number of teachers in the treatment group from the same settlement type. The sampling was carried out by lottery: lists of INSET teachers during the three-year research period were extrapolated from the College's computer and sorted according to settlement type. Every settlement included in the list was written on a piece of paper that was chosen randomly from each group in proportion to the number of teachers from the same settlement type.

Table 11 describes the number of schools from each settlement in proportion to the number of teachers in the treatment group from each settlement type.

Table 11: Number of teachers and schools from the treatment group according to each settlement type

	Kibbutz	Moshav	Jewish City	Cooperative Settlement	Arab City	Arab Village	Total
Teachers	25	15	29	5	5	11	90
Schools	5	3	6	1	1	2	18

The researcher explained the research objective to the head-teachers and requested their permission to visit the schools and observe the lessons. These head-teachers were also interviewed.

All of the 18 head-teachers agreed to be interviewed and approved visits to the schools by the researcher. They even agreed to notify the teachers as to observations of their classes. They were requested to explain to the teachers that the class observation was not to be carried out in a supervisory fashion (i.e., neither in a judgmental manner nor in the capacity of supervisor or counselor; only an observer trying to collect data on how the class functions), and that their names, classes and schools would not be publicised with the publication of the research findings. The intent of the class observation was purely "routine," therefore, the teachers were not required to make any special preparations.

All of the teachers from the treatment group (Group A) agreed to have the researcher visit their classes to observe the lessons, and even look through their notebooks and worksheets and discuss them with the pupils. Four teachers from the control group (Group B) refused, and the head-teachers requested permission from other teachers who also taught similar age groups (one grade higher or lower) to those of the research subjects, but not in parallel classes. The teachers who refused to let the observer into the classes were all of Jewish origin. The reasons for this varied: the teachers' personality traits (i.e., lack of self-confidence); special problems of the classes, etc. This question may be partially clarified through negation - Why did the Arab teachers have no opposition? Typical of minority class Arab teachers' behavior is the need to please (to be accepted by) the establishment, and the researcher was perceived to be part of the establishment. In addition, in Arab society, much more than in Jewish society, the head-teacher is understood to be the final authority. If the head-teacher decides that a visitor will visit the class, then this decision is final.

An observation was made in every class for the duration of one lesson only (45 minutes), but there were lessons that were sometimes longer or shorter in

length. The observation focused on teaching-learning methods implemented in the class during one lesson and on the type of activity that took place during the observation.

In order to carry out the observation, the researcher used an observation sheet specifically designed for this purpose (detailed in Chapter 7, Section 7.2.3, Table 6).

A summary of the findings is divided into two main parts:

a. The average time devoted to each teaching-learning method (teacher-centred, individual work, group work, complex).

b. Type of activities occurring during each method.

In order to avoid the use of too many variables, only Hebrew language and literature classes were observed in each sector. These two subjects were chosen since they are taught in a similar fashion in Jewish, Arab and Druze sectors, whereas the other subjects are taught differently (at least in terms of language). In addition, since the researcher is not fluent in Arabic, lessons taught in the researcher's mother tongue, Hebrew, were selected.

Average time devoted to each method

After the lesson, the portion of each method during the lesson was calculated. Since not all of the lessons were of the same duration, the portion of each method in every lesson was calculated by percentage. For example, in a certain class, observation for 18 minutes of the full teacher-centred method, 20 minutes of individual work, and 5 minutes of work in pairs (work in pairs is included in the group learning category), was made for a total of 43 minutes. Hence, the teacher-centred method took up about 42% of the lesson (18:43), individual work about 46% (20:43), and group learning about 12% (5:43).

A total of 36 observations were made (2 x 18). After each observation, a discussion was held with the observed teacher. Table 12 summarises the observation findings in the treatment group. (Note: Only findings in the treatment group, Group A, will be detailed in this chapter. Control group

findings will be detailed in Chapter 9 dealing with the second research question discussing the differences between the two groups.)

Table 12: Observation findings in the treatment group (Group A): percentage of lesson time devoted to each method

Settlement Type	Teacher-centred	Individual Study	Group Learning	Combination Teaching
Jewish city	50.97%	22.69%	26.35%	-
Kibbutz	32.26%	16.18%	22.66%	28.89%
Moshav	55.55%	7.40%	14.80%	22.22%
Community settlement	77.77%	-	-	22.22%
Arab city	55.55%	33.33%	11.11%	-
Arab village	55.55%	16.67%	27.78%	-
Overall average	**54.61%**	**16.04%**	**17.11%**	**12.22%**

Notes:

Individual study refers to work that the pupil does by himself using a work-sheet or guidelines, and if required, information resources. The product requested of the pupil is personal and he alone is responsible for his achievements.

Group learning refers to a study task involving the cooperation of two or more pupils. Different levels of cooperation and types of groups exist, but common to all is the process requiring cooperation and applying interpersonal skills in order to achieve the product.

Combination teaching refers to part of the lesson whereby several teaching methods are used concurrently. Usually, the teacher works with one group, and the other pupils working individually or in groups perform compulsory and elective tasks.

Figure 9 graphically describes the average time devoted to each teaching-learning method.

Figure 9: Average time devoted to each teaching-learning method as a

percentage of lesson time

Average time devoted to each teaching-learning method in one lesson
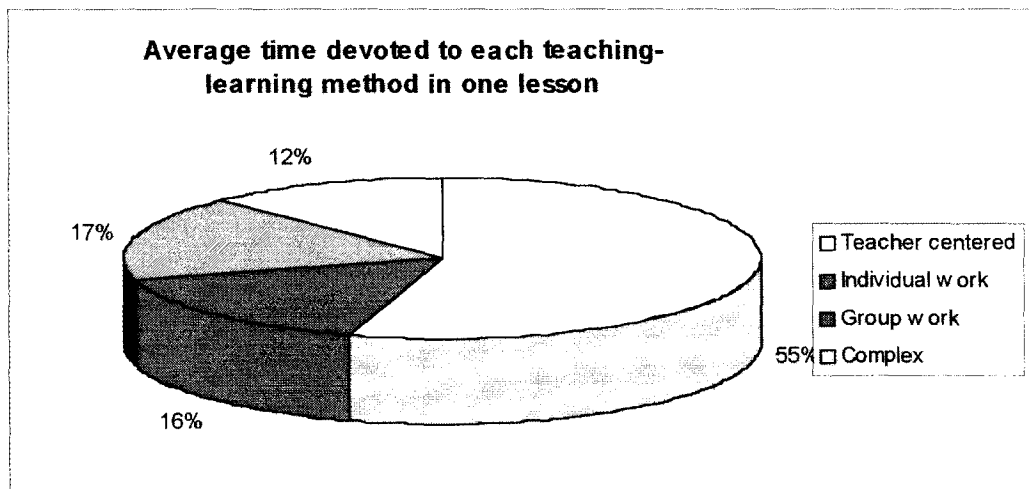
In this figure, the traditional teacher-centred method is the main method used compared to other teaching methods. It is important to note that the figure summarises the findings of 18 observations only. These observations took place in lessons of teachers who were studying and gaining experience in the use of new teaching methods, and they dealt, among other things, with the advantages and disadvantages of the teacher-centred method. During the course, it was emphasised that this teaching method ignores the differences between pupils (in every respect); the teacher treats each pupil in the same way, asks the same type of questions and at the same pace, and expects to get the same answers, more or less. For this reason, and owing to the attentiveness and concentration limitations of young pupils, there was a need during the course for limited "doses" of this teaching method which would be devoted primarily to giving instructions, introducing and summarising activities, giving explanations to individual pupils, etc.

Thus, despite the material studied in the course, the teacher-centred method still proved to be the most popular. The other methods received comparatively similar grades. Combination teaching was observed in only a few schools, but

in these places, it was used in numerous lessons. Therefore, on the average, it received a grade similar to that of individual study and group learning methods. It is important to remember that the course participants studied the principles of this work method and visited several schools in which it was used. Where the combination teaching method was observed, it was used in several classes (or in the entire school), as a result of the process of change which took place in the school, and not necessarily as a result of the courses taken by certain teachers. It could be that the teachers who participated in the course have more confidence, are more open to new ideas, and are more convinced that this is the correct method (details of this are provided in the summary of interviews with teachers).

As previously mentioned, in Israel there are differences between schools in terms of settlement types (even though these differences are gradually becoming less notable). Owing to the differences between schools, there was a need to investigate the possibility of emphasising the differences between settlement types regarding the extent of implementation of the different teaching methods. Figure 10 shows the use of different teaching methods according to settlement type (Group A).

Figure 10: Distribution of use of the different methods according to settlement type (Group A).

Distribution of use of the different methods according to the settlement type (in group A)
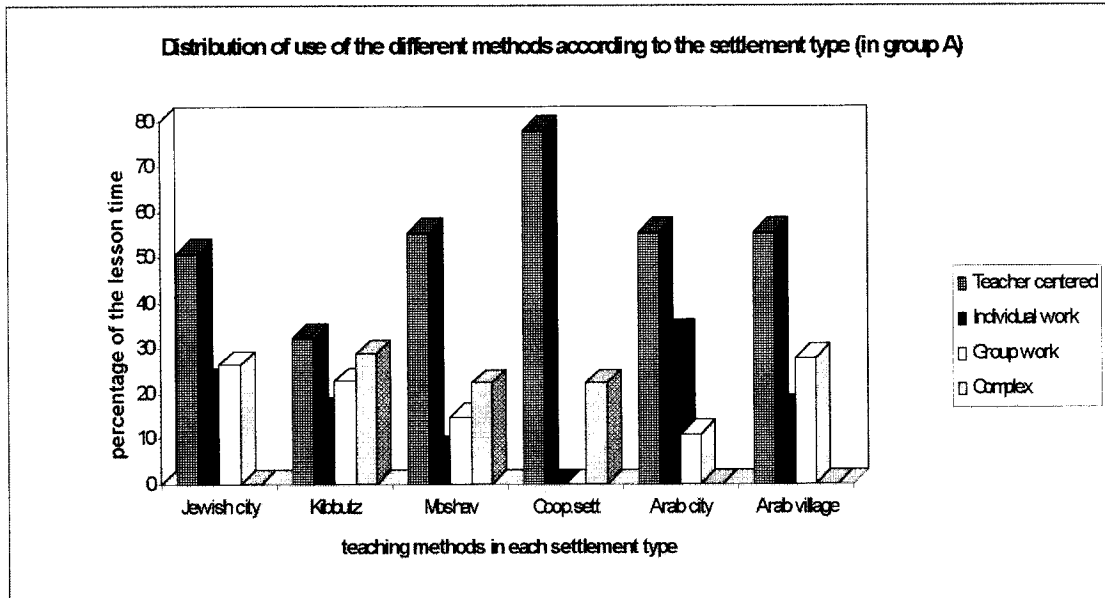
This figure also highlights the extensive use of the teacher-centred method in all of the schools, showing no marked difference between settlement types. The high grade received in the cooperative settlement is coincidental (only one observation was made). Despite this, combination teaching is used only in the Jewish sector in rural schools. This finding may perhaps hint to a relationship between the type of school and between the extent of change and variety of teaching methods taking place. This fact will be discussed in detail in the conclusions chapter, but already here it may be implied that Jewish rural schools are smaller than urban schools, and the community they serve is, at the outset, a community of pioneers in all walks of life, including education. Rural schools have been the leaders in introducing innovative teaching methods even prior to the establishment of the State of Israel.

In conclusion, the picture drawn from the observations (keeping in mind that only 18 were carried out) is that great use was made of teacher-centred learning activities (explaining, asking questions and confirming answers, instructing, demonstrating to the entire class, etc.).

For individual study and group learning as well, the following activities were also common: practice, answering the teacher's questions using different types of worksheets, work with information sheets prepared by the teacher (the Jigsaw method, for example), research work carried out by the pupil (only one observation), and elective and art classes (three observations). All this despite the great deal of time and content devoted by the course to developing skills by the independent learner, and to working both on the pupils' personal projects and on group research work on subjects chosen by the pupils.

It is important to re-emphasise here that only one observation per class was made.

B.   Extent of Implementation According to the Research Subjects

B.1   Questionnaire Findings

Questionnaire responses were summarised using descriptive statistics method. For each question, the number of respondents, as well as the minimum value actually given in response to the question, the maximum value, the average, and the standard deviation for responses whose average had a value were summarised.

Details of the questionnaire findings appear in Appendix 2, including the significant findings for the specific questions dealt with in this chapter. Questions 13 to 28, dealing with implementation of the course material (from different aspects), are divided into three main categories:

a.   The teacher describes his work in the class (planning, use, evaluation, and associated feelings).

b.   The teacher describes his relationship with different factors in the school system.

c.   The teacher applies reflective thinking with respect to the processes of change taking place during the years of his teaching work.

a. Teacher in the Class

With respect to planning (question 16), most of the respondents remarked that they did not consult frequently with others, and they planned their lessons on their own while paying attention to the needs of the pupils and the time at their disposal. The respondents answered "Usually" both regarding an increase in the variety of options, in the choice of diverse and innovative activities, and in the choice of a more effective way of fulfilling the objectives. There may be a contradiction here in that the most effective way of fulfilling the objectives is not necessarily the method involving innovation.

A similar situation applies for work in the class with respect to observation findings: the most popular activities included the teacher providing an explanation, class discussions (under the teacher's guidance), and individual study. The teachers' responses were divided between "Each lesson every day" and "Several lessons a week," but most mentioned "Several lessons every day." These activities were even explicitly recorded as activities that were used much more often (question 14).

The teacher's arguments for choosing these particular activities were similar. All of the teachers remarked that the teacher-centred method for providing explanations was effective since it reached out to every pupil and involved a minimum amount of time. The arguments for the greater use of teacher-supervised discussion evidenced a strong belief in the need for teacher mediation. The respondents perceived the teacher's role as leading to the correct conclusions, to the key concepts, to the main points. It is interesting to note that many teachers mentioned that in their literature and Bible classes, teacher guidance was essential, without which, no marked practical learning would have taken place.

Other arguments refer to the need for reinforcing the pupils' power of expression and their relationship to others. Arab teachers teaching Hebrew in

Arab schools emphasised the importance of pupils practicing to express themselves in the Hebrew language. It is clear to the respondents that reinforcing the skills of discussion must take place using the teacher-centred method and under the teacher's guidance (during the course, in addition to dealing with discussions supervised by the teacher and its advantages, the importance of small group discussions was also emphasised for those having difficulty expressing themselves in a broader forum). Individual study skills intended to help the pupil draw conclusions on his own were also emphasised, as well as determining the content relevant to his needs and choosing a suitable study method.

Following are typical responses from two teachers:

Bassam, a Hebrew teacher from an Arab school (primary and intermediate levels) with 18 years of teaching experience, also acts as school advisor for new teachers:

"A combination of lecture and discussion creates teacher-pupil dynamics. In this way, I succeeded in leading the pupils to think, analyse issues discussed in the lecture, and make conclusions regarding the new material learned..."

Sahar, a Hebrew teacher in an Arab village school, also acts as school advisor on teaching methods:

"Discussion helps a pupil develop independent opinions, self-confidence, and the ability to speak in front of an audience without a teacher. The pupils learn to express themselves as well as listen and relate to others."

The teachers' responses hint to the fact that teachers don't trust the pupils to understand the essence of the material studied on their own; the teachers believe that they alone know what is essential, important and significant.

It is interesting to note that all of the respondents had a high grade regarding their feelings while implementing different strategies in their classes. Regarding organising work in groups and individual study, higher grades were received (6-7) for self-confidence, being equipped with the proper tools, and the ability to be flexible. For teacher-focused teaching, however, slightly lower grades were received for the same categories.

b. Teacher's Relationships with Different Factors in the School System

Relationships with the staff: As previously mentioned, most of the participants do not consult often with their colleagues, and they plan the greater part of their work on their own. They also do not receive feedback about their work from their colleagues (question 16). The responses to the question dealing with their relationships to other teachers varied from "Support" to "Great support."

Relationships with the head-teacher: Most of the 30 respondents claimed that they received support from the head-teacher - he gave them a free hand, encouraged them to introduce innovations, and offered them praise (questions 19 and 20). Three respondents, in addition to mentioning "Support," also mentioned "Pressure" - they felt that the head-teacher was testing and criticising them, applying pressure on them. Four respondents felt that the head-teacher was only applying pressure. Only two respondents said that the head-teacher was not involved in their work and did not understand what was going on.

Relationships with the supervisor: Half of the respondents answered "Lack of communication" and added comments such as "Who even sees him?" The other

half felt that they received support from the supervisor. It should be noted that in the present structure of the current Israeli education system, supervisor and teacher have limited contact. The supervisor rarely visits the schools under his jurisdiction (the number of which is generally great). He is normally called to the school only when problems arise, when there is a need to follow-up on a specific teacher (mostly new teachers), or when a project in which he is involved in, or which appreciates the importance of, is being carried out.

Relationships with the parents: Apart from one respondent expressing "Great pressure," all of the respondents said that they received ample support from the parents. Three respondents said that they felt pressure in addition to support.

c. Processes of Change

In questions 23-27, the respondents were requested to relate to the level of change that they experienced over the past three years, the fields in which the greatest change took place, and the factors of change.

Twenty of the 30 respondents noted marked improvement; others mentioned a lesser level. That is, all the respondents experienced a positive change (improvement). Other teachers mentioned areas in which they felt a change, mostly the following:

* Familiarity with different teaching methods, teaching in heterogeneous classes.

* Ability to plan the teaching based on their own initiative and consideration.

* Activating group learning.

* Familiarity with different methods of group learning.

These areas are all related to the course content and the respondents included the teacher training course as one of the factors of change that occurred in their work. They even stated that the course influenced, to a great extent, their work in the class. Other teacher training courses, as well as school

training courses (courses taking place within the school for the entire teaching staff), influenced to a certain extent their work in the class,

B.2 Interview Findings

As detailed in Appendix 3, several different uses were made of this tool: a.

Interviews with head-teachers. b.   Interviews with teachers from both groups. c.   Interviews with teachers after observations were made in their classes.

B.2.1 Interviews with Head-Teachers

A sample of head-teachers interviewed was chosen based on data of teachers who participated in the INSET course (according to settlement type). Several head-teachers were chosen from each settlement type in proportion to the number of teachers from each settlement type (for each of the three years of the research study). Table 13 shows the relationship between groups of teachers and head-teachers according to settlement type.

Table 13: Number of teachers and head-teachers interviewed according to settlement type

	Kibbutz	Moshav	Jewish City	Cooperative Settlement	Arab City	Arab Village	Total
Teachers	25	15	29	5	5	11	90
Head-teachers	5	3	6	1	1	2	18

The head-teachers were chosen randomly from each settlement type by lottery. Names of settlements were typed on pieces of paper and put into piles according to settlement type. The number of head-teachers required were drawn from each pile according to the above table. All the head-teachers agreed to be interviewed. The researcher met with each head-teacher in his/her school after making arrangements in advance and taking their schedules into consideration.

The interviews were recorded on a tape recorder with the consent of the interviewees. In the second stage, each interview was typed and analysed according to the coding frame described in Chapter 7 (Section 7.3.3).

As previously mentioned, during data processing, a phenomenon typical of a qualitative research was revealed - the data units were defined (sentences), the categories for analysis were clearly formulated (see section on Research Tools), and every sentence in the interviews was analysed according to these categories. Table 14 shows an example of a summary of four interviews based on the analysis categories. This table illustrates classification of the sentences by each interviewee based on the categories, and shows the number of sentences per category.

Table 14: Example of an analysis of four head-teacher interviews according to the number of sentences on a specific subject

Inter-view	TFE	TTE	TC	TB	P	C	HB	HS	SD	SN	IS	WS	PC	DC	AC
Sub. 1	-	3	3	2	-	-	4	12	5	41	8	1	1	5	3
Sub. 2	-	6	6	4	-	1	15	27	3	30	1	2	3	1	4
Sub. 3	-	9	14	2	-	-	25	44	2	22	-	-	1	14	5
Sub. 4	-	4	7	4	1	-	9	17	5	27	1	-	2	3	2

An additional classification of interviewed head-teachers' responses was made according to the questions. All subjects included for each response were recorded (see Appendix 3).

In this way, data analysis provided a tremendous (even superfluous) collection of data, but its contribution towards searching for qualitative answers to the research questions was insufficient. For example, Table 16 shows that the interviewees use a large number of sentences relating to the school nature, i.e. the accepted norms in the school, the school atmosphere, working relationships, etc. Many sentences also represent the head-teacher's opinions and management style (HB, HS). Together with this, there was practically no reference to the pupils or the class, and very little to the teacher (his training, opinions, skills, etc.).

In light of the fact that these findings repeat themselves for all of the 18 interviews, conclusions may be made regarding priorities, relationships to the teacher, etc. However, these conclusions are unfounded and ignore the objectives of the interview and the questions asked during the interview. Counting the sentences in this case helped organise the data but ignored the subjective reality of the research subjects. The research question focused on the way in which the reality was explained to the research subjects.

At this stage, the researcher decided to relate to this preliminary analysis as a pilot study, from which new analytical categories were defined.

Reviewing the interview printouts showed that the interviewed head-teachers related to certain target groups - the class, the pupils, the teaching staff, the employees, the community (the parents committee, and the municipality's education department or local council), the Ministry of Education and Culture, and the course providers. Most of their comments regarding the courses and extent of implementation of the material learned could be divided into the following four topics:

a. Comments expressing the educational concept and pedagogical knowledge of the head-teacher.

b. Comments expressing the head-teacher's relationship with teachers participating in the teacher training courses in his school and the course subjects.

c. Comments expressing the head-teacher's relationship to supervisors (in the context of the courses and their implementation).

d. Comments expressing the head-teacher's relationship to the course providers.

The interviewed head-teachers' responses were summarised according to the above groups.

a. Educational Concepts and Pedagogical Knowledge

The head-teachers' knowledge plays a central role in administering the processes of change and improvement. In order for the head-teacher to be capable of leading the process of change, he must possess, over and above his natural intuition and abilities, the relevant knowledge, or at least be familiar with methods of tapping into relevant information sources. The head-teacher cannot, of course, be an expert in every field, but having a basic knowledge and especially an understanding of the central principles relating to change is essential. Without this basis, the head-teacher cannot plan the process of change, foresee difficulties, encourage and guide the teachers, and create the proper conditions for activity. The interviews showed that this area proved to be problematic.

Of the 18 head-teachers interviewed, only five presented a clear picture of a school they wished to run, the quality of a graduate of this school, the process which could lead to the graduate's development, and of course, the role of the teacher in this process. These five head-teachers belonged to different Jewish settlement types and served as innovators, guides, and leaders for the teachers; the teachers likewise consulted with them very often.

These head-teachers often talked about how to educate a child for life in the 21st century and about their obligation to make school courses relevant and authentic. The authenticity they discussed was expressed both in the course

subjects, in aspirations to learn, and in the learning methods. They talked about the pupil researching his environment and developing into an involved, curious and active individual.

They drew a picture (for some, this was already realised; for others, this was still in the form of an aspiration) of children investigating objects, texts and people, and of the teacher's role in helping them "fit together the puzzle pieces which they themselves had created." They therefore perceive the teacher as a guide, an ally, and a leader in the process of integration and execution

These head-teachers took courses, and continue to take courses, within formal frameworks or frameworks which they have established for themselves.

Roni, a new head-teacher in a Jewish primary school located in an established urban neighbourhood, was a teacher for 15 years prior to taking on this position. The school has been in operation for three years, and Roni has been head-teacher since the school's establishment. She expressed the following:

"... Since I want to have my teachers graduate to a higher level in this respect, I went on my own to learn how someone more expert than I does it..."

Riki, who has been head-teacher of a Jewish development town primary school since the school's establishment over five years ago, said:

"... Next year we plan to change the teaching of mathematics. The teachers and I will learn the new method. I will become the 'teachers' companion' in one of the classes in order to gain experience in working with children in a different way, since I believe that if I request a teacher to do something, I must know whether or not it is feasible, and when she has difficulties, to know how to help her cope..."

The feeling of obligation to, heavy responsibility for, and involvement in the school is common among these head-teachers. They do not just settle for initiating - they become actively involved and they lead their teaching staff based on clear and consistent guidelines. They are not led by changing "fashions" in teaching methods, by the initiatives of other bodies, or by the supervisors' suggestions.

Contrary to these five head-teachers, a confusion of concepts and messages was observed among the other interviewed head-teachers. They talked about increasing achievement levels, including the national exams in which it is important to succeed, and also emphasised the difference between pupils and the need to determine what is suitable for each individual. They discussed many approaches currently used in the Israeli education system - "adaptive teaching," "combination teaching," "language in its entirety," investigative learning," etc., but it was impossible to discern a clear approach from them, a clear picture of the school they wanted to shape.

For example, Ella, head-teacher of a Jewish urban primary school located in an established neighbourhood, has over 10 years of teaching experience in this capacity. This is the second school in which she has held this position. She proudly told of the courses that she was holding in the school for the entire teaching staff:

"... I determine the training courses, I know what is required and what is good for the teachers. This year, we dealt with the subject of violence; next year, we will deal with the subject of computers..."

In another head-teacher's school, two opposing bodies worked together: the Oranim staff dealing with a holistic change in the settlement as a whole; and a private counselor dealing with the development of creative thinking skills. The

head-teacher did not feel there was any problem in having two bodies with such opposing views work simultaneously with the teaching staff.

Naomi has been a head-teacher for six years in a Kibbutz regional school that teaches to three Kibbutzim. Prior to being a head-teacher, she was a kindergarten teacher and a primary school teacher of younger grades. She admitted:

"... We mapped the needs, and emphasised turning the pupil into an independent learner, but this was very 'fluid.' Every teacher acts on her own and implementation does not always take place..."

Aziz, head-teacher of an Arab primary school that teaches several Bedouin villages, has over 30 years of teaching experience. He presented a concrete example whereby his education concepts did not conform to his real beliefs. Even though it was important for him that teachers take courses, diversify their teaching methods, choose ways to teach better, be independent, and make decisions without depending on him, he made the following blatantly contradictory statement:

"...I pick up the class textbook, formulate questions, not too difficult but not trivial either, and prepare a worksheet for the pupils to answer. In this way, I am able to know what they have learned and what they do not understand... There was a case where a teacher solved the questions in advance together with the pupils... Upon discovering this, I asked her "Why"?..."

In this example, his ignorance of the teachers' feelings is evident, which also testifies to a lack of pedagogical knowledge.

This large group of head-teachers (13 of the 18 interviewees) shows a lack of understanding of the basic principles and is unable to formulate a clear educational outlook. These head-teachers cannot relay clear messages to their teachers and are certainly incapable of advising and guiding them. They do not believe that this is part of their role. They turn to external counselors and other agents of change, and settle for the administrative role of inviting a lecturer, setting up his schedule, and supervising him.

b. Relationship to Participating Teachers and Course Subjects

In order for the head-teachers' ideas in this area to be properly understood, attention must be paid to the following phenomenon - the Ministry of Education and Culture encourages more and more teachers to study towards a B.Ed. degree, and teachers are studying in different colleges providing this degree (Israeli colleges and foreign college extensions). They must follow the course curriculum suggested by the college, and in many cases, study topics that are not directly related to their work in the class or to the school's needs.

All of the interviewed head-teachers stated that their involvement in the subject of teacher training is not great. At the beginning of the year, they try to suggest courses that appear to be relevant and important to the school, they know what the teachers are studying, and they occasionally listen to their experiences. But there is no formal framework whereby the teachers report to them on certain subjects from the courses in which they participated (some schools in Israel fit into this framework but not the sampled schools). The head-teachers feel that their hands are tied regarding this issue, and it is only reasonable that they should have expectations from the teachers participating in the courses.

The difference between head-teachers from Jewish and Arab sectors is appreciable in this respect. Head-teachers from the Arab sector stated that all of the courses attended by the teachers enriched both them and the school. For

example, they described how the staff meetings changed as a direct result. If previously, the teachers were passive and accepted what the head-teacher suggested without argument, now, active discussions were being held and many teachers expressed interest, involvement and the desire for change. They unequivocally stated that the training courses, any training courses for that matter, considerably advanced the school. This may be related to the origin of the Arab teachers and this issue will be discussed in more detail in the interpretations chapter.

Head-teachers from the Jewish sector expressed their dissatisfaction in that they were unable to influence the subject content of the teacher training courses. The majority was even disappointed that the courses had no repercussions on the school. Naomi, a head-teacher for six years in a Kibbutz school, expressed the following:

"... I initially expect personal enrichment but implementation as well, and implementation doesn't always take place. For example, a teacher taking a course in mathematics may blossom and say that the course is wonderful, but when it comes to implementation in the field, nothing..."

Ella, head-teacher of a Jewish urban primary school located in an established neighbourhood, was very angry, both with respect to the things said and the way in which they were expressed:

"... I have had no expectations for a long time. Once I did... The teachers only do what is good for them, they do not contribute anything they have learned to the school. Two teachers teaching the same level class would attend training courses and the third not. They would not involve her. She doesn't ask and they don't

offer. They could also contribute to the entire school and they do not..."

Therefore, head-teachers are pleased to see teachers studying, but are frustrated that they cannot influence the course subjects and that the teacher training courses have no significant influence on the school.

In addition, even if the course subjects were relevant to the teaching work, the head-teachers (in the Jewish sector) felt that they were not effectively implementing the material learned. In places, there was diversity, suggestions for change, new ideas, but no actual qualitative changes. As mentioned, head-teachers from the Arab sector showed great satisfaction in the change which took place in the teachers as a result of the teacher training courses, and the positive influence this change had on the entire school.

An additional problem brought up by the head-teachers was the fact that the teachers participating in the courses were so overloaded with tasks required of them from their studies that they were not available for school training courses or for carrying out school tasks (over and above their actual teaching work).

c. Relationship to Supervisors

The head-teachers related to supervisors on two contexts: the teacher training courses initiated by the supervisors, and the work methods encouraged by the supervisors to implement in the school.

In the Arab sector, many training courses were initiated by the supervisors with the objective of introducing new teaching methods, new curricula, etc., into the school. In many cases, these courses were intended for teachers teaching certain age groups and in specific locations (under the supervisor's jurisdiction).

The head-teachers accept this without contest and require the teachers to participate in courses. In the Jewish sector, this phenomenon rarely occurs, but here too, when a supervisor initiates or encourages a certain direction, most of the head-teachers feel that they must adopt their initiative. According to Ella, head-teacher of a Jewish urban primary school:

"... The supervisor was sold on the subject of adaptive teaching. She strongly promoted this subject so we had to go along with her..."

The head-teachers did not describe the supervisors as stopping, preventing or delaying the incorporation of change. Regarding the interviewer's question on comparative exams (uniform exams initiated by the Ministry of Education and Culture held all over the country), most of the head-teachers did not perceive this to be a delaying factor. In addition, only one head-teacher (Riki, a Jewish development town primary school head-teacher) claimed that she relates to the exams according to the school situation, and does not conform the school to the exam requirements:

"... Regarding the subject of comprehension, I noticed that the exam dealt with the material studied, therefore the children answered the questions, we sent in the results, and that was that. For mathematics, I noticed that we had not taught all of the material required, so I attached a note saying that the pupils had not studied certain sections. I am not willing to go crazy about the exam nor make everyone else crazy..."

This response is not typical; most of the head-teachers claimed that it was important for them that the pupils succeed in these exams and it was therefore

important to prepare them for the exams. The school's success in the exams was to be proof of a good scholastic level in the school. That is, most of the head-teachers did not see a conflict between requirements for uniform achievements and incorporating adaptive teaching methods to a hetero-population, and therefore, they did not perceive the supervisor (the representative body who required the exams) as a factor delaying them in implementing these methods.

d. Relationship to the Course Providers

All of the interviewed head-teachers expressed their expectations that the colleges would determine the needs of the school together with the head-teachers, and as a result, develop courses to meet these needs. Several head-teachers felt that it was important for college lecturers to visit the school and guide the school teachers:

Aziz, an Arab primary school head-teacher, expressed the following:

"...You [the interviewer] are an expert in group learning. Why don't you come to give a lesson in our class? The teachers would be your guests, they would see how you formulate questions, how you organise your lesson..."

One head-teacher felt that colleges must renew and update on their own. Another head-teacher, Ella, a Jewish urban primary school head-teacher, commented:

"... If I would know what the training course subjects are and the schedule of the participating teachers, I could do something with

this information, but no one informs me and I have no idea what they are studying..."

This head-teacher did not even consider the possibility that she should have showed the initiative of getting updated on the course subjects. Based on all of the interviews, there appeared to be a lack of communication between the head-teachers and the course providers (to be discussed later in the interpretations chapter).

B.2.2 Interviews with Teachers from the Treatment Group

The interviewed teachers were sampled in the same way as the head-teachers, but they were not the same teachers in whose classes the observations were made. Questions were prepared ahead of time for the interviews (see Appendix 3). During the interviews, an interesting phenomenon worth mentioning occurred - the interviewed teachers were not only pleased to answer the interviewee's questions, they even added information and details over and above what they were asked.

All of the interviews became, at some point, unstructured in form in that the interviewee basically listened. Several teachers even remarked that they had wanted to talk for some time about the subjects discussed in the interview. This fact in itself exhibits some of the feelings the teachers had when it came to implementing the different activities in the school and in the class. Here too, I classified the teachers' comments into three groups:

a. Comments regarding the course itself.

b. Comments regarding the extent of implementation of the methods and tools taught during the course.

c. Comments explaining the extent of implementation.

a. Comments Regarding the Course Itself

All of the interviewed teachers claimed that they were very satisfied during the course on alternative teaching methods at Oranim. Teachers participating in the courses while working said that they learned something new each week that helped them implement new ideas in the class. On the other hand, teachers who were on sabbatical felt that they were missing out on the opportunity to immediately implement the material studied in the course although they were very enthusiastic about the new methods and programmes.

Ten interviewees (of 18) explicitly stated that the course caused them to change their thinking processes, their perceptions, and their approaches. Haya, a Jewish rural school teacher, confirmed:

"... The course open my eyes and made me realise that there are other things..."

Zahava, a Jewish urban school teacher, felt:

"... If something made me turn my head, it was this course..."

Rivi, a Kibbutz regional school teacher of Grades 1 and 2, said:

"... The course aroused and encouraged me to use different thinking processes..."

The interviewees' responses regarding the question of what could be added or changed in the course content focused on two areas: increased visits to schools which succeeded in introducing change and innovation in the working methods (some teachers added that head-teachers of course participants should also attend these visits); and the requirement by the course providers of all participants to implement each new teaching method learned in the course.

One way or another, almost all of the interviewees referred to this requirement of implementation. They claimed that during the course they may have complained about this requirement. But it was now clear to them that had they been requested to implement in the class all that they had learned and returned to Oranim with documentation of the process, and analysed and improved this process as they had been instructed, they would have greatly benefited.

In addition, the interviewees mentioned that they were pleased to try out the methods and techniques learned in the course in their classes (practice on their own initiative).

Not one interviewee related to the question if there was a need to place greater emphasis on formulating a universal outlook and educational approach, and lesser emphasis on techniques. Most of the interviewees, even after being asked, preferred to leave the issue on outlooks and approaches for discussion in the school in which they worked. Only three interviewees responded (only after being asked) that perhaps there was a real need to start clarifying the question, "What do we really want?" and only afterwards, to learn the techniques which could help formulate their educational beliefs.

One of the interviewees, Iris, a Kibbutz primary school teacher, formulated her opinion as follows:

"... We received information piece by piece... every week we learned about a specific method but we did not develop a universal outlook in a fixed systematic way. We basically learned how to work from one day to the next..."

From the organisational point of view, all of the interviewees positively noted that the course took place over the entire year, and during the course classes, teachers had the opportunity to discuss the difficulties they encountered. They praised the fact that the instructors allowed open discussion

of the problems and materials which the teachers brought up from their teaching work (as previously mentioned, some teachers suggested that this element become a course requirement).

All of the teachers noted that the course participants came from different sectors (Jewish/Arab, secular/religious, urban/rural) and from very different schools. Not only did this fact not adversely influence the course's effectiveness, just the opposite, it enriched the sessions, according to Haya, a Jewish rural school teacher:

"... Meeting other teachers enabled us to observe, to be enriched, to renew, and not just to observe goings on around us - this helped me see what others were doing and understand that outside my school, wonderful things were happening..."

Only one interviewee, Rachel M., a Jewish rural primary school teacher, related to the course teaching method, especially to certain elements such as the lectures:

"... I expect to be an active learner and to be made to take action. If you want teachers to believe and internalise a certain teaching-learning method, the teacher's teaching method in the course must conform itself to the objectives..."

In conclusion, based on the interviewees' responses, the teachers were very satisfied with the course. Emphasis must also be placed on important comments made by the teachers regarding course content and structure, and requirements of the participants. These comments may have serious implications on the ability to implement the material learned. Especially important is that all of the interviewees felt that the course created an openness, an eagerness to learn, and a willingness to try out new methods.

b. Comments Regarding the Extent of Implementation

Separating this section from the next section (the explanation provided by teachers regarding extent of implementation) is difficult since it is rather artificial. However, it is essential for organising the responses so as to enable focused discussion.

In this section, we will discuss the questions as to if, to what extent, and which elements of the material learned in the course were implemented "in the field?"

All of the interviewees expressed their great enthusiasm in starting out their first year following the course. This enthusiasm was illustrated in their preparation of material and planning of the diverse activities. Some teachers concentrated on a specific subject, others completely changed their working methods and tried to implement the methods learned in several subjects. Iris, a Kibbutz primary school teacher, described how the course influenced her:

"... I had always been very teacher-centred. After the course, I decided to change my work methods only for the subject of mathematics. I saw that it worked and so I decided to try them out on other subjects..."

The implementation involved diversifying lessons within the curriculum dictated by the system. That is, within the given framework of subjects, the required course contents, and 45-minute lessons (sometimes double sessions), the teachers felt that they could teach using different methods, arouse interest (both in the pupils and in themselves), and activate the children more. The following comment by Gila, a Jewish rural school teacher, is evidence of this, a typical testimony that was repeated in different forms in other interviews as well:

"... We studied a great deal of material in the course and it was impossible to fit everything into one year. But every time I opened my course notebook, I actually taught my class material that was relevant to them, for example, study centers. I was required to teach a certain subject so I took my course notebook, reviewed what you taught us and prepared the material just like you taught us... it worked wonderfully..."

If this initial enthusiasm was felt by all the interviewees, it was possible later on to observe different levels of implementation. All of the interviewees felt that they were equipped with essential skills that would help them in their work. Even if they didn't implement all of the material, they became familiarised with a variety of methods, they were open to learn and try out new methods, and when an innovation was introduced into the school, they knew what it was all about. Only five interviewees continued to work in a completely different fashion from conventional methods. They said the following of themselves starting with Hanni, a Jewish rural primary school teacher:

"... I already find myself in a different place, I am already unable to return to teach using the old methods..."

Hanna, a Kibbutz school teacher of Grades 1 to 3, taught five years in a development town and 18 years on a Kibbutz. She felt the following:

"... In the past, I bored both myself and the children. If today, I had to return to using the old methods, I would stop teaching..."

Leah, a Jewish urban school teacher of Grades 1 and 2, taught Hebrew for five years to new immigrant adults, and then taught all subjects for six years to children. She commented:

"... I can't see any other way of teaching. I don't think that we should be allowed to request that the children sit and listen to me all day and write down what I say..."

Haya, a Jewish rural school teacher, expressed herself as follows:

"... I am not a babysitter. I need to give my pupils responsibility, and make them choose and think..."

All of the other interviewees mentioned different levels of diversity that they incorporated into their lessons, but the overall framework is the traditional one. Over the last year following the introduction of changes in several school systems, progress was made on the subject, even if the change was not on a qualitative level. The interviewees were pleased to report that these innovations were not new to them and they could now implement them more often, but this issue will discussed in the next chapter.

c. Comments Explaining the Extent of Implementation

As previously mentioned, the picture drawn by the interviewees (as for the observations and the questionnaires) was that diverse methods and techniques were used in most of the classes but not in a consistent fashion conforming to a clear educational approach. Diversification was for the sake of diversification, and not for the sake of fulfilling the objectives beyond this diversification (for example, education of the independent learner)

The teachers' explanations regarding this reality may be classified into the following categories:

* The course structure and the role of the college
* The head-teacher and the school system
* Requirements and messages of the Israeli education system

Course structure: All of the interviewees complained that the course lasted for only one year. In their opinion, a continuation was essential. Their suggestions for this varied: maintaining close follow-up by the instructor, organising support groups for the course graduates, holding monthly meetings to resolve problems in the field, creating information resources to serve the teachers, locating model schools and creating contacts between them and the teachers, developing an Internet communications channel, etc. The interviewees' opinion was that the role of the college was to deal with all of these issues. Rivi, a Kibbutz regional school teacher, angrily expressed her feelings:

"... It is impossible to take a teacher, load him up full of tools and tell him to go out on his own! A teacher is not superhuman, he is only a human being..."

The teachers mentioned that they encountered many problems in their work that they did not study in the course, and in order to deal with them, there was a need for follow-up and support at least during the first year after the course. They felt that it was not enough for Oranim to provide the courses, it must also take responsibility for implementation in the workplace. Oranim's staff is capable of doing this, and its connections with information resources and with schools make it the perfect body to do so.

The head-teacher and the school system: Most of the problems brought up by the interviewees focused on this area. Five teachers who told of qualitative continuous change in their work methods were teachers in whose schools there was a system change, or those who received backing and support from the head-teacher and succeeded in attracting other teachers.

The remaining 13 interviewees had harsh remarks, starting with Haya, a Jewish rural school teacher:

"... I felt like I was in a swamp. I was sinking and had nothing to grab on to. This sinking feeling was very depressing..."

Zahava, a Jewish urban school teacher:

"... The loneliness is very difficult. No one can help, there is no feedback, no one understands what I am talking about, and the head-teacher, although he doesn't bother me, also doesn't understand..."

Rachel H., a Jewish urban primary school teacher:

"... I expected that the head-teacher would fill up my engine but she didn't... and when I ran out of gas, I had no other source to turn to..."

Hanni, a Jewish rural primary school teacher:

"... I was unsuccessful in convincing a colleague of mine, no matter what I did... she was unqualified, she did not believe in children, she didn't trust them..."

Leah K., a Kibbutz school teacher with 11 years of teaching experience, teaches all subjects to Grades 4 to 6. She is a candidate for a managerial position:

"... No one disturbs me since they understand that I am doing well, but no one helps or supports me either. If I talk too much about the things I have accomplished and say that others should

do them too, I can already see the sour expressions on their faces..."

Rivi, a Kibbutz regional school teacher:

"... Following the course, I introduced many new elements, but my colleagues simply copied the material I used. They made no attempt to add to it, develop it, or adapt it to their classes, and some of the activities simply turned into worksheets... I have no more strength to fight them... how much can one fight?"

From these examples, it is possible to see that the teachers' comments refer to the teaching staff and the head-teacher. They complained about the teachers' unwilling to open up to new things, to experiment, and to develop new material. Two interviewees attributed this to the great load placed upon them by the curriculum; two other interviewees talked about a different type of load - the changing "modes" and different methods imposed upon the teachers, sometimes all at once.

One interviewee referred to the lower cultural and intelligence level of teachers, especially of the new teachers. All of the interviewees referred to the lack of knowledge by teachers who had not studied the new methods. Therefore, they could not become part of a support group, they could not be consulted or told of the successes and the failures, they could not be asked for feedback or to help develop programmes. Three of them even told of an atmosphere among the teaching staff that did not encourage openness and sharing.

In addition, most of the complaints were directed to the head-teachers. On top of the five teachers already mentioned, the other interviewees described situations of lack of knowledge and understanding on the part of the head-teacher. The teachers expected that they would be able to consult with the head-teacher and have him help them in planning and making decisions; they

were disappointed upon discovering that he was unable to fulfill this function. Four interviewees referred to head-teacher's lack of knowledge, and the fact that the head-teacher is drawn to new fashionable methods and placing unreasonable demands on the teachers. All of the interviewees perceived the head-teacher to play a leading and encouraging role. As previously mentioned, most were disappointed.

Other types of complaints referred to the head-teacher's hidden double messages: on the one hand, he placed demands on them to participate in training courses, to introduce new methods, to innovate; on the other hand, he placed demands on preparing the pupils for achievement exams, he was upset at seeing them wandering around during the lessons, he complained of classroom noise, etc.

Teachers receiving support from their head-teacher mentioned that she was always available and helped during every crisis. However, they also pointed out that the head-teacher made demands both of herself and her teaching staff, and did not let anyone off the hook.

Two teachers told of staff meetings that started with the head-teacher praising the teacher(s) in whose classes something interesting happened during that week.

Three teachers said that their head-teacher calmed their fears about "work output" and even served as a protective wall opposite the supervisor.

It is interesting to note that except for three interviewees (all from the Arab sector), none said that the pupils delayed or prevented implementation of the different teaching-learning methods. Just the opposite, the interviewees referred to their obligation to adapt the teaching methods to their pupils, to make the material interesting and varied. Two teachers even said that although they received no support from the teaching staff, the pupils provided them with feedback on the work methods and jointly deliberated as to what method was most suitable, preferred, etc.

The three teachers from the Arab sector claimed that their pupils lacked the skills required for independent study and group learning. Therefore, when they tried to implement these types of activities in the class, they did not succeed.

In conclusion, the interviewees see team work, particularly support, backing and help from the head-teacher, as a preliminary condition for implementing new teaching methods in the class. If these factors are missing, the teacher has difficulties (even if he is motivated) to carry out what he wants to in the class and in the school.

Teacher's Personality: In light of the gloomy picture drawn by most of the interviewees, it is obvious that the teacher's personality plays an important role in the process. For the same reality, different teachers responded in different ways - some continued in their ways even if they felt alone in the system, some fought to convince other teachers, and others gave up.

The interviewees were very honest in describing their feelings and their accounts highlighted the differences between them. Sahar, a Hebrew teacher in an Arab village school, expressed herself as follows:

"... In order to change, one needs confidence. I need to be convinced in order to convince others and I still don't have the confidence..."

Contrary to this teacher, Leah K., a Kibbutz school teacher, had this view:

"... I have the power to push, even if I am on my own... I have the power to carry it off..."

On another subject, Rachel H., a Jewish urban primary school teacher, said:

"... They say that a teacher has autonomy, but then the district exam comes and tells the teachers to 'teach what we tell you to...' so what can we do?!"

On the same subject, Rachel M., a Jewish rural primary school teacher, said:

"I succeeded in bringing on a qualitative change only after I decided not to give in to the heavy school curriculum. The moment I stopped being under pressure to achieve certain contents, I was free to try new things as well as things which I was previously not so sure of..."

Additional interesting testimonies by the teachers about themselves included that of Amal, an Arab city primary school teacher:

"...When I get hooked on a idea, I get the impulse to do it, it becomes an obsession..."

Hanni, a Jewish rural primary school teacher, felt:

"... I had a hard time convincing others and it was important for me to 'accepted' by all so I stopped trying..."

"... Your heart must be in it. Just like a man who likes to knit as opposed to a man who buys a ready-made sweater. I love to 'knit' my lessons, to plan, to design, to prepare every section, and afterwards join it all together, much more than buying a finished product..."

Iris, a Kibbutz primary school teacher, said:

"... I don't know how to sell myself. Even the head-teacher tells me that my class is a pleasure but I don't talk about it in the teachers' room..."

Rivi, a Kibbutz regional school teacher, commented:

"... I paid a heavy price fighting over my principles. How much can a person fight? I don't have the energy..."

These testimonies show the vast difference in the teaching population, differences whose source lies in the level of knowledge, experience, job status, self-confidence, and other personality traits. It appears that this topic has a great influence on the ability to implement and will be discussed in detail in the interpretations chapter.

Requirements and Messages of the Education System: Only five interviewees related to the general education system and to the supervisors as its representatives. They referred to three main topics:

a) The required curriculum - the teachers mentioned the content load and the skills required to teach according to curriculum requirements.

b) National or district exams - uniform exams taken within every school at a set time. These exams created competition between the schools (with the head-teacher's encouragement) and the teachers felt that they had to prepare their pupils for this exams.

c) Approaches, methods, ways - most complaints were voiced against this issue. Teachers feel that supervisors are imposing more and more innovations, projects and tasks on them, and this heavy burden does not allow them to focus. The feeling is that the market is flooded and the head-teachers, encouraged by the supervisors, choose the most attractive methods without taking into account

long-term options and continuity. Rachel H. a Jewish urban primary school teacher, said the following:

"... Every year, a new teaching mode becomes fashionable and the others lose their appeal..."

Two teachers claimed that in their school in the same year, five different projects that were introduced by the supervisor and fully supported by the head-teacher were underway. The load was, of course, borne by the teachers.

According to testimonies by the interviewees, the teachers were confused, exhausted from the work load, and were simply disdainful.

In conclusion, it may be said that the teach' expectations of the teacher training courses were fully realised. They expected to enrich their repertoire of teaching methods and it was indeed greatly enhanced. Regarding implementation in the field, it appeared to be not just dependent on the extent of control by teachers on their teaching skills and the diversity of teaching-learning methods. At least according to the teachers' feelings, the ability to implement heavily depended on the system within which the teacher worked and especially on team work and the role of the head-teacher.

Within this system, the unique personality traits of each teacher are important and these also have a direct influence on the extent of implementation.

B.2.3 Interviews with Teachers after Class Observation   After

each observation, a discussion was held with the teacher who had been observed. The researcher tried to make the interview conversational in nature and not in the form of a formal interview and definitely not a feedback session. The researcher clarified that her research affords great importance to the teachers' opinions, thoughts, and positions and her questions serve to provide a more in-depth understanding and not a criticism or judgment. As   detailed   in Appendix 4, the conversation revolved around four points: objectives of the

lesson, planning of the lesson, course of the lesson, and future planning. A.

Objectives: this subject initially refers to the objectives of the lesson under observation, but the conversation later focuses on the extent to which the teacher formulates objectives in advance and if so, at what level of detail. Table 15 summarises the responses of the research subjects on this topic.

Table 15: Level of formulation of objectives by the teachers: the figures represent the number of interviewees formulating objectives for each method

Formulation of Objectives	Detailed Formulation	General Formulation	No Formulation	Total
Treatment group	5	4	9	18

B. Planning: At the outset of the discussion on this topic, the teacher is asked about the level of compatibility between original planning and what actually occurs in the lesson, and about his/her general impressions after the lesson. Only one teacher was dissatisfied with the course of the lesson, which was attributed to the pupils' restlessness and lack of concentration. The conversation also focused here on the extent to which the teachers planned the lesson in advance, and if so, what factors were taken into account during the planning. Table 16 summarises the responses of the research subjects according to the level of pre-planning.

Table 16: Level of pre-planning: the figures represent the number of interviewees using each planning method depending on their responses

Planning	Detailed Planning	General Planning	No Planning	Total
Treatment group	8	5	5	18

Contrary to the two first questions (regarding formulation and pre-planning), the question regarding factors taken into account during lesson planning is an open one. In order to summarise the answers to this question, content analysis techniques were used. The categories for sorting the factors were first isolated from the teachers' responses. Then, the number of times which each category was mentioned for all of the responses was counted.

8.3   CONCLUSIONS

The main question dealt with in this chapter is the extent of implementation of teaching methods studied in the course at Oranim. The question was examined by carrying out observations, interviews and using questionnaires, which mainly focused on how the teachers and head-teachers perceived the issue. The research tools will be discussed reflectively at the end of section 9.4.

The hypotheses were that the findings would lead to the following conclusion: the extent of implementation depends on the course structure and curriculum, as well as on the educational system in which the teacher works, and also to a great extent on the teacher's personality.

From the collected findings, the following picture may be drawn:

A group of teachers from different schools studied a course on different teaching methods. The course included workshops on teaching methods and interpersonal communications, as well as lessons on measurement, evaluation, and class planning in general. The course took place over a one year period (weekly classes) in the Oranim School of Education.

The teachers attended the course with the objective of enriching their repertoire of teaching methods, to refresh themselves, to visit other schools, and to get updated on innovations taking place in the Israeli education system. These expectations were fully realised. The teachers, upon finishing the course, felt that they had become enriched with a variety of teaching methods that they

were not previously familiar with or were not proficient enough to apply them in the class.

However, problems arose in the implementation in the field stage. In most cases, the implementation, if it did occur, was by chance. The new teaching methods were not implemented in a systematic and consistent fashion, rather they served to occasionally diversify the lessons. The traditional framework of the teacher-centred method in which the teacher plays a pivotal role (the source of information, asking questions, evaluating, etc.), was preserved.

It appears that most of the head-teachers are generally not involved in choosing course subjects studied by teachers, therefore, they were also not involved in this teacher training course. The majority of head-teachers did not formulate a clear educational approach. They had expectations for a more significant contribution from the teacher training courses, but most did not describe a clear framework within which this contribution would be felt.

The head-teachers even expressed expectations of colleges (course providers). In their opinion, colleges must be more involved in what is going on in the schools, both during course planning and implementation stages.

The teachers themselves were disappointed due to an ability on the part of most head-teachers to support and help them during the implementation stage. The majority even mentioned a lack of support from the teaching staff. During the interviews, the differences between teachers' responses were expressed. It appears that for the same situation of lack of information and support from the school staff, combined with a heavy school curriculum, the teachers responded in different ways - from an unceasing fight to convince other teachers to try out new working methods, up to yielding and joining the general flow of conventional teaching methods.

Prior to a discussion on the findings presented here, it is important to remind the reader that the "treatment" given to the treatment group was the one-year teacher training programme in the form of a course on the subject of teaching methods. A training programme of this type, contrary to in-house

training, for example, places the teacher in the pupil's place. An expert or group of experts determines the specific fields of knowledge to be suggested to the teachers taking the course and the best way of presenting them. During the course, the expert is the leader and the participating teacher responds. Contrary to in-house training, whereby the teacher is the main "speaker" raising questions and expressing his specific needs, the training programme does not necessarily deal with the specific needs of each teacher.

These issues do not contradict the fact that a training programme of this type must be effective, since it is intended to be a directional path in the teacher's professional development. As detailed in the literature survey, numerous researchers use different criteria for the extent of effectiveness (Petracek, 1990; Bell and Gilbert, 1994; Little, 1993; Lieberman, 1995; Robson, 1988; Bolam, 1988; Hopkins, 1989; Williams, 1991; Darling-Hammond and McLaughlin, 1995), therefore, course curriculum and structure may be examined based on these criteria. For example, the course did not deal with introducing a marked change in the teachers' thought processes or with their relationship to lesson planning and the world. The course presented a great variety of methods and strategies but did not give demonstrations or show how to systematically introduce even one teaching strategy. As previously mentioned regarding the character of the training programme, the course was planned by experts from Oranim without even consulting with individuals in the field, and there was no continuation afterwards to provide the teachers with an opportunity to implement the material.

The course basically dealt with pedagogical content knowledge, much less with curriculum content knowledge, and did not even touch on content knowledge and background knowledge (Shulman, 1986; Glatthorn, 1990, Shulman, 1987). In order for the body of knowledge to be important for the teacher and in a form in which it could be implemented, it should be structured based on different types of knowledge presenting a subject and/or problem from different aspects.

The course was structured based on the following hierarchical model: expert → teacher → pupil. However, the participants perceived it to be effective only at the expert → teacher level, that is, only at the stage in which the teachers themselves were in the pupil's position. During this stage, the teachers exhibited enthusiasm and curiosity, raised questions, and even expressed creative ideas of their own. Despite this, at the implementation stage, many reverted to their old teaching methods. This fact raises many questions regarding a teacher's adhering to methods that do not meet the needs of his pupils, even when he is familiar with different methods; questions regarding the way a teacher translated the professional knowledge he acquired in order to meet the needs of his class (sometimes a translation which differed from the original); questions regarding the adult pupil's learning ability; and other questions, each of which could represent a research subject in itself.

Programme planners expected the training course graduate to be a professional teacher whose work would be based on theoretical bodies of knowledge, on strategies and on experience whose efficiency has been proven in research studies. In addition, on the basis of his control of this knowledge, he is able to choose between alternatives and make decisions (Schwartz, 1988).

The research findings show that the course curriculum, the reasons behind the teacher's actions, and his personality all resulted in the planners' expectations to be realised only to a limited extent:

The course curriculum based on the hierarchical model of expert → teacher → pupil does not encourage processes of interpretation, reflection, and search for meaning. Neither does it develop creative thought processes intended to help the teacher find solutions, even under obscure circumstances (Doll, 1993).

The reasons behind the teacher's actions based on reports by the teachers themselves showed that in many cases, they found themselves to be course graduates who were "loners in the system." They did not receive any support, neither from the head-teacher nor from the teaching staff.

The teacher's personality proved to be an important element in light of the fact that different teachers responded differently to the same problems occurring in the field. A professional teacher should, to a great extent, be autonomous in showing initiative, as well as in actively participating in the planning and development of course programmes and the didactic environment. To this end, a teacher must change his beliefs, positions and goals, and act in a practical fashion within a dynamic world which sometimes includes hidden knowledge (Little, 1993; Richardson, 1990). Most teachers who participated in the research study apparently did not reach this level of professionalism.

This chapter focused on the findings of the first research question. Findings of the second research question will be presented in the next chapter. The responses of the head-teachers and teachers will be discussed again in Chapter 10.

CHAPTER NINE: FINDINGS (Second Research Question)

This chapter presents the data collected from responses to the second research question, which focused on the differences between Group A and Group B. Since Group B served as the control group only, a detailed discussion about this group will not be made. The discussion will focus on the same points revealing the behaviour of Group A teachers. These points were determined through a comparison to Group B teachers.

In light of the extensive data collected using the different research instruments, and in an attempt to make it easier for the reader, the findings for the second research question will be reviewed separately in this chapter. As a reminder, the second research question restated below: Could one detect meaningful differences between the group of teachers who participated in the course and the group of teachers who did not participate? The general hypotheses relating to principal research question B are detailed below:

1. The extent of implementation was related to the teacher's personality.
2. The extent of implementation was related to the system in which the teacher works.
3. The extent of implementation was related to the course in which the teacher participated.

As previously mentioned, the second research question dealt with the differences between two groups - the treatment group and the control group. Each teacher from the control group had its match from the treatment group. Teachers in the control group did not participate in the teacher training courses under discussion.

The research focused on investigating the differences between the two groups with respect to the teaching methods used by the teachers (including their considerations for choosing these methods), as well as on the level of change which took place in their work and the reasons for this change (or the

reasons why no change took place). Observations, questionnaires and interviews were also used here.

The data will be presented under three sections, namely:

1.Observational data

2.Questionnaire data

3.Interview data

9.1   OBSERVATIONAL DATA

As previously mentioned, two observations took place in every school - one in the class of a teacher from the treatment group, and the other in the class of a teacher from the control group.

Table 17 presents the observational data of the two groups according to the schools in which they took place. Since two observations were made in every school, each number represents a different school. The first number represents the observation made in the class of a teacher from the treatment group, and the asterisked number represents the observation made in the class of a teacher from the control group. For example, 1 and 1* represent the observation numbers made in the same school: observation no. 1 in the class of a treatment group teacher and observation no. 1* in the class of a control group teacher.

Table 17: Observational data for both groups according to schools in which they took place (the percentage of time devoted to each teaching method is calculated for each observation)

Obs. #	Settlement type	Class observed	Teacher centred	Individual study	Group learning	Combination teaching
1	Jewish city	1	20/45=44.44%	25/45=55.55%		
1*	Jewish city	1	18/38=47.36%	20/38=52.63%		
2	Jewish city	1	23/33=69.7%		10/33=30.3%	
2*	Jewish city	2	36/66=54.54%	30/66=45.45%		
3	Jewish city	4	20/45=44.44%	15/45=33.33%		
3*	Jewish city	4	28/45=62.22%	17/45=37.77%		
4	Jewish city	4	52/74=70.27%	22/74=29.73%		
4*	Jewish city	4	20/50=40%			30/50=60%
5	Jewish city	5	13/40=32.5%	7/40=17.5%		20/40=50%
5*	Jewish city	5	30/40=75%	10/40=25%		
6	Jewish city	6	20/45=44.44%			25/45=55.55%
6*	Jewish city	6	30/45=66.66%	15/45=33.33%		
7	Kibbutz	3	29/52=55.77%	23/52=44.23%		
7*	Kibbutz	4	26/45=57.77%			
8	Kibbutz	4	5/30=16.66%	11/30=36.66%		14/30=46.66%
8*	Kibbutz	5	20/45=44.44%	15/45=33.33%		
9	Kibbutz	2	10/45=22.22%			
9*	Kibbutz	2	30/40=75%	10/40=25%		
10	Kibbutz	5	15/45=33.33%			30/45=66.66%
10*	Kibbutz	5	30/45=66.66%	15/45=33.33%		
11	Kibbutz	1	15/45=33.33%			
11*	Kibbutz	1	20/45=44.44%			25/45=55.55%
12	Moshav	6	45/45=100%			
12*	Moshav	5	30/45=66.66%	15/45=33.33%		
13	Moshav	4	15/45=33.33%			30/45=66.66%
13*	Moshav	4	15/45=33.33%			
14	Moshav	4	15/45=33.33%	10/45=22.22%		20/45=44.44%
14*	Moshav	4	45/45=100%			
15	Coop. sett.	4	35/45=77.77%			
15*	Coop. sett.	5	5/45=11.11%	7/45=15.55%	33/45=73.33%	
16	Arab city	6	25/45=55.55%	15/45=33.33%		5/45=11.11%
16*	Arab city	6	45/45=100%			
17	Arab vill.	1	15/45=33.33%	15/45=33.33%	15/45=33.33%	
17*	Arab vill.	1	30/45=66.66%	15/45=33.33%		
18	Arab vill.	6	35/45=77.77%			10/45=22.22%
18*	Arab vill.	6	25/43=58.1%	18/43=41.86%		
Avg. % in class			**54.115%**	**19.883%**	**19.883%**	**8.333%**

* Control group.

In order to more clearly illustrate the situation presented by these data, the results will be presented graphically. Several figures will show the use made of the different teaching methods (avg.) during the lesson by teachers from each group. Figure 11 illustrates the use made of the different teaching methods during one lesson (on the average) by Group A - the treatment group (N = 18), and Group B - the control group (N = 18). Since the observations were made in different settlement types and classes, the data presentation will also relate to these variables.

Figure 11: Use made of the different methods (avg.) by each group
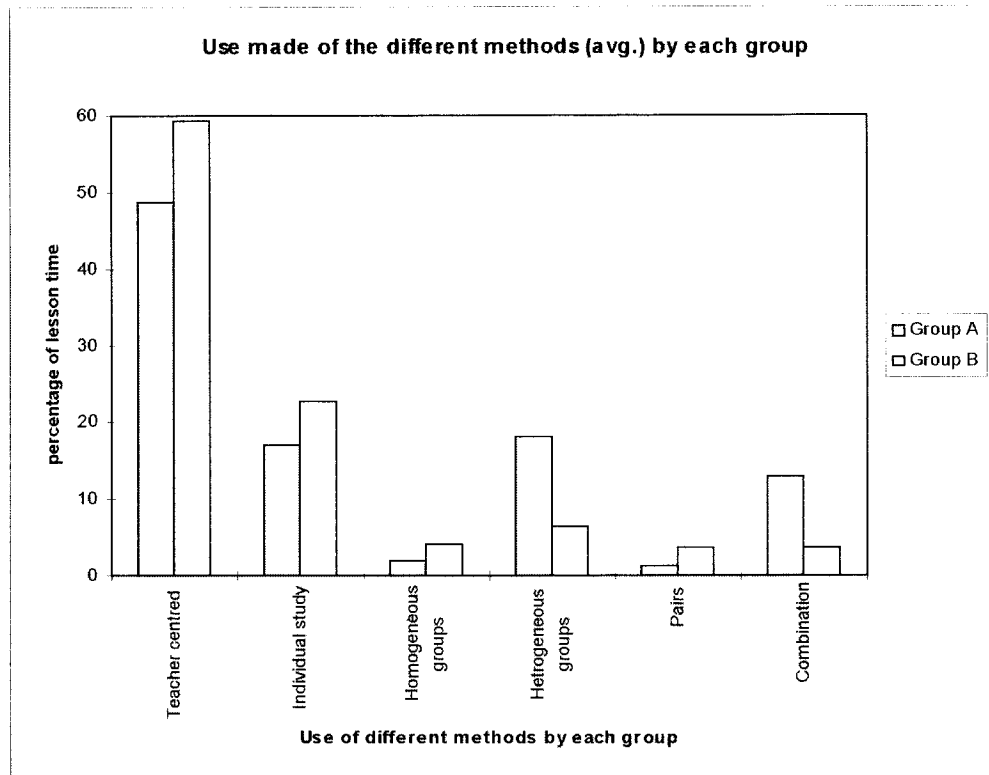
This figure shows that the traditional teacher-centred method was used the most both by both groups but more by the control group.

The individual study method was also used more by the control group than the treatment group, as is exemplified by the use of question sheets and exercises following the teacher-centred lesson.

The group learning method appeared in the most detail in the figure. Three main types of group learning were observed in the classes:

a. Homogeneous groups - pupils have a common denominator (usually the same achievement level regarding the material studied). They are given the same task according to their individual levels (and sometimes to their fields of interest). For example, pupils having the same comprehension level sit in one group. They are requested to find details in the same text. They help each other and submit a joint product. Pupils of another level sit in a separate group and are required to perform either the same task using a different text or a different task using the same text.

b. Heterogeneous groups - pupils have different achievement and/or skill levels. They divide up a task between themselves. Each group member must make his individual contribution to the overall group product (a type of Jigsaw puzzle in different forms). For example, the entire class works on a certain story. Pupils having varying levels of abilities and skills sit in one group. The group is required to put on a play about a certain part of the story. Two group members write a dialog, the third prepares the stage decor, and the fourth arranges the musical accompaniment.

c. Pairs - the class remains in the form of an audience behind the teacher and the blackboard. The pupils are arranged in pairs, working at different levels of cooperation, starting with comparing exercise results solved individually, up to having a stronger pupil tutor a weaker pupil.

During the observations, the treatment group used heterogeneous groups much more than the control group. The control group, on the other hand, used homogenous groups and pairs slightly more.

Tasks of the heterogeneous groups were complex. Their preparation required relating to the different skills, cooperation levels, methods for encouraging cooperation, and the development of a positive mutual dependency. These subjects were studied extensively in the teacher training course and may have helped the participating teachers.

Tasks of the homogenous groups and pairs were mostly the same, similar to those of the individual study group (the activities will be discussed in detail in a separate section). The treatment group used combination teaching much more than the group. The class in which this method was observed for the control group teacher was located in a school which had already undergone processes of change and this method was used in all of the classes.

Figure 12A: Distribution of use of the different methods according
to settlement type - Group A (N = 18)
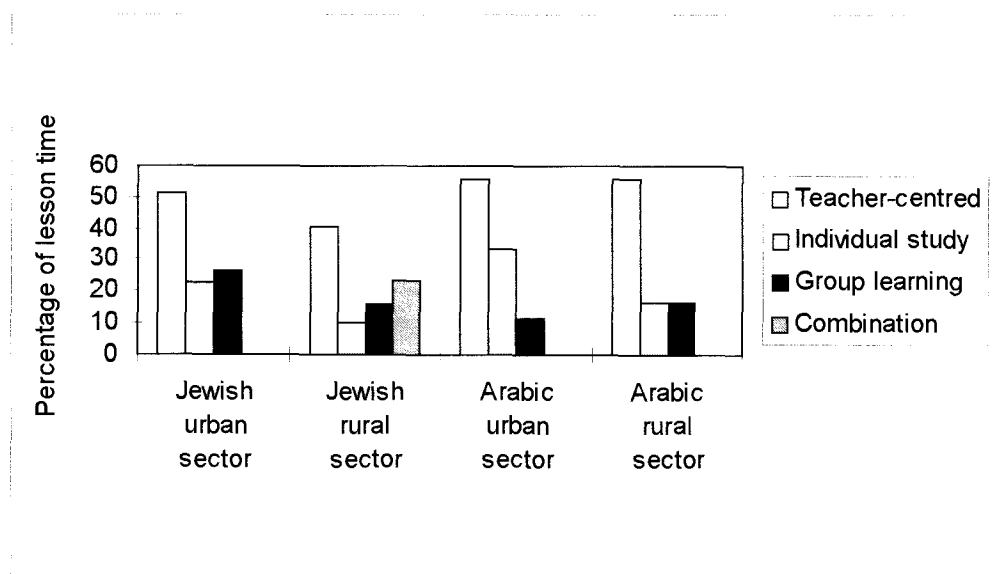
Figure 12B: Distribution of use of the different methods according
to settlement type - Group B (N = 18)
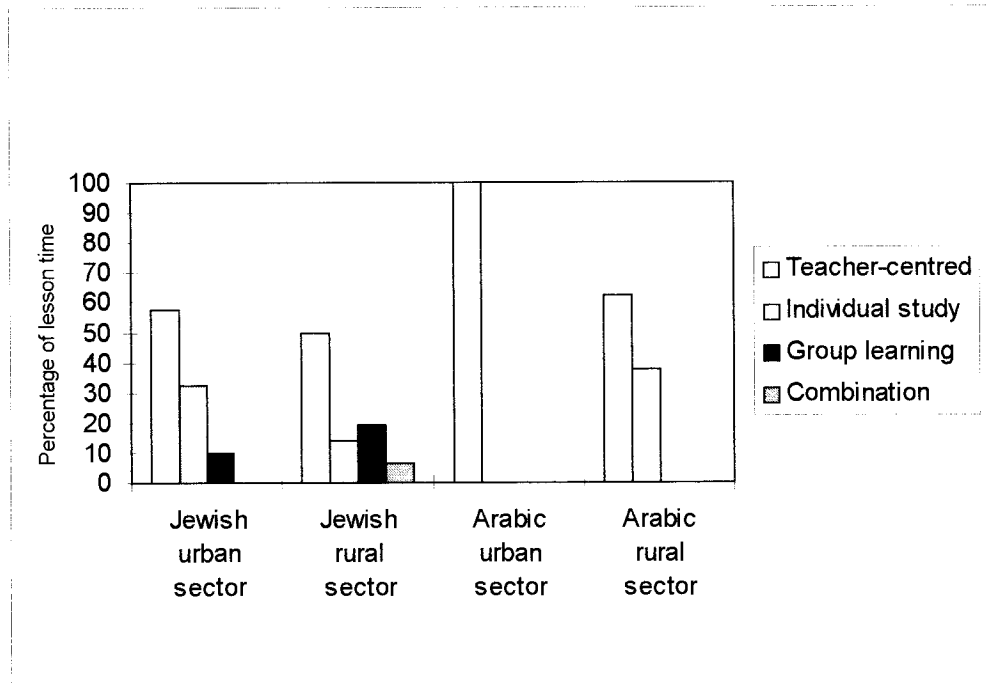
This figure shows the distribution of use of the different methods by the two groups according to the settlements in which the schools are located. As previously mentioned, the schools were sampled according to settlement type. This sampling is based on the assumption that there are differences in the nature of the school, and, therefore, also in the teaching-learning methods used in rural as compared to urban settlements. It was also assumed that differences exist between the Jewish and Arab sectors.

At first glance, the two figures show that for the two sectors (Jewish and Arab), the treatment group uses a larger variety of teaching methods. In addition, the rural schools use a larger variety of methods than the urban schools; this variety is greater within the Jewish sector.

In both groups, the extensive use of the teacher-centred method is prominent (over 50% of lesson time in most classes). In addition, it is worth noting that the treatment group used this teaching method less than the control

group. This method was used more in the Arab sector than in the Jewish sector;
this is particularly evident in the control group.

The individual study method was used in almost all of the lessons. In most
lessons, the pupils were required to perform a personal task after studying the
material in the first part of the teacher-centred lesson.

Combination teaching was used only in the Jewish rural sector. It was used
more by the treatment group. Combination teaching in the control group was
used in the majority of the classes in a school that had undergone processes of
change. The reasons for this phenomenon will be discussed in the conclusions
chapter.

Figure 13A: Distribution of use of the different methods
             according to age groups - Group A (N = 18)
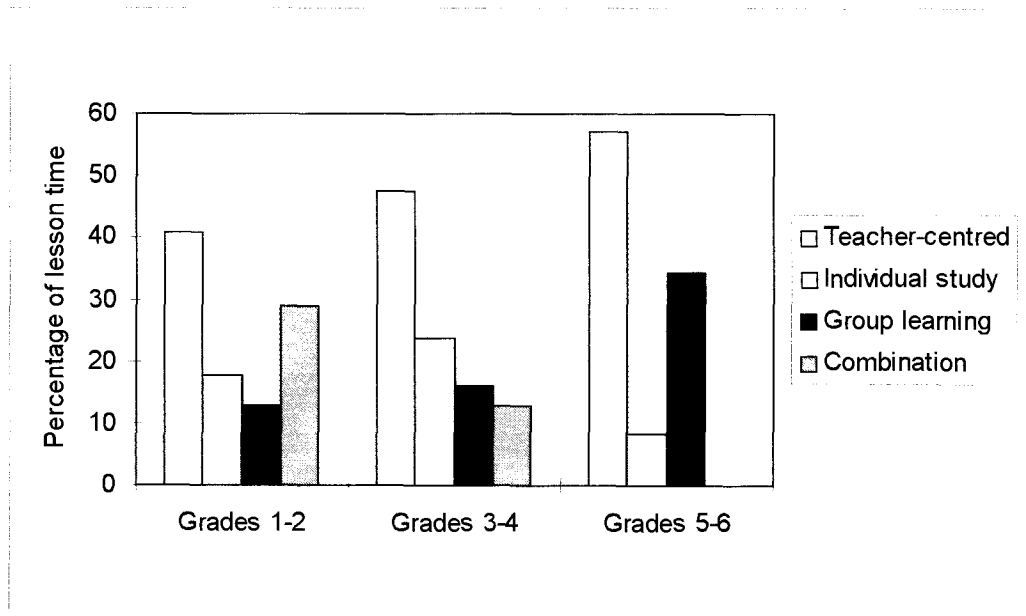
Figure 13B: Distribution of use of the different methods according to age groups - Group B (N = 18)
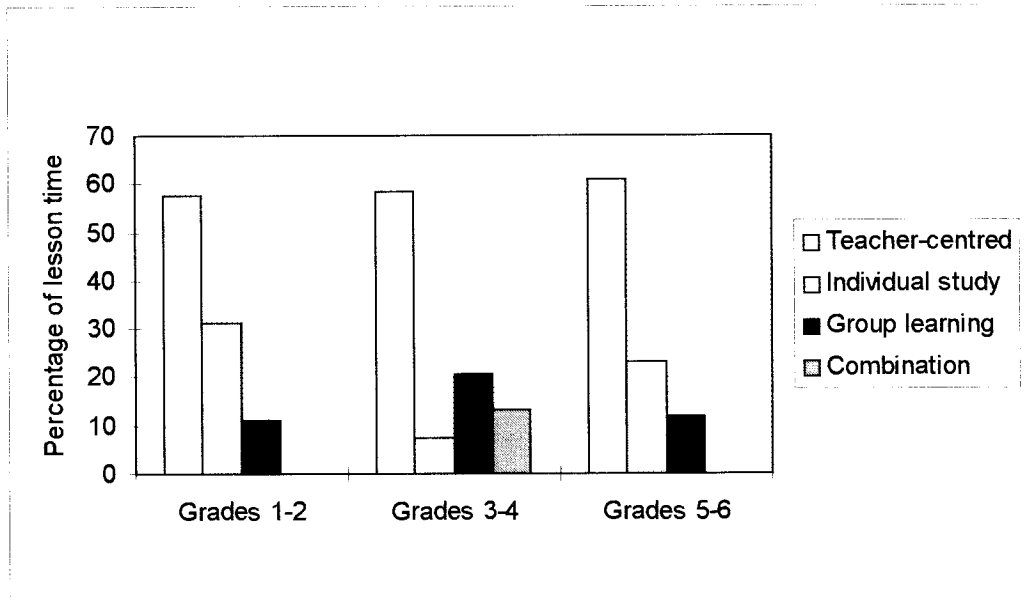
In this figure, use of the classic teacher-centred method increases with an increase in the age of the pupils. Combination teaching was used less with an increase in age. Group learning was used more as the age increased. This method was used the most in the oldest age group in comparison to the other two age groups.

The control group used the teacher-centred method the most (for all age groups). A larger variety of teaching methods was used in the intermediate age group. Combination teaching was used only in the intermediate age group. This finding is very much in line with the views of educators and parents in Israel. In Grades 1 and 2, the basic skills of reading, writing and arithmetic are taught. Many educators and parents claim that in these grades, emphasis should be placed on acquiring these skills only. The higher primary school grades prepare pupils for junior high schools and place heavy weight on content. Emphasis should be placed accordingly on the material and skills required for junior high schools. Therefore, only the intermediate age group is open to change and innovation.

The treatment group used group learning and combination teaching more than the control group. Despite this, the control group used the individual study method in the younger and older groups more than the treatment group.

9.2   QUESTIONNAIRE DATA

As previously mentioned, the number of returned questionnaires was not large (30 from each group), making the drawing of conclusions rather cautious. A comparison of responses to most of the questions by research subjects from the two groups revealed only minor differences.

Details of the questionnaire findings are shown in Appendix 2. No significant difference in any of the questions appearing in the questionnaire was found between the two groups of teachers (a significant statistical difference between averages must be at least 0.4). Teachers from the treatment and control groups had similar responses regarding the evaluation methods they used in their classes, their feelings about implementing different strategies in their classes, their relationships to different factors in the system and most of the teaching methods that they used in their classes.

As will be described shortly, a distinct difference was found in the questions dealing with the frequency of using different methods over the last two weeks (Question 13 in the questionnaire), and in the areas in which change occurred in their work over the last three years (Question 23).

The reasons for there being no differences between the two groups will be discussed extensively in Chapter 10. They may be attributed to the structure of the course given to the teachers, the structure of the Israeli educational system, and the fact that specific changes in the teacher's work method in the classroom also depend on an overall change in the system. As previously mentioned, these issues will be discussed in more detail in Chapter 10. Only those questions for which significant differences were found between the two groups are discussed here:

Question 13: The teachers were given a list of different activities and teaching methods and were requested to mark the frequency with which they used each method over the last two weeks. Table 18 summarises the responses to this question of teachers from both groups.

Table 18: Scaled Comparison of Mean Values of Question 13 in the Questionnaire

Question	Mean Group A	Mean Group B
Q. 13a Explaining the subject	1.86	1.87
Q. 13b Dictation	**3.32**	**3.73**
Q. 13c Discussion in class	2.28	2.00
Q. 13d Organising group work	2.39	2.47
Q. 13e Activating different pupils in different areas of study in the same class	**2.79**	**2.73**
Q. 13f Experimenting in the classroom	**3.11**	**2.87**
Q. 13g Teaching outside the classroom	4.18	4.21
Q. 13h Using technical aids (film, video, etc.)	4.07	4.07
Q. 13i Inviting a guest lecturer to class	**3.60**	**3.30**
Q. 13j Integrating different teaching methods in one lesson	**4.71**	**4.50**
Q. 13k Other	**3.07**	**2.50**

From this table, it may be seen that there were no significant differences between the two groups. Distinct differences were found in the following areas:

a. The control group used dictation the most (see Q. 13b). This method is typical of the traditional teaching method whereby the teacher faces the class and perceives his role as an individual conveying the information he knows to pupils lacking this information. This role also requires measuring the level of absorption of the new information. Dictation is one of the most popular measuring tools in the traditional teaching method. During the

course (the treatment) given to Group A teachers, participants were exposed to different perceptions of the teacher's role. It is possible that the difference could be attributed to this. As previously mentioned, the subject will be discussed in more detail in Chapter 10.

b. The treatment group used slightly more the strategy of activating pupils in different areas of study simultaneously (see Q. 13e). This strategy was studied in the course and the course participants even visited schools where it was implemented and observed classes of this type. A significant difference between the two groups of teachers in this respect was expected, but apparently in order to activate this teaching-learning strategy, the course and observations in schools were not enough. This subject will also be discussed further in Chapter 10.

c. The treatment group used experimenting in the classroom more and invited a larger number of lecturers to the classroom (see Q. 13f and Q. 13i). Here too, the difference between the two groups of teachers is insignificant. These two areas are "context dependent" in that experimenting was not required in every and not every subject required inviting a lecturer. The reason for the differences may be incidental since the teachers related only to the last two weeks prior to filling out the questionnaire.

d. The treatment group reported slightly more incidents in which they used several teaching methods in one lesson. Since the course dealt with different teaching methods and ways of incorporating them into the lesson, a difference in this area between teachers who participated in the course (treatment group) and teachers who did not was expected. However, apparently here too, the course was not enough. This subject will be discussed further in Chapter 10.

e. In the "Other" section, both groups of teachers added different activities that they used in their classrooms. Most of the activities were limited to the possibilities suggested in Question 13 but which had been formulated differently, i.e., different types of group work, individual work, reading

stories, etc. Treatment group teachers reported that they used slightly more types of activities. This might be attributed to the fact that they were familiar with various methods and diversified their teaching methods a little more. As mentioned, the difference is insignificant and it is therefore not possible to drawn any far-reaching conclusions.

In conclusion, in the area of teaching-learning methods used in classrooms, a very slight difference was noted between the two groups.

Question 23: The teachers were given a list of topics related to their teaching work and were requested to mark if a change had occurred in these topics over the past three years. Statistical differences (as shown in Appendix 2) were observed between the groups in two topics: greater change (on the average) occurred for the treatment group regarding the ability to plan their teaching on their own initiative; greater change (on the average) occurred for the control group regarding their awareness of learning difficulties.

Table 19 summarises the findings in the two areas in which a statistical difference was found, as well as in an additional area where a distinct difference was found.

Table 19:   Scaled Comparison of Mean Values of part of Question 23

Question	Mean Group A	Mean Group B
Q. 23c Ability to plan teaching on own initiative	2.69	2.27
Q. 23g Activating group work	2.53	2.23
Q. 23j Awareness to learning difficulties	2.34	2.70

As shown in the table, the differences between the two group are not uni-directional. The treatment group teachers reported on a greater change in their ability to plan teaching activities by themselves. The course in which teachers from this group participated purported to equip the participants with

the tools required to plan teaching activities and therefore, a greater change was expected. A notable but insignificant difference between the treatment group and the control group was observed in this respect.

A difference in another direction was observed in the area of awareness of learning difficulties. It is difficult to pinpoint the reasons for this difference - were Group A teachers aware of this problem at the outset and hence they decided to participate in the course? Did the fact that they participated in the course help them find solutions but the problem is still unresolved? Is this an incidental occurrence.

A small difference was also found in the extent of the ability to activate group work in the classroom. The treatment group reported a larger change than the control group in this area. Since group work was once of the main subjects studied in the course, a larger difference was expected in this area, but here too, the course was not enough to result in a marked change. These findings will also be discussed extensively in Chapter 10.

There were no significant differences in any of the other topics appearing in this question. The same level of change (on the average) occurred for both groups in all areas. It should be emphasised that changes occurred in all areas for both groups. That is, the teachers in both groups felt that they weren't just stagnating.

No marked differences were cited between the two groups for the other questions.

9.3   INTERVIEW DATA

As previously mentioned, the interviews took place with head-teachers and teachers from both groups. Two types of interviews were held with teachers from both groups:

a. Semi-structured interviews after observation in their classes.

b. Unstructured interviews in classes where no observations were made.

9.3.1 Interviews with Teachers after Class Observation

As previously explained in Chapter 8, two observations were made in each sampled school - one in the class of a teacher from the treatment group and one in the class of a teacher from the control group. After each observation, an interview was held with the teacher (see Appendix 3.4). An important subject discussed during the interview was the teacher's considerations during lesson planning. The teachers were requested to detail the factors taken into account during the planning stage.

It appears that the two groups placed great emphasis on the pupils. The interviewees related to the pupils' scholastic achievement level, their comprehension of the material studied, the differences between them, their social relationships, etc.

Both groups related to conditions and circumstances - the time at the teacher's disposal, class size, etc. The control group related to this factor more than the treatment group, a finding that recurred also in interviews with other teachers from the control group. It is interesting to note that in both groups, less emphasis was placed on the material studied and on the teacher himself. That is, when a general question was asked regarding factors taken into account during the planning stage of the lesson, both groups placed the greatest emphasis on the pupils and the least on the material studied.

The teachers stated that, first of all, it was important to them to make the lessons interesting for their pupils and to increase their motivation. All of the teachers felt that it was important that the entire class understand the material being taught and become adept at acquiring new skills. Since they were aware of inherent differences among their pupils, it was clear that they must adapt their teaching methods to meet the needs of the overall class population. It is important to remind the reader that these feelings were expressed in response to the general question regarding factors taken into account during lesson

planning, and different responses were given at a later time, as will be described shortly. Apparently, the teachers know that they are expected to relate first and foremost to the needs of their pupils, however, in the implementation stage, their priorities changed. Table 20 summarises the responses from the two groups of teachers.

Table 20: Factors taken into account during lesson planning

Factors Taken Into Account	No. of Times Mentioned		Total
	Treatment group	Control Group	
Pupils	25	20	45
Conditions and circumstances	7	15	22
Material studied	5	8	13
Teacher	4	4	8

Later on in the interview, when the teachers elaborated in more detail their plans for the next lesson following the observed lesson, the picture changed. Table 21 shows the teacher's responses to this question.

Table 21: Factors taken into account in planning the next lesson

Factors Taken Into Account	No. of Times Mentioned		Total
	Treatment group	Control Group	
Material studied	10	12	22
Pupils	5	5	10
Conditions and circumstances	2	5	7
Teacher	0	2	2

From this table, it may be seen that during the actual teaching, both groups placed greater emphasis on the material studied than on the pupils' needs. The interviews after class observation related to the teacher's work, in general, and o the observed lesson, in particular. No marked differences between the groups were noticed.

9.3.2 Interviews with a Sample of Control Group Teachers

These interviews provided the most informative findings about the control group. Here, too, the interviewees expressed a great need to be listened to. The interviewer's involvement was minimal; the teachers expressed themselves extensively and explicitly without prompting. A need also arose to formulate the following four new analytical categories based on the teachers' comments:

a. The educational approach and concept of the teacher's role.

b. The relationships to a change in work methods and the process of its introduction.

c. The relationships to the head-teacher and to the teaching staff.

d. The relationships to work conditions.

a. The educational approach and concept of the teacher's role

The comments in this category illustrate the difference in concepts between the two groups of teachers. Comments by control group teachers on their educational approaches and concepts of the teacher's role varied. Many related to what they believed in, and especially to what they <u>didn't</u> believe in. Ten (of 18) interviewees had the following remarks starting with Livnat, a teacher in a Jewish urban primary school located in a deprived neighbourhood. She teaches all subjects to Grades 3-6 and has 13 years of teaching experience in the same school:

"... I don't believe in all of those methods... you'll see that in the end, everyone will return to the old method..."

Tilli teaches all subjects to Grades 3-6. She has over 20 years of teaching experience, 10 of which are in a Jewish rural primary school. She expressed her feelings as follows:

"... I'm apathetic. I'll let those who think they know everything talk and I'll do what I want to... I don't believe in all of the methods, not under our conditions..."

Olga, a Kibbutz school teacher for 10 years and previously a teacher in the former Soviet Union, said:

"... Perhaps if I could see a teacher using a method and actually succeeding with it, I would be convinced that it works. Today, I don't really believe that it can..."

Tami has taught in many schools in different areas throughout the country and teaches all subjects to Grades 3-6. For the past five years, she has been teaching in an established Jewish urban school. According to her:

"... There are many wonderful ideas but they don't always work in the classroom. Everything is so pressured there..."

Annie, a teacher in an established Jewish urban primary school and who has over 20 years of teaching experience, said:

"... I am not fully convinced of this change..."

These comments serve to exemplify the lack of faith expressed by the majority of teachers regarding the effectiveness of teaching methods that are not teacher-centred.

Another aspect for which it is possible to learn of the approaches of control group teachers is their relationship to the pupils. Fifteen teachers felt that the lack of pupils' abilities was a contributing factor to their failure in implementing different teaching methods in their classes. One of them, Edith, teaches in a Jewish urban school located in a deprived neighbourhood and has

five years of teaching experience:

> *"... The pupils don't know how to hold a discussion. They are not used to listening to one another, so how can they participate in group learning?!"*

Orna teaches in a Jewish urban school located in a deprived neighbourhood and has three years of teaching experience. She commented:

> *"... I tried to use the group learning method in my class but it didn't work due to a lack of cooperation on the part of the pupils..."*

Tilli, a Jewish rural primary school teacher, felt:

> *"... The pupils are not used to these methods, therefore they become disruptive..."*

Two teachers teaching in development towns felt that the type of pupil population was a factor making the diversification of teaching methods arduous. According to Edith, a Jewish urban primary school teacher:

> *"... The population is a tough one, involving very difficult children. It is not impossible but it is very hard. They need a strong, guiding hand..."*

Interviews with the treatment group showed that the teachers recognised the differences between pupils and the need to respond to these differences. Interviews with control group teachers showed that only three related to the needs of the pupils. The majority blamed the pupils for lacking the skills required for individual study and group learning.

Livnat, a Jewish urban primary school teacher, related negatively to the differences between pupils and to the role of the teacher:

"... If I would have seven(!) pupils less in my class, then you would see the achievements I could make using my old-fashioned methods... These seven are simply holding us back..."

In this respect, there was a marked difference between the two groups regarding their concept of the teacher's role. The treatment group teachers felt the need to fulfill the needs of the pupils, to make them responsible, and to provide them with freedom of choice (even teachers who had difficulties in doing so). However, the majority of control group teachers had different opinions. A typical opinion is expressed below by Olga, a Kibbutz school teacher, who tried to use other methods (under pressure by the head-teacher) but returned to using traditional methods:

"... I had never been sure that they had arrived at the right conclusions, that everyone had participated. I didn't know what level of knowledge each one had, and what grade to give... I didn't know what each one managed to do... Maybe he did nothing, just sat there quietly, and I wasn't able to reach him in time..."

Many other teachers including Orna, a Jewish urban school teacher, felt the following way:

"... In group learning, the teacher is unable to see what is going on in the entire group... It is impossible to follow their progress and check up on them..."

Olga, a Kibbutz school teacher, commented:

"... Control, I was greatly lacking control..."

From these remarks (repeated in numerous interviews), the teachers' lack of faith in the pupils' abilities to carry out individual study and to be

responsible for their studies, on the one hand, and their perception of the teacher as a source of knowledge (knowing what conclusions must be made), a supervisor, and an evaluator giving grades, on the other hand, was evident. In light of this, the opposition to the teaching-learning methods based on the concepts of qualitative differences is clear.

b. The relationships to a change in work methods and the process of its introduction

Only two interviewed teachers from the control group reported on their need to change, to diversify, to update.

The other interviewees reported on different attempts during their years of teaching to introduce changes into their schools. To them, change was something which had been forced upon them, or it was a requirement demanded by the head-teacher or another external body. Some of the interviewees placed more emphasis on the fact that they had been forced to implement the change than on the change itself. It is only natural that if one is forced to do something, he will be opposed to it as expressed here by Yael, a teacher in an established Jewish urban school who teaches all subjects to Grades 3-6 and has 10 years of teaching experience:

> "... It bothers me to be forced to do something. Not every method is suitable for every class and teacher. I know what is best for my class..."

Regarding a change in teaching from the teacher-centred method to methods providing pupils with greater independence, most of the interviewees expressed feelings of skepticism rather than opposition including Annie, a Jewish urban primary school teacher:

> "... I am a veteran teacher, I have accumulated a vast amount of

experience and I am sure that what I do is correct. Suddenly, they want to introduce something new. This leaves me feeling 'naked', it is threatening..."

Livnat, a Jewish urban primary school teacher, said:

"... They actually hint that what I am doing is not good but they don't tell me how to work differently..."

Tilli, a Jewish rural primary school teacher, felt:

"... It is difficult at our age to change our thought patterns..."

The relationship to the process of introducing change also met with opposition to "orders from the top" and to the process itself. Interviewees having experience in the processes of change related to the lack of clarity regarding the objects of change, the lack of guidance, the lack of structure of the change, and as previously mentioned, the lack of faith. One of them, Yehudit, teaches in a new Jewish school located in an established neighbourhood, commented:

"... If they would have paired me up with a teacher who was already using these methods, who could guide me, give me tips, and teach me tricks, then maybe I could have been convinced to believe that it is possible..."

According to Orna, a Jewish urban school teacher:

"... If one wants change, then guidance and a clearly defined programme must be provided. Without this, we are like a boat without oars..."

Shoshi, a Kibbutz school teacher with 11 years of teaching experience who teaches all subjects to Grades 1-3, expressed her feelings as follows:

"... It is impossible to cause a revolution all at once. It must be done gradually and slowly. Only when we see that it is accepted, can we continue further..."

Tilli, a Jewish rural primary school teacher, commented:

"... We were told that the school is progressing and whoever is incapable of keeping pace, should get 'off the bandwagon' and look for work elsewhere... We therefore joined because we were requested to, not for the sake of the pupils and not because we fully believed in the change..."

Tami, a Jewish urban school teacher, felt:

"... If we want change, we must first convince ourselves of the change and study the subject well before we even enter the class. We must first be fully convinced, and that was not the case..."

These examples illustrate a lack of knowledge and familiarity with alternative methods which led to rejection of the methods, to apprehension, and even to opposition on the part of the control group teachers. The treatment group teachers remarked that for the same situations of introducing change, which were familiar to them and which they understood, this was not new. The treatment group teachers rejoiced at having the opportunity to implement what they believed in. The control group teachers showed apprehension, reservation, and sometimes, open opposition.

c. The relationships to the head-teacher and to the teaching staff

Similar to the treatment group teachers, control group teachers also placed great importance on their relationships with the head-teacher regarding methods and the introduction of change.

As previously mentioned, the head-teacher was associated with introducing change by force and, as such, he created feelings of opposition. However, three interviewees stated opinions in contradiction to whereby the head-teacher did not force his ideas and methods on them, including Annie, a Jewish urban primary school teacher:

"... When the head-teacher gave me autonomy and credit, I must justify this credit..."

Tami, a Jewish urban school teacher, said:

"... The head-teacher gives me a free hand and doesn't interfere, this is excellent..."

Eight interviewees referred to the head-teacher's double messages and to the feeling that the head-teacher himself was not fully convinced about (nor did he understand) the process of change. This situation represented a factor delaying the change which they were supposed to experience among some teachers including Edith, a Jewish urban school teacher:

"... The head-teacher has very conservative ideas. She herself does not believe in change. She wants the teacher to be at the centre and that there should be peace and quiet in the class, so how can she convince us?!..."

Orna, a Jewish urban school teacher, commented:

"... The programme was also forced upon the head-teacher and she

herself doesn't completely understand it..."

There were complaints in the two groups regarding the lack of knowledge and understanding on the part of the head-teachers. In the treatment group, this adversely affected the teachers' ability to implement work methods in which they believed. In the control group, teachers felt that represented their lack of faith in alternative teaching methods.

The teachers who gained experience in introducing change also referred to the work of the teaching staff. Eight teachers described how the vast amount of work imposed upon them finally "broke" them and they returned to using conventional methods. These teachers said that had there been organised team work and group efforts, their work load could have been divided up and perhaps they would have succeeded in meeting the heavy demands placed on them in using the new methods.

Devorah, a Jewish rural primary school teacher who has over 20 years of teaching experience and teaches Grades 3-6:

"... I sat for three to four hours preparing one lesson. I had to photocopy, duplicate, and prepare different tasks for different groups to ensure that there would be work for all of the pupils while I would work with another group. It is impossible to do this for a long period of time...:

Areen, an Arab rural primary school teacher with five years of teaching experience, teaches Grades 3-6. She was supposed to serve as the school advisor on teaching methods:

"... My colleagues did not help me. I did everything on my own and this was extremely difficult."

Tilli, a Jewish rural primary school teacher:

"... The change was my initiative, based on my need. I did everything on my own - I prepared, I photocopied, and I even got into trouble for the large number of photocopies I made. In the end, I just gave up because of the exhausting work. If the work would have at least be divided up between several teachers..."

Zahava, a Jewish urban primary school teacher who has over 20 years of teaching experience and teaches mainly Grades 1 and 2:

"... I was lacking real team work - both dividing up the work with other teachers as well as enjoying the fruits of our labour, this was also missing..."

Annie, a Jewish urban primary school teacher:

"... Some individuals in our team have broader formal educations and others have vast experience. They greatly opposed introducing change and I just went with the flow..."

Therefore, the interviewees see a lack of organised team work, especially the unclear messages by the head-teacher, as a factor preventing the introduction of change in teaching methods. Contrary to some teachers from the treatment group, not one interviewee from the control group reported on using work methods in which they believed despite the inhibiting factors.

d. The relationships to work conditions

It is interesting to note that the treatment group teachers did not cite classroom size or number of pupils per class as factors inhibiting them to use unconventional teaching methods. Despite this, ten control group teachers said that this played a central role. One of them, Tami, a Jewish urban school

teacher, said:

"... If the classrooms would have been larger, allowing greater movement of the pupils, if each classroom would have had a library corner, or if the class would have been divided into two groups, then perhaps it would have been possible to work differently..."

Fatma, an Arab urban school teacher with 16 years of teaching experience, commented:

"... With the current number of pupils, it is impossible to work using another method. Only if another adult, even a teacher trainee, would be present in the class, then perhaps it would be possible..."

Most of the interviewees also related to the heavy curriculum demands -and to the achievement exams, as previously described for the treatment group. An additional factor which was not mentioned at all by treatment group teachers was compensation. Three teachers, including Tilli, a Jewish rural primary school teacher, cited compensation to be a factor that would have given teachers incentive to work using diversified methods (requiring much more preparation work at home).

"... If they want teachers to work more, then they pay them more. Not just one teacher works hard, the entire teaching staff does. For example, a bonus weekend vacation in a hotel for the teaching staff to renew batteries instead of being reprimanded all the time..."

9.4 CONCLUSIONS

The second research question dealt with the differences between the two groups of teachers - the treatment group and the control group. The findings described above point to two main topics: the differences in teaching-learning

methods used by the teachers from both groups, and the different approaches, opinions and beliefs of the teachers. From the point of view of work in the field, only several differences were found between the two groups. The treatment group used (on the average) a greater variety of teaching-learning methods. In addition, teacher-centred methods proved to be the most popular in both groups.

The more marked differences were observed in the outlooks of teachers from both groups. Teachers from the treatment group expressed satisfaction in meeting the needs of their pupils, in diversifying their teaching methods, in getting refreshed and updated. However, teachers from the control group were skeptical regarding the possibility of implementing the alternative methods, they showed a lack of faith in pupils' abilities to take responsibility and work independently, and were doubtful as to the level of effectiveness of methods which were not teacher-centred.

These differences between the two groups of teachers implied two contrasting directions or points of view of the teacher's role and the teaching approach regarding knowledge transmission compared to learning facilitation, or the instrumental approach compared to the developmental approach (Kember and Gow, 1994; Keiny, 1994). The instrumental approach places achievements as its main objective and assumes that the teacher's role is to convey comprehensible and defined bodies of knowledge to the pupil. The pupil is the passive knowledge absorber and the teacher is responsible for developing a diverse range of teaching methods in order to effectively convey the knowledge. Contrarily, the developmental approach deals with the learning process and perceives the teacher's main role as developing his pupils into becoming learners. This approach deals with the interaction created by the active learner with his environment and emphasises the teacher's responsibility in developing a meaningful encounter between the learner and the knowledge (Kember and Gow, 1994; Keiny, 1994; Elbaz and Keiny, 1993; Gorodetsky, Hoz and Keiny, 1993).

It should be remembered that the teacher's perception of his role is not just a cognitive concept. It is based on concepts developed by the teacher during his professional development, but is also anchored in his basic beliefs, values and instructions regarding the learner, the learning and teaching processes, the knowledge, the educational and social objectives, and is also greatly influenced by expectations of the environment (Margalit, 1985; Gorodetsky, Hoz and Keiny, 1993).

Ambiguity in the perception of this role may cause uneasiness, tension and conflict within the environment, which in turn transmits feelings of dissatisfaction. It could be that the course to which only treatment group teachers were exposed made a contribution towards clarifying and defining the teacher's role during the period of change, and therefore, these teachers differed from the control group teachers in terms of their satisfaction level. The course may have urged the participants to research their work and rebuild their pedagogic knowledge, even if, at this stage, they had not implemented essential changes in their work.

The pedagogic knowledge acquired in the course, even if it did not lead the teachers to make meaningful changes, perhaps reduced anxieties and helped the treatment group teachers to not feel threatened. In comparison, the control group teachers expressed opposition to new teaching methods which apparently emanated from their feelings of insecurity as well as threats to their self-esteem and their value in the eyes of others.

In both groups, the teachers felt that they were developing and changing and weren't just stagnating. It appears that the two groups perceived this development differently. This subject will be elaborated in more detail in the interpretations chapter.

Chapter 9 focused only on the differences between the treatment group and the control group in the relevant areas of the research. As may be seen, there were almost no significant differences between both groups of teachers. An analysis of these findings and the findings of Chapter 8 will

be made in the next chapter.

After reviewing the findings, it will be possible to reflectively study the methodology in general, and the different research tools in particular.

This research deals with the "treatment" given to a group of teachers, but is not a classic research whereby a situation is studied before and after treatment. In this case, the situation was studied only after the treatment, i.e., after teachers participated in a special course on alternative teaching methods. Accessing a broad population (including different types of teachers who differed in their teaching methods also before the course) and comparing them to a control group should have provided data enabling a description of the existing situation and attempts to explain it.

A type of research strategy called "triangulation" was used in this research. Research methods were combined due to the need, on the one hand, to rely on the many findings (requiring quantitative collection methods), and, on the other hand, to maintain the authenticity and character of these findings. Reconstruction of the use of the different tools reveals the problems involved in combining the different methods:

a. The course curriculum was analysed based on the curriculum description (a method leading towards the quantitative direction). Ethically, the elements of time and place (the researcher did not work at Oranim and resided for several years outside of Israel) enabled a more objective analysis than might have been made had she been involved in the course planning and operation.

b. The classroom observations provided information as to what and how much was being done. Their objective was to provide preliminary information in response to the question "If and to what extent were the methods learned in the course implemented?"

Observation is a data collection method whereby the researcher directly observes a specific social behavior. In a qualitative research study, the researcher remains for a long period of time among the research subjects.

His identity is known to and accepted by them, and they get used to his presence and to the fact that he is recording and taping everything that is going on around him. The advantage of observation is that it directly studies the situation being researched and does not rely on testimonies or documentation. This advantage was also exploited in this research study.

On the other hand, the researcher carrying out the observation influences, through his presence, the behavior of the research subjects. For this reason, and due to the large number of research subjects, it was not possible to remain for a great length of time in each class.

In addition, since observation is a social process, there is a danger that a researcher's opinions and perceptions might influence the material he is collecting. Therefore, use was made of the time dimension to describe the methods used in the classes. The observations focused on the amount of time devoted to each teaching method, and using the time dimension, a picture of the situation in the field was obtained. The data collected were more valid due to the objectivity of the measuring tools. However, their disadvantage lay in the fact that they showed no indication of the quality of the activities or the considerations guiding the teachers. Through interviews held following the observations, answers to these issues were provided.

c. Interviews were held both with head-teachers and teachers. The interviews took place following the observations and were structured in nature. Open interviews took place with head-teachers and teachers from both groups. They focused on the research topic; the interviewer used the knowledge acquired in previous interviews and attempted to determine whether the conclusions that she had formulated for herself valid in light of the testimonies from the new interviews.

The main advantage of interviews is the direct relationship that is created between the researcher and the research subjects. The face-to-face interview enabled a direct investigation of the research questions and did not just settle for testimonies from a second research tool. The researcher

found this research tool to be the most fascinating one used. With each interview, her ability to create a close relationship with the interviewees improved. Therefore, differences might be observed in the data collected from the initial interviews and from subsequent interviews. In addition, all of the interviews were carried out by the researcher herself, thus eliminating the problem of inter-personal reliability. This fact also had a notable disadvantage – it limited the size of research population interviewed and required considerable time. In order to overcome these problems, structured interviews and questionnaires were used.

An analytical tool was developed in the pilot stage to analyse the interviews and the open questions in the questionnaire, which proved to be quite effective. Based on the abundant findings and during the data processing stage, the tool relating to the word as the researched unit appeared to be clumsy and ineffective. Therefore, the analytical unit was expanded, and statements by the research subjects were analysed according to the subject they dealt with. Quantitative tools were used to organise the findings to avoid adversely affecting the "spirit" of the statements (another example of combining quantitative and qualitative tools).

d. The questionnaire was initially planned to be the main research tool. The questionnaire enables easy access to a large number of research subjects, can include a great deal of questions, and is very reliable. Tremendous efforts were invested in developing a questionnaire that would include every aspect of the content relevant to the research. A preliminary version was distributed to a group that did not participate in the research. Prior to formulating the final version, the questionnaire was distributed to a group of experts in Oranim who made helpful suggestions.

To summarise the findings, the main concepts discussed in the research will be presented in the form of a "concept mapping." This technique, called the Concept Structuring Analysis Task (CONSAT), presents opinions, positions and thoughts of a research subject regarding a group of concepts. The

arrangement of the concepts and the lines drawn between them, their possible division into sub-groups, the verbal explanations of the relationships between them, and definitions of the concepts - they all represent the cognitive aspect of the research subject. Thus, concept mapping reveals the way in which an individual understands a group of concepts related to a specific subject (Champagne, Hoz & Klopfer, 1985).

The mapping summarises the main components brought up by the research subjects relating to the research questions and the relationships between them. The relationships revealed problems which, in the opinions of the research subjects, were the cause of the minor implementation of the material learned in the teacher training course.

Figure 14 illustrates concept mapping - the factors accelerating and delaying the introduction of change and the relationships between them as revealed by the responses of the research subjects.

Figure 14: Concept Mapping - the factors affecting change and their relationships (drawn by the researcher based on research findings and the ConSAT technique)
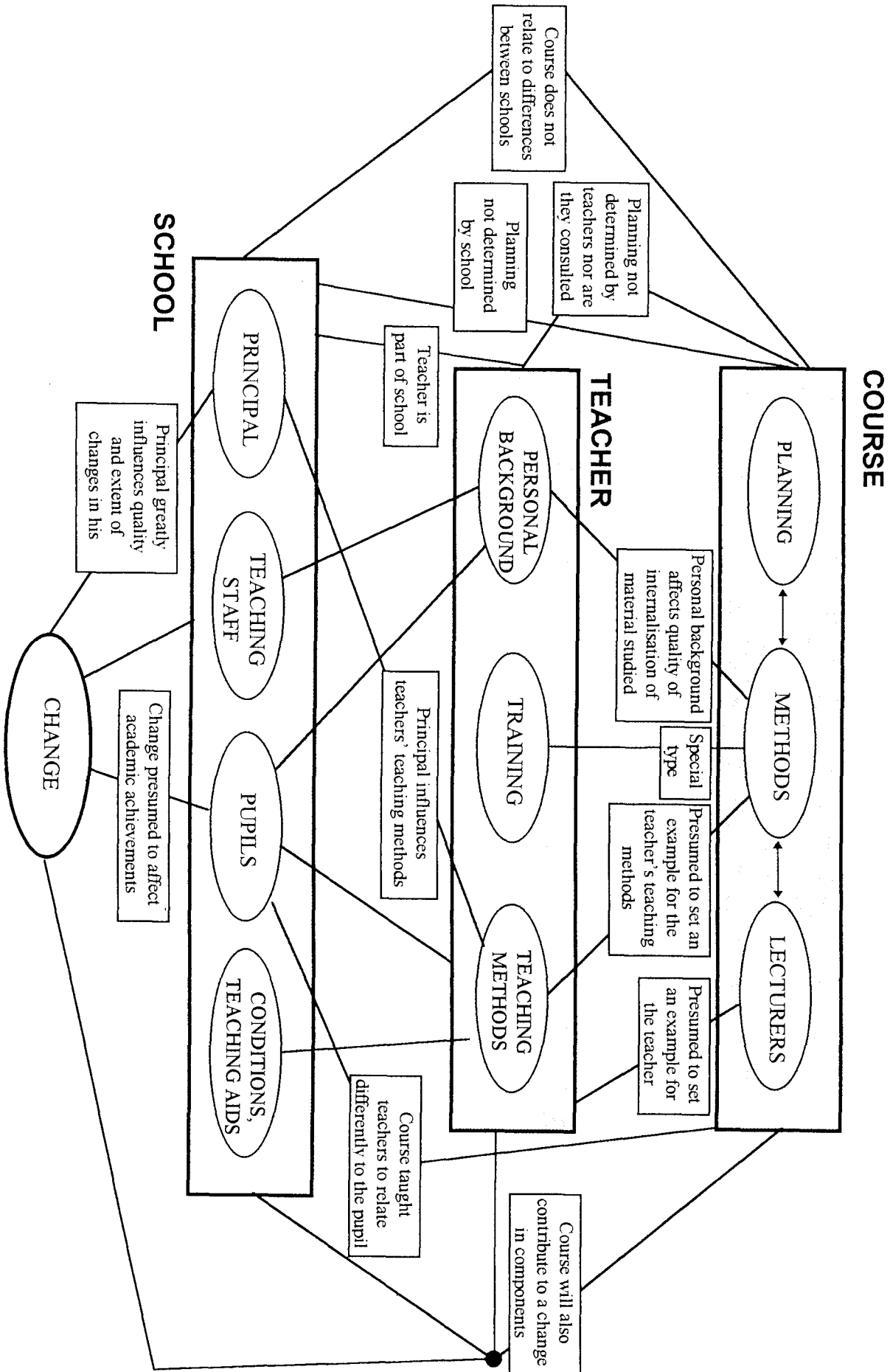
CHAPTER TEN: DISCUSSION AND INTERPRETATION OF THE FINDINGS

This chapter discusses the findings described in Chapters 8 and 9. The discussion of the findings is structured around several foci, as will be seen later.

Although this chapter deals with the conclusion of this research study, there was a need to include the literature and other means (such as concept mapping) in it. These details were neither reviewed in the literature survey nor in the other chapters. However, at the end of the research, when a better picture of the situation in the field was obtained and new insights were developed, the need arose to combine them to arrive at an optimum level of generalisation possible for a case study. These additions (such as Kurt Lewin's comments) were perhaps perceived as irrelevant in the previous chapters but served to be very helpful here.

This research documented an attempt to introduce change in teachers' working methods in several Israeli schools through the use of teacher training courses (INSET).

This sentence covers several important elements, each of which plays a vital role regarding the level of success (or failure) of this attempt, including: the concept "**change**" and the ways of introducing it, **teacher training courses, teachers' work methods**, and **Israeli schools**.

The research focused on the teachers' work and how they and their head-teachers perceived their teaching roles and work.

The positions, opinions, and work methods revealed from the questionnaires, interviews and observations evidence a complex reality which may not be decisively interpreted, and it is impossible to point an accusing finger at one factor or another.

In his field theory, Kurt Levin (1951) related to man's "life space." According to Levine, man's "life space" is composed of man himself and his psychological environment as <u>he</u> perceives it. Every type of behavior

(thoughts, actions, aspirations, values, etc.) are perceived to be a change in his situation in the field in a set period of time. The space is composed of "cells" each of which differ in content within the same space. Therefore, for an increase in the number of cells in the space, the heterogeneity of the space also increases, thereby increasing the chance of friction occurring within the space, but to the same extent, increasing the chance of change.

The space is in a state of equilibrium whereby there is a balance between the powers. If a lack of this equilibrium occurs, a great investment of energy in power struggles and activities will result, distracting man from his main objectives.

In this chapter, an attempt will be made to relate to the different components in the teacher's professional "life space" and to investigate how the different "cells" influence the quality of his work.

The discussion of the findings will focus on:

a. The teacher and the process of change.

b. The teacher and the teacher training courses in Oranim.

c. The teacher and the school.

d. Oranim and the school.

10.1. THE TEACHER AND THE PROCESS OF CHANGE

As previously mentioned, the main research question investigated by this research dealt with the extent to which the teachers changed their teaching methods and how they explained the extent of this change. For this reason, the concept "change" is shown to be independent in the mapping, and the arrows show how the other concepts are related to it.

It is understood that when dealing with change, we are dealing with a process and not a single event. The process of change is a dynamic and complex one, involving cognitive aspects (perceptions, knowledge and thoughts), affective aspects (emotional and social, as well as positions), and

practical aspects (learning-teaching behaviors). There are periods of development as well as periods of apprehension and frustration in this process (Hall & Hord, 1987). During the research, the teachers seemed to feel that they were undergoing a process of change but the application aspect was insignificant.

This fact suggests the need to relate to different levels of change: **first-level change** occurring in the given system, including change from one action to an other without having the system itself undergo change; and **second-level change**, creating a new framework for and interpretation of the reality (Watzlawick, Weakland & Fisch 1996). During the research, almost no change whatsoever was observed on the second level. Changes in the level of use of different teaching methods for the sake of diversity were observed, but practically no changes were observed in class structure, schedules, relationships to different students, etc. This fact relates to the system approach claiming that change may only be introduced in the school if a change will occur in the system, and not a change which occurred with an individual teacher (Bolam 1983, Hopkins 1987, Levine 1991, Lieberman 1992, Purkey & Smith 1983, Taylor & Levine 1991). In addition, after interpreting the research findings, it is impossible to only accept this explanation, and so the factors both preventing and accelerating the introduction of change must be investigated more thoroughly.

The findings show that the teacher's personality (his perceptions, positions, opinions and feelings) plays a central role in choosing his teaching methods and in his decision to change them. Different teachers will respond differently to the same teacher training course and the same reality in the school, such as an attempt by one teacher to enthuse other teaching staff, or the obstinacy of another teacher to use a certain method even without cooperation by other teaching staff, or a third teacher's "giving up" and returning to the conventional teaching method.

The introduction of change in the classroom and the school may pose a challenge, but apparently not all teachers who participated in the training courses felt this way. Changes in the educational system are related to what the teachers think and do, but every teacher has his own perception of his position and brings with him his own life experience. Therefore, these perceptions determine, to a great extent, if and how the change will be implemented (Sikes 1996, Wideen 1996).

The teachers' relationship to change is expressed on two different levels: the relationship to initiating the change (for example, Who initiates it? To what extent is the change imposed on the teacher?); and the relationship to the expected results following the introduction of change. There is a difference between both groups of teachers on both levels. Opposition to the imposed change is understandable. Teachers are required to change their work methods according to decisions made by bodies external to the classroom and sometimes to the school. The requirement for change is often perceived as impossible or unsuitable, adversely affecting the autonomy and the teachers' professional freedom, hinting that what the teacher had accomplished to date was not good (Sikes 1996). The control group also expressed a lack of faith in the expected results of the change, further strengthening their opposition to imposed change. However, the research group expressed an awareness of the need for change, which contributed to their ability and desire to accept new pedagogical methods even if the change was imposed on them.

Therefore, a differentiation between the two groups of teachers regarding the need for change was made. The research group expressed awareness of and a desire for change, particularly in order to fulfill the needs of the pupils. The control group expressed a lack of faith in teaching-learning methods which differed from the traditional method, and dissatisfaction from the fact that that an external body, unfamiliar with the classroom situation, imposed the change upon them. From this we see that the teacher training course made an important contribution, at least with respect to the teacher's awareness.

In addition, no change was observed (nor reported) regarding second-level change in teaching-learning methods used by the majority of teachers from both groups. Therefore, in order for an intrinsic change to occur, it is not enough that the teacher is aware that this change must occur and he must change at the same time. This teacher is faced with different types of obstacles to change (external and internal to the educational system), some of which will be reviewed later. Presently, we will deal with the internal obstacle - the teachers' beliefs and opinions.

Based on the fact that different teachers respond in different ways, the assumption arises that for the same classroom and school situation, their "life space," perceptions of reality, and beliefs and opinions will differ and consequently their responses.

In general, teachers have two types of opinions in the field of education: those related to specific activities, and those belonging to an ideology. The opinions and beliefs of teachers emanate from different sources, both incidental and systematic. They are designed by unique circumstances characterising the teacher's personal development and by the special events and processes he experiences (Floden & Huberman 1989). A new teacher entering his classroom has already filled many relevant job positions (i.e. youth movement instructor, private tutor, etc.). The experience he has accumulated from these jobs, in addition to his experience as a student, creates preconceptions regarding the essence of teaching. After the training course, he formulates his own beliefs and opinions. In time and with accumulated teaching experience, his beliefs and opinions are influenced by many other factors, one of which is teacher training courses (Thomas 1997, McLaughlin 1990, Hollingsworth 1989). In light of the fact that a teacher's beliefs and opinions have a resounding affect on his position, it is only natural that part of these beliefs may encourage or prevent the introduction of change. A teacher's willingness to adopt innovations in teaching and the quality of implementation of new methods in the classroom will be influenced by his beliefs.

As previously mentioned, many control group teachers openly expressed a lack of faith in the new methods. Research group teachers expressed the need for change and understood that they must find teaching-learning methods which differed from the traditional method, but they tended to attribute the lack of change to external bodies. It is understood that external bodies have an influence and this issue will be discussed later, but it appears that if a teacher's perception of his objectives and his role would be different, he would adopt different teaching methods.

Research studies made in Israel show that many teachers do not encourage the use of pedagogical methods about which they are uncertain if they will improve pupils' academic achievements (Chen et al. 1990, in Hebrew; Rich 1990). The system of beliefs and opinions championing only academic achievements do not form fertile soil for the development of special pedagogical programmes involving social and other components. In Israel, the subject of achievements, in general, and success in matriculation examinations, in particular, have a tremendous influence on the entire educational system, already starting at primary school level. The subject of achievements is only implied in this research, mainly by the control group. Responsibility felt by the teachers regarding their pupils' academic achievements is related to this. Apparently, a teacher feeling a serious personal responsibility towards a pupil's advancement will invest time and energy in learning and trying out new pedagogical strategies. If he doesn't do this, he may believe that these strategies have no chance of having an influence, or he may not believe that he has the ability to introduce change. In this research, the problem of teacher efficacy was prominent. The teachers expressed a lack of faith in their ability to introduce change. Research group teachers felt that their ability to introduce change and make improvements was limited by external bodies. In addition, control group teachers were also skeptical about their personal ability (in terms of knowledge and skills) in using the new methods in their classes.

In conclusion, it may be said that in the "life space" of the teachers studied, from their point of view, there are elements over which the teacher feels he has no control. Because of the responsibility he has for his pupils' achievements, he prefers to use methods over which he has control and knows he can implement. In order for him to change the essence of his work methods, he must risk giving new interpretations to the reality around him, to be convinced of the effectiveness of the new methods proposed to him, to believe that he himself is capable of introducing change and bringing about improvement, and to get the support from bodies outside of his control. Many teachers felt that these "conditions" did not exist in the "field." The few who described the unique way they had chosen reinforce the assumption that the teacher's personality and locus of his control (internal or external) has a great influence on the level of changes he uses and on his self-confidence to introduce change.

10.2. THE TEACHER AND THE TEACHER TRAINING COURSES IN ORANIM

The "treatment" provided to teachers in this research with the objective of introducing change in their work methods was through teacher training courses held in Oranim. The courses were held once a week over a period of one year. If teacher education may be defined as follows: "A process of life-long training and personal development, during which teachers and teacher educators are exposed to new ideas and practices with the ultimate aim of improving self-esteem and professionalism" (Thomas 1996, Thomas 1997), then training courses in Oranim represented a starting point. The course participants were exposed to new ideas and even gained some experience in using them which contributed to their understanding of the need for change and of their desire to introduce change. The teachers' expectations were to update and diversify their

repertoire of teaching methods and techniques, and based on their testimonies, these expectations were fulfilled.

In order that use of these teaching methods be systematic, consistent, long-term and not just incidental, an additional component in the training courses is apparently required. Based on remarks by the interviewed teachers, the missing links are related to a lack of association with the system from which the teacher comes, as well to the individual teacher's formulation of his point of view.

Entire teaching staffs did not participate in these courses, rather individual teachers from different schools. They all attended an identical course which involved the presentation of examples, making visits, and discussing events which occurred in the different schools. Over and above this, no attention was paid to the teacher's individual needs, neither during the course preparation stage, during the course itself, nor afterwards when each teacher returned to his class. On the one hand, the teachers themselves were satisfied with the course content, but on the other hand, after elaborating on the reasons for their difficulty in implementing the material studied, they also commented on a lack of attention paid to their unique reality and a lack of follow-up during implementation in the field.

The course content also did not relate to the teacher as an adult, for whom teaching is only one part of his life. The course participants also differed in terms of "life cycle" stage and their perceptions of the teaching role (the teacher as a provider of skills, the teacher as a cultural attach', the teacher as an improver of their pupils' academic achievements, etc.). the course paid no attention to differences among participating teachers.

Regarding formulation of an educational point of view, it must be remembered that the participating teachers were adult students. An adult student studies courses out of choice. He arrives at the course of his choice with experience and clear cognitive structures. If we would take advantage of the adult student's experience, determine the participants' needs and

apply them when formulating the course content, depart from the cognitive structure and deepen our understanding, then there would be a greater chance to internalise knowledge and skills and perhaps also a change in positions. This course was not planned in such a way.

Another fact to be taken into consideration is that many teachers participate in training courses with the objective of finding answers to problems they encountered in their classrooms. They expect to immediately implement the material learned. They review the course programme based on the criterion of the extent of their ability to immediately implement the material in their classes. The course planners, aware of the teachers' needs and of their desire to fulfill them, place great emphasis on practice. The planners' basic assumption is that by practicing using teaching methods and techniques, a change in teachers' behavior in the classroom will occur. This change will result in a change in pupils' achievements and behavior, which will consequently result in a change in teachers' positions and beliefs. Research findings show that the course did not provide enough to bring about a real change in teachers' behavior.

As explained in the section entitled "The teachers and the process of change," the term "real change" refers to a second-level change, that is, a systematic change of teaching-learning methods, a consistent change based on a clear educational perspective. This is expressed in all levels of the learning class: the level of organisation (physical layout of the class, organisation of the didactic material, organisation of time, etc.); the level of educational tasks assigned to the pupils; the level of the teacher's role; the level of the pupils themselves and the skills (academic and social) which they are required to use; and the level of communication within the class. Real change cannot take place on one level only (only in the type of tasks given to the pupils, for example), and it involves a gradual process which occurs simultaneously in all of the above-mentioned levels.

As previously mentioned, the course perhaps represented a starting point. The "dose" of theory and practice was satisfactory for the participants over the short-term during the course, but not over the long-term when the teachers were required to implement the methods in the classroom while making their own considerations and applying problem-solving processes. Problem-solving processes and reflective thinking could have contributed to making an improvement, but the course did not train the teachers for this.

There may be no room to deal with teachers' values, beliefs and opinions in a course of this nature, which, as mentioned, represents the first step in the process of change. If so, objectives and expectations should be structured accordingly. The question remains open as to whether a change in teachers' beliefs and positions could occur as a result of a change in their behavior, or whether a change in their behavior could occur only as a result of a change in their positions.

The above will be taken into account in the conclusions section.

10.3 THE TEACHER AND THE SCHOOL

In literature on education, the claim is continuously repeated that effective treatment depends on a teacher encouraging the pupils' achievements in the class, and on the environment and activity taking place in the institutional organisation of the school. One of the most notable conclusions made is that the school's success in encouraging academic achievements depends on reciprocal relations between the systems. There is a greater chance for intervention by educational frameworks to succeed when they work within the overall school framework when the school is perceived to be a social system in which every change in one of its components has consequences on the performance of the entire system (Deal & Peterson 1990, Hopkins 1987, Taylor & Levine 1991, Levine 1991, Clift et al. 1990).

As previously mentioned, individual representatives from different schools participated in the training courses. When each teacher returned to his respective school, he tried to implement what he learned, based on his understanding of the material studied and according to his particular class situation.

In response to the question as to what factors accelerate and what factors delay and impede implementation of new pedagogical methods, the participants made strong references to the particular school where they worked. The concept of "school" covered work conditions, especially from the point of view of place and time, but the greatest emphasis was placed on the teaching staff and the head-teacher. Lack of team work was perceived by the research subjects to be one of the main factors preventing the introduction of change. "Team work," as described by responses from the research subjects, is cooperative work by the teachers between themselves and the head-teacher, allocation of job positions, each staff member's contribution according to his ability and skills, each staff member's feeling of obligation, and multi-directional interpersonal communication. That is, a team that works together in performing pedagogical tasks represents a support group for its members. A large number of participants felt lonely. Lack of a partner was felt in the distribution of work loads as required by the new methods, and especially in terms of giving advice and getting feedback.

Traditionally, teachers were seen to be autonomous; teachers' classrooms were their castles, and they were not expected to participate in school-level decision-making. The implication of school effectiveness and improvement research is that this is no longer acceptable. The isolation typical of most classrooms did not provide a good setting for change and professional development (Stoll 1996).

The group setting is a powerful vehicle for bringing about change but with the qualification that certain characteristics must pertain for a group setting to be effective. Certain norms, beliefs, expectations, and support are needed

within that group setting for any change to occur. But in addition, such beliefs and expectations must revolve around instructional matters that those both inside and outside the group see as important (Wideen 1996).

A group in the school is composed of the teaching staff and the head-teacher. During team work, the teachers and head-teacher adopt and internalise certain accepted norms and perceptions. The norms, beliefs, opinions, and expectations within each teacher's school are actually the product of the "school culture" where he works.

Culture is not itself visible, but is made visible only through its representation. It consists of the beliefs, values, and norms which govern 'what is of worth to this group and how the members should think, feel, and behave'. At the school level the culture is known by the working relationship that teachers have with their colleagues inside and outside the school, by their words, and behaviors (Fullan & Hargreaves 1996, Siks 1996, Grimmett & Crehan 1996).

Research studies showed that the subjective perception of the educational staff and personal impression of each individual within the environment of the academic institute, the influence of the head-teacher's leadership and management style, and the individual's feeling of the accepted processes and actions within the institute determine the actual level of academic achievement in the classroom (Purskey & Smith 1983, Zak 1981).

In most schools in which this research was carried out, the belief is that the teacher must "stand on both feet" without the help of others, and the teacher should not "invade" another teacher's class nor "host" colleagues in his own class. The teacher must not show weakness, neither to his pupils nor to his colleagues. The teacher's success is measured by his pupils' achievements and by his ability to cope. The value at the crux of this belief is the importance of success without help, and the teacher's privacy and independence. The norms developing from these beliefs and values are the individual work of each teacher, minimal communications, and a feeling of loneliness.

In addition, the introduction of change is related to "school culture." If the contribution of change is unclear, if change is perceived to require considerable investment of time and energy, if it is unsuitable or hints that what has been done up until now is not good, it will be contrary to "school culture," that is, "to the way we do things."

It is understood that several cultures may exist in one school, but the majority of research subjects encountered work norms and characteristics of a team, causing them to feel lonely.

The head-teacher could have a great influence on "school culture" and most of the research subjects made reference to his vital role. Head-teachers perceive their roles in different ways. Some focus on the administrative aspect, others focus on the school environment and interpersonal relations, even others focus on programmes or a pupil's development (Leithwood 1996). As in the case of other organisations, two opposing needs come into conflict in the school: the first, normal ongoing activities; and the second, renewal. Most of the teachers described the head-teachers as devoting most of their time and energy to the school's operation and to maintaining the existing situation; only a few initiated innovation. Most of the interviewed head-teachers did not take part in studying activities, in localising the changes taking place inside and outside of the school, in analysing new policies, or in preparing new operational programmes. They dealt with the school's ongoing operation. In order for a head-teacher to succeed in introducing changes, he must understand and be convinced of their importance and increase the awareness of his teaching staff regarding expected results of the change. For him to achieve what he perceives to be right and good, and not just what appears to be popular, he must have foresight, confidence, and internal strength. These features were not prominent among most of the head-teachers who were interviewed or described in this research.

"Maintaining the existing situation" on the part of the school head-teachers might be effective under relatively stable conditions when changes are clear, regular and expected. In the Israeli educational system, these conditions are

extremely rare since this system exposed to perpetual change: changes in pupil population as a result of waves of immigration; cut-backs in teaching hours and job positions; cancellation of certain course subjects; introduction of new technologies; revival of previously dormant bodies such as parents, the community, etc. Therefore, most of the head-teachers described in this research did not adapt thought and leadership patterns conforming to this changing reality, and did not encourage their teaching staff to introduce the changes required by this reality.

This fact leads to the conclusion that head-teachers must be consulted regarding their new perception of the school and re-examining their goals and the educational processes taking place. The head-teachers, in effect running the school system, must be convinced that the objective of continuity of culture (by introducing the pupils to the heritage and knowledge of previous generations) and the objective of providing an opportunity to every pupil to tap his full potential both now and in the future, are not contradicting objectives.

The Israeli reality, ever-changing in all walks of life, poses a challenge to the educational system. The head-teachers and teachers must develop a great deal of autonomy in order to enable them to function properly, including in threatening and changing situations. To this end, a special training programme should be developed both for the head-teachers and for the teachers.

10.4   ORANIM AND THE SCHOOL

As previously mentioned, this research is based on a teacher training programme for teachers from northern Israel which were planned by and operated in the Oranim School of Education. Israel, being such a small country, has different schools reflecting, to a certain extent, different population groups - Arabic/Jewish, religious/non-religious, veteran/immigrant, rural/urban, high/low socio-economic levels. The schools differ with respect to physical conditions, policies, work methods, etc.

It should be noted that in Israel, contrary to many other countries, rural schools were pioneers in using teaching methods which differed from the traditional method. These schools relied at the outset on the paides center approach and research methods of investigation, holding activities, learning about the environment, etc. This research also reports that rural schools use more diversified teaching-learning methods than urban schools. This unique phenomenon is typical of many aspects of life in Israel whereby the rural sector proved to be the pioneer, but this phenomenon is common only in the Jewish sector. The Arabic sector exhibited a converse phenomenon. In many places, rural schools suffered from neglect, both in terms of physical and pedagogical conditions, whereas urban schools prospered. Historical social research may be attributed to the problems of minority groups in the country, as well as to the differences between Christian and Muslim groups in the Arabic sector. This subject will not be elaborated on here, rather emphasis will be placed on the differences between the schools.

As previously mentioned, the training courses offered to teachers barely touched on these differences. Over and above the difficulty in implementation brought up by this fact, the relationship between the school and Oranim must be investigated: Is there a partnership? Is this a buyer/seller relationship? Or is it perhaps another type of relationship?

The concept of "partnership" in the context of the educational system relates to the process of sharing between an academic institute and a school. The joint objective is to improve the quality of teaching, to contribute to the teachers' development, and to jointly find a solution to problems for which each separate body has difficulties in solving individually. The assumption is that through collaborative research and problem-solving, it is possible to discover better ways of working (Thomas 1996, Hake 1993, Watson & Fullan 1996).

This research does not deal with initial teacher training, rather with INSET. This fact is significant in understanding the collaborative aspect of partnership.

In initial training, emphasis is placed on the school as a place for gaining practical experience. Schools require good teachers, and in order for the academic institute to train good teachers, it requires schools. In order for practical experience to achieve its goals, the institute is interested in improving its schools to the same extent that the schools are interested in developing its teachers (by the way, the schools did not always recognise their responsibility for providing a place for teachers to gain practical experience).

When referring to INSET, the picture changes slightly. The partnership takes place only when the two sides involved realise the inherent potential of collaborative work. The responses of the research subjects in this study do not describe a profile of real partnership. Not all of the teachers and head-teachers who were studied fully realised Oranim's ability to contribute to their development and enrichment. Some perceived Oranim as an institute isolated from work in the field, and hence, its contribution was irrelevant. Others who realised Oranim's ability to contribute to their knowledge, give advice and develop their confidence, felt that they were not benefiting from the contribution, at least not at the level that they could. The head-teachers reported that Oranim's experts did not come to visit the schools nor contribute from their wealth of expertise to each school based on its individual needs. The head-teachers also claimed that in planning the courses in Oranim, no attention was paid to the needs of the school, nor were they consulted during this stage. The participating teachers claimed that Oranim offered the training courses but was not responsible for implementation in the field.

Oranim tries to offer relevant training courses to meet the needs in the field and to have the course participants benefit from the know-how and experience of its experts. The course programme described in this research was planned according to the perception of Oranim's staff in meeting the needs in the field. However, the "field staff" were not involved in the planning stage, no preparation work for the course was made, and no type of follow-up was offered to the course participants. This is not a real partnership. The issue of

supply and demand applies here - Oranim needs the course participants in order to exist, and the schools "supply" the participants. In order to attract participants, Oranim tries to offer an attractive programme, but is not responsible for the results that may develop afterwards. Attractive programmes ensure providing compensation to the participants (in the form of a degree or a salary increase here in Israel), bringing in renowned lecturers and advisors, and the teaching of subjects perceived by the teachers to be relevant to their daily work. Course planners and administrators do everything in their power to fulfill the participants' expectations (by arousing their interest, by renewing old teaching methods, by stimulating them, by using modern didactic aids and materials, etc.). All this must be included in the programme itself. Upon completion of the programme, the teacher is often highly motivated to try out the new methods he has learned in his class but finds himself alone. Those same experts who stimulated him so greatly during the programme are not available now during the critical preliminary stage when he desperately needs their support. Sometimes he tracks them down; sometimes he finds other supporters and advisors. The findings of this research show that the teacher very often feels alone in the system. He may perceive the programme's contribution to be negative - it caused him to feel frustration and failure. He is unable to implement the material he has learned, and by returning to the secure methods which he had been using previously, the programme may now perceived to be a failure.

Head-teachers and teachers tend to perceive their profession as a "practical" profession and understate the value of theory, but professional development requires a combination of theory of "super-thought." Although every teacher faces an individual situation, he will respond to it in a professional manner if he is aware of his responses, if he uses reflective thinking about the events, and if he applies known processes and problem-solving methods. An evaluation process is made on levels of: planning, action, data collection, thought; then revised planning and action over

and over again. This type of process provides the teachers and head-teacher with tools for improving the practical aspects of their teaching. Reflective thinking contributes by improving their successive actions. Oranim's staff have the know-how and skills which could help schools in using processes of this type and advance the teachers, and result in improvements in the schools themselves. Academicians could also contribute by exposing teachers to new ideas, methods and programmes. For this help to be actually given, it is important that Oranim's staff realise the benefits they themselves could derive from this type of partnership. The school, for example, could serve as a broad basis for action research and draw the academic institute closer to actual events.

This field of research is still in its infancy in Oranim. The majority of lecturers are unaware of the schools' raw potential, more than just being a place to offer practical experience to its new teachers and "supply" students for the different courses.

A partnership must develop gradually and involve full cooperation during each and every stage, but mutual recognition of the unique contribution of each partner must exist. This is still not the case in the situation being researched.

CHAPTER ELEVEN: CONCLUSIONS AND RECOMMENDATIONS FOR IMPLEMENTATION AND FUTURE RESEARCH

11.1 INTRODUCTION

This research study had two main objectives:

1. To investigate the suspicion that Oranim course graduates are not implementing the material learned in the course in their classes. This was noticed by the researcher and her colleagues during their visits to numerous schools. The first objective of this research was to more systematically investigate if this feeling reflects reality.

2. To investigate how teachers and head-teachers explain the reality described above, that is, how they explain their ability (or inability) to implement new methods, techniques and didactic means learned in the course in their classes.

The first objective was examined both by reviewing the reality through observations, questionnaires and interviews, as well as by making comparisons to work methods and opinions of teachers who did not participate in the course. The second objective was examined through interviews and questionnaires.

The main research findings show that the course participants differ from their colleagues who did not participate in the course with respect to their level of awareness of the need to implement change, and their familiarisation with diverse teaching-learning methods. The two groups of teachers actually work in a similar fashion. The main explanations provided by the teachers for this were: lack of follow-up by an expert after the course; lack of cooperation by the school's teaching staff; and insufficient preparation in order to cope with their unique reality during the course.

11.2 CONCLUSIONS

These findings lead to the following conclusions:

a. The course, in its current format, fulfills its objective of enriching a teacher's repertoire of teaching methods. It is unable to force the teacher to introduce a systematic change in his work, and certainly unable to prompt a process of change in the school. In relating to the course's influence (Hopkins, 1989) we could say that it contributed to the levels of Awareness (realising the importance of area and focusing on it), Concepts and Organized Knowledge (concepts provide intellectual control over relevant content), and Principles and Skills (tools for action). However, the course did not affect the participants with respect to the level of Application and Problem-Solving (transferring the concepts' tenets and the skills to the classroom).

b. Communication between schools and the academic institute is limited. It is often of a buyer/seller nature and frequently exhibits a lack of faith and appreciation on both sides. "Field" staff perceive Oranim to be an "Ivory Tower," distant and incapable of solving real problems; academicians diminish the value of "field" staff as colleagues and professionals (operative suggestions are detailed in section 'e' below).

c. A teacher's personality and the way in which the teacher perceives his professional environment strongly influence the way a teacher will take advantage of the knowledge he acquired in the course.

d. There are advantages and disadvantages to the fact that individuals from different schools participate in the same course: on the one hand, the encounter enriches the participant and enlightens him regarding new

possibilities and coping skills; on the other hand, it contributes to the teacher's feeling of loneliness in his school and the belief that things taking place in another school are unfeasible and irrelevant in his school.

11.3 RECOMMENDATIONS FOR IMPLEMENTATION

In order for the course to contribute towards achieving long-term goals, several changes must be introduced in both the course and the overall system:

1. Additional communication channels should be opened up between Oranim and the schools. For the schools to be more reflective, for Oranim to have closer connections with work in the field, and for collaborative work to take place, then a partnership must be established. In light of the current situation, creation of a partnership must be a gradual process, starting with mutual recognition and joint small-scale projects. This requires a developmental dialog between the field and the training programme which would strengthen the involvement, the partnership, and the initiative of the field in the programme.

2. A typical joint project could be planning a course of the type researched here. It must be based on localising the needs in the field. Oranim's staff must visit the schools and together study their needs for which they may provide answers without giving up on subjects important to them. This study could present the different needs, taking into account the difference in character of the schools. Different types of training courses should be planned based on the different needs determined. In addition, the possibility of offering training courses to groups of teachers from interested schools and not just to individual teachers must be investigated. Ideally, these groups should include only those teachers who feel that the course represents an initial stage in the process of introducing change, and who are

willing to take responsibility for continuing the process in the school. It is highly recommended that the school head-teacher join the group of teachers from his school. In existing head-teacher training courses, the course planners must pay greater attention to the aspect of formulating school policies and introducing change. That is, the training programmes must be structured based on evaluation and dialog, with the objective of responding to the specific needs of the course participants. Fulfilling these objectives requires the involvement of various organisational structures (school groups, local groups, regional workshops, etc.).

3. A different "dose" of theory and practice should be tried during the course planning stage. Teaching methods and holding workshops could still be included, but greater clarification as to positions and beliefs should be added as well as formulating an educational point of view. Each teacher should check the methods to be taught in light of the positions he has formulated. In addition, it is important to provide the teachers with reflective thinking and problem-solving skills, as well as with tools to carry out action research. The training courses must be structured in such a way that the teachers can make choices, work in small groups, and carry out tasks based on revelation and independent investigation in the "field." That is, the focus of the course must be on "reflective instruction" leading to "reflective teaching," both of which are a type of research in practice (Schon, 1988). At the center of reflective teaching lie surprise, wonder, lack of the "right answer," ambiguity, and the belief that there are several ways of thinking about every problem. Reflective teaching contradicts the school culture supporting the system of "right answers" which the teachers must suffice to teach and the pupils suffice to learn. Therefore, it may cause embarrassment and anxiety for the teacher, and have him use defensive strategies. The teacher training programme in its new form must train the teachers and encourage them to use reflective teaching. Through

advice, criticism, description, demonstration and posing questions, the course participants and advisors can help one another apply the programme in practice. The teachers will use their teaching profession as raw material for research, the objective of which is to promote their professional development. The course advisors will guide the teachers to think of the problems which arise from several aspects, to analyse their choices of specific strategies and not of others, to analyse their responses and the responses of their pupils, etc. The programme advisor can direct them to apply reflective thinking by posing questions, but the questions may be asked only if suitable documentation is available. Time should be devoted to instructing and obliging the participants to document their work as a base for training programmes in general, and reflective research in particular. Actually, this requires a change in approach regarding knowledge. Knowledge, at least in part, will be created using the joint processes of individuals in the field and individuals from Oranim. The documentation and creation of knowledge during the teacher training programmes will represent a source of reflection, control, planning of improvements, and dissemination of knowledge to others. The development of a "research culture" as an integral part of the learning processes of the training programme is required.

4. Oranim must also be responsible for continuing the process. The courses offered in Oranim only serve as a starting point in the process of introducing change. Afterwards, Oranim must follow-up in analysing the problems by using additional information, through instruction, by establishing support groups for teachers, etc.

11.4 RECOMMENDATIONS FOR FUTURE RESEARCH

Oranim must further develop the research field, especially research which could affect activities in the classrooms, in the schools and with respect to teacher training. Examples of research topics arising from this work include:

a. The influence of a teacher's personality or his "field perception" of the use he makes of the material studied in the course.

b. Investigating the effectiveness of two different models: the model of change in teachers' beliefs and opinions as a result of a change in their behavior, as opposed to the model of change in teachers' behavior as a result of a change in their beliefs and opinions.

c. The initial teacher training programme must be reviewed regarding the extent that it actually deals with beliefs, opinions and perceptions of the new teacher, that reflective thinking and problem-solving skills are developed among an experienced teacher, and that a teacher is prepared for an encounter with "school culture." Mention must be made here that not all teachers participating in teacher training courses received initial training in the same institute, and, as in the case of Israeli schools, there are also many differences in Israeli teacher training colleges.

d   The measure of effectivity of the training programmes among teachers and in schools of different sectors in Israel.

e. The relationship between the perception of the teacher's role and his ability to change his teaching method.

f. Follow-up of the teachers who are themselves researching their teaching profession.

11.5 CONTRIBUTION OF THE RESEARCH

The contribution of the research is firstly of a practical nature. The research evokes the need for rethinking the system of "college-field" relationships in general, and the researched programme structure in particular. The research findings have already been brought to the attention of individuals in Oranim dealing with teacher training programmes. The researcher has started to form a team of programme coordinators who will be in charge with brining about a change in the stricture of the programmes and make them suitable for work in the field. The findings will be submitted to Oranim's management with the objective of implementing them in the development of a dialog with the field..

This research is a case study and, as such, can serve as a pilot for a more extensive research study in all Israeli colleges, in which training programmes of the type studied here are offered, or for several subjects which were just briefly mentioned and not developed as described in Section 11.4:

Being a case study, this research poses several general questions:

* The researched training programme tried to convince the teachers that there is no one correct teaching method for every situation, for every class, for every pupil, and for every subject. For example, cooperative learning and mastery learning are strategies ensuring the improvement of learning quality, but each has its advantages, disadvantages, and conditions best suited for use. Together with this, the Israeli reality shows that in many cases, the intervention of the initiator of change and innovation of one strategy succeeds in bringing about change. However, the basic assumption of programme planners must be reexamined. Perhaps an extensive focus on a specific strategy must be the first stage to motivate the system into being much better suited for the year 2000?

* An additional axiom on which the course curriculum (and actually the research as well) is based is that traditional teaching (teacher at the centre) is no longer suitable. This axiom is based on many research studies and on

the educational viewpoint which places the pupil and his needs at the centre. The research findings show that teachers use this strategy very often and feel secure with it. Course graduates also returned to using this method when they encountered difficulties. Perhaps one should relate to this axiom as an assumption and investigate it from a new point of view, disregarding all basic assumptions of this type?

* In addition, the traditional teaching method is referred to here and in numerous studies as a teaching method whereby the teacher is at the centre. Is the teacher really at the centre? The teacher, in fact, directs the learning process, but neither his needs nor personal desires are the basis for consideration (in most cases). The teacher mostly abiding by this method also places the needs of his pupils at the centre. Despite all that has been previously mentioned regarding the difficulty of the heterogeneous class and the ever-changing requirements of the educational system in all walks of life, perhaps this teaching method should be reexamined, disregarding all prejudicial judgement?

* In reviewing the findings, the fact that different teachers internalised the material studied in the course at different levels was mentioned, from a level of awareness only to an ability to convey the material to the class (ability to implement). What may be deduced from this? Should the teachers be classified according to their level (awareness, knowledge of the material, skills and ability to convey the material) and work differently with each group? Should a meaningful change be expected only among teachers at a specific level? If so, what is this level and how can one maintain it?

In light of these findings and the criticism voiced in Israel about the quality and level of teachers (for example, the claim that high-school graduates attaining only mediocre achievements turn to the teaching profession), perhaps the entire concept of teaching training prior to and during their work should be reconsidered?

Assuming that the teachers absorb the new knowledge by filtering their previous beliefs and the concepts which they had formed during their professional development, and that these concepts have cognitive components as well as emotional components (Shechtman & Or, 1996; Mosenthal, 1995; Tillema, 1994; Pintrich, 1990, Pajares, 1992), a stronger relationship to the emotional aspect may be made. Training programme planners relate to the teachers' needs in terms of their knowledge and skills, but must also relate to their sensitive needs, their anxieties, and their uncertainties.

These issues were brought up with different bodies both internally in Oranim (experts dealing with in-service and pre-service teacher training) and externally (school advisors, head-teachers and teachers). The issues require rethinking and in-depth discussion on every topic related to teacher training. However, already at this stage, presenting the findings was almost like a "revelation" to individuals dealing with teacher training programmes and others who were, until now, very satisfied with their teaching methods, their curricula and even their pupils' achievements. They later understood that they had to redefine and restructure.

It is interesting to note that even though the research dealt with in-service teacher training, the implications regarding pre-service training were clear. For example, it was found in the research that teachers often used the traditional teaching method in their classes, whereby the teacher was at the centre of classroom activity. These teachers had internalised this teaching-learning method during their 12 years of formal schooling, and most of the subjects they had studied during college were in this way. Is it at all possible to change the perception of a teacher's role and behaviour which has been internalised for such a long, critical period of time?

If the work method in Oranim will not change during the preliminary teaching stage, it will be extremely difficult to change it later on.

This idea, even though it appears obvious, is not simple. Oranim is in the throes of the academisation process and, as a result, is becoming increasingly

similar to a university regarding class size, choice of lecturers (there is no demand for teachers having work experience in primary schools, for example, rather for those on a master's degree level), as well as regarding students' requirements (more emphasis on academic achievements and less on practical work). That is, Oranim's teachers are not only unfamiliar with diverse teaching methods, they are also unable to teach using a method differing from the lecture format owing to the large number of students.

This is also true of in-service teacher training programmes, which, from the point of view of the Ministry of Education and Culture, are mostly programmes with the objective of attaining a B.Ed. degree.

On this subject, a gap exists between Oranim's management who is interested in "academic recognition" and cost-effective highly-populated classrooms, and between the lecturers and instructors who are supposed to train the teachers.

An additional example is the subject of implementation. This research shows that in order for the training programmes to indeed be effective in terms of introducing change into the teachers' work methods, the course provided by Oranim is not enough. Course content, processes and time organisation must be implemented during the programme. Flexible and diverse "time windows" are needed to meet the individual and group needs, as well as theoretical teaching and practical experience. The college, as it functions today, does not enable this type of work - the structured timetable, the classrooms available to teachers for a set period of time, and even the requirement for a numerical grade at the end of the training programme all make it very difficult. Without "modelling," it is hard to convince the programme participants to at least try out new methods.

An additional problem implied in this research is the fact that the teachers are inundated with different types of requirements. This problem is typical of the Israeli educational system regarding projects which are threatening to turn the system into a victim of its own method. Schools are flooded with new curricula following the best marketing rules: well-defined course content,

impressive graphic design, professional development programmes. In particular, they ensure a hefty budget, as expressed in the addition of school hours. A school having no new programmes considers itself to be inferior to its neighbours. When a new Minister of Education and Culture or General Director comes into power, normally the programmes also change, and even before one programme has been implemented, another comes along and takes its place.

Under these conditions, teachers have difficulty in implementing projects which they have launched, and are very often forced to report on imaginary successes and to cover up the failures, even if this is against their principles.

Oranim at this stage does not carry out an open dialog with schools, and does not help teachers and head-teachers to cope with this problem. Just the opposite; regarding teacher training programmes, Oranim conveys the message to schools that they must change and get up-to-date, but does not help them to clearly define their objectives and adapt curricula to these objectives.

Oranim does not help teachers and head-teachers ward off the "project mentality" and sometimes even adds to the confusion. Very often, Oranim itself is not up-to-date.

These are only some examples of the problems covered by this research. An internal dialog will first be required between the different bodies at Oranim. These bodies are currently being pulled in different directions and are conveying different messages to its students.

If this research will trigger a joint discussion between these bodies, this will be a considerable achievement.

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APPENDIX 1

"ALTERNATIVES IN TEACHING" COURSE AT THE ORANIM SCHOOL OF EDUCATION

1. INTRODUCTION

1.1 Programme Description

The programme described herewith is a unique INSET programme taking place at the Oranim School of Education of the Kibbutz Movement in Israel. This is a year-long course, held one day a week between the hours of 8:30 am and 15:30 p.m. The course is part of an extensive and varied array of INSET courses offered by the School's Studies Department, which promotes its courses through "The Institute for Improving Teaching Methods" (details in Section 2).

1.2 Target Population

The course is aimed at qualified primary and intermediate school teachers having at least two years of teaching experience. The course is open to Jewish and Arab teachers, from urban and rural schools, graduates of Oranim and other colleges, teachers on sabbatical, and working teachers who attend one day a week courses.

The prerequisite of two years of experience was instated based on the assumption that a newly qualified teacher is not yet ready to acquire new methods of teaching or practice new skills. A teaching certificate is required as a necessary minimal common denominator of participants (a highly heterogeneous group), i.e. common language and terminology acquired during previous study periods. All applications, however, are equally considered and in some cases, teachers who are not qualified are admitted.

1.3   Admission

Prospective applicants fill in a formal questionnaire issued by the Department of Training in the Department of Education. An admission committee (comprised of the Head Inspector of INSET in the northern region, the chief coordinator of courses in the School, and the course's leader) then reviews the applications and proceeds with interviewing suitable applicants. The list of participants is finally determined based on the interviews.

1.4   Requisites

a.   Participants must attend no less than 70% of classes in each term.

b.   Participants are required to take part in at least two of the list of tours on offer.

c.   Participants must submit exercises and essays required as part of the course programme.

d.   Participants are required to take active part in classes and workshops.

1.5   Benefits

The course participants are entitled to INSET allowance and additional B.Ed. credit points.

2.   BACKGROUND

Oranim is a comprehensive teachers' training college, offering a variety of training courses for educators and school teachers at all levels. Oranim was founded by the Kibbutz Movement in Israel with the view, originally, to train educators and teachers for the unique educational system of the Kibbutz Movement, but today, it is open to all interested.

In 1974, the Institute for Improving Teaching Methods was founded within the School. The aim was to bring into effect the idea of continuously training of teachers and improving teaching methods.

Following is a brief description of developments in the Institute. The stages described are crucial to the understanding of the reasons behind the birth of the "Alternatives in Teaching" course. Initially, in a gradual process spanning over eight years, the following divisions were established within the Institute.

2.1 Educational Technology Division (est. 1974)

In its initial stages, this division was assigned the task of assisting teaching staff in the school. The basic premise was of using 'educational technology' as a teaching aid and incorporating it into the classroom. The aims were to:

a. Minimise tutors' resistance to applying technology in education.

b. Teach and guide them to include the technology appropriately.

c. Develop their awareness of the possibilities, roles and disadvantages of technology so that they could train young teachers accordingly.

The Division developed gradually, introducing the following elements:

a. Documentation, i.e. using close circuit television to document classes/lectures and using the edited material for teaching purposes.

b. Conducting classes in educational technology in the Institute.

c. Guiding courses' participants as well as tutors in the educational technology room, outside formal course hours.

d. Lending out audio-visual equipment.

e. Recording radio and television programmes at the request of teachers, to improve and enrich classes.

f. Ordering and showing films at the request of teachers.

g. Photocopying reproductions (books, pamphlets, etc.) at the request of teachers.

The Division's activities are currently being curtailed. It no longer initiates activities or holds classes. Its main role now is lending out and recording material, as well as documenting classes using closed-circuit television. The "Alternatives in

Teaching" course makes use of the Division's audio-visual equipment and its video library.

2.2 Development of Teaching Programmes Division (est. 1975-1977)

The objective of this Division was to promote the involvement of tutors of the Institute in activities aimed at the outside. The programmes were unique in that Oranim, affiliated to the Kibbutz Movement, had a distinct ideological identity and had accepted Rogers' approach claiming that the teacher must not be a sterile means of communicating knowledge from one generation to another, but an individual who is prepared to present and argue his/her case in different areas of life (Giladi, 1988).

The Institute undertook the task of promoting advisory boards that would prepare specific teaching programmes, in areas such as history, from an integrative stance, e.g. new ways of teaching subjects such as the Holocaust, the Arms Struggles and the establishment of the State of Israel, the Kibbutz, Equality of the Sexes, etc.

The programme were unique in that a special effort was made to extend the personal involvement of the pupil, to develop his/her critical thought process, and to involve him/her, as much as possible, in assimilation processes and decision-making. The programme mess were requisitioned by schools, Educational Departments of the Kibbutz Movement, the Ministry of Education, etc. They filled certain "gaps" in the general teaching programme and offered specific teaching programme where required.

Due to lack of resources and other difficulties, the Division's activities are currently very minimal. The course under discussion uses part of the Division's material for exercise, programme analysis and teaching resources.

2.3 Working Teachers Courses Division (est. 1976-1979)

This Division was established based on the notion that training during work is a necessary second stage, directly linked to the first stage of qualifying (Hadomi, 1982). Structurally, the Division was divided into two: the office for INSET for educators and teachers of the Kibbutz Movement, and the north regional centre for INSET courses of

the Ministry of Education. The Division was created in response to the special needs of teachers of the Kibbutz Movement.

Gradually, however, the number of special INSET courses for teachers of the Kibbutz Movement were reduced and today, hardly any are taught. The course illustrated here, was originally aimed at teachers of the Kibbutz Movement.

The Division offers a large variety of courses, catering to a multitude of needs. Teachers are not party to the planning of courses material, but work practices and subject matters are at times adapted to participants' requirements and as a result of feedback at the end of a course (term).

2.4 Teachers Centre (est. 1980-1982)

This Centre was set up with the aim to minimise aspects and interpretations of frontal teaching and to constitute a climate of integrative teaching in schools, covering all the different levels and the variety of subjects it deals with.

The Centre was to cater both to students at Oranim and to teachers from "the field," deploying the following schemes:

a. Display of learning materials, teaching strategies and teaching aides, as inducements to creating an active learning atmosphere in the classroom.

b. Display of alternative teaching activities, with the emphasis not on the "selling" but on the methodical principles to which activities should be suited, within the specific circumstances in the classroom.

c. Offer equipment and materials with which teachers can work individually and create learning and teaching work practices.

d. Promote required aptitudes in teachers in areas of assessment and choice of teaching materials and teaching strategies out of the options on offer.

e. Organise different events aimed at creating opportunities to exchange opinions, experiences etc. among the centre's students.

Within the Centre itself there are a number of active sections such as Nursery Schools and Grades 1 and 2 (primary), Grades 3-6, English, Music, Geography, etc.

The course often uses materials and displays in section 3-6, and some of the workshops take place in the section itself and are structured around its display.

2.5 Computers in Education (conceptualised 1982, est. 1984)

In accordance with a resolution of the Ministry of Education, a new strategy for the teaching of computer literacy in the top classes of primary schools was devised. Here, there was a definite shortage of teachers, manuals and other didactic materials. It was suggested that the Division for Improving Teaching Methods would be instrumental in training teachers in subjects of computer sciences and at the same time, in improving teaching resources and materials. Today, the Centre offers INSET courses for teachers, in general, and for students of Oranim.

In the course under discussion, an attempt was originally made to incorporate computer studies and actual computer work as part of the class. This practice was soon dropped due to the vast differences in attitudes and abilities between the students.

The information in this Chapter was compiled based on conversations with colleagues at Oranim and on a study carried out by Mrs. Yona Granot (1993).

3. BACKGROUND AND RATIONALE OF "ALTERNATIVES IN TEACHING"

As previously mention, Oranim had been offering specific courses aimed at teachers of the Kibbutz Movement. Up until recently, the School was rather small in size, situated on the Kibbutz and run by members or teachers hired by the Kibbutz. The schools had particular curricula, structured around the Kibbutz way of life (communal) and its ideology, incorporating both social and cultural aspects of the Kibbutz. Teachers (Kibbutz members), unlike their colleagues outside, did not take sabbatical leaves in a regular fashion.

Oranim offered the Kibbutzim a year-long training course for teachers. Teachers were invited to participate in the course either once weekly or several days a week, depending on the school's requirements. The once a week course took place at the

Teachers Centre (see Section 2.4), and covered topics of learning to understand and master new methods and strategies in teaching, deliberating mutual problems brought up by teachers, and examining new didactic material and teaching subjects. The course leader was an experienced pedagogic consultant of the School staff, assisted by the Centre's professional teachers. The programme included guided tours of particular schools, and guest lectures on various subjects, some at participants' requests.

Time brought on changes both to educational strategies in the Kibbutz and to courses at Oranim. Due to shortages of financial and human resources, as well as other social and economical problems, most schools in the smaller Kibbutzim have amalgamated into large regional schools. These have tried, and are still trying, to preserve their distinctive character, but are no longer an offshoot of the Kibbutz body. On the other hand, problems that beset schools outside the Kibbutz such as large heterogeneous classes, pupils and teachers of different backgrounds, restricted contact with parents, and at the same time, an ever-increasing demand to achieve government targets and improve standards, have all placed teachers in a vastly different environment to which they were required to adjust. Oranim, too, had to make similar adjustments, and offer more and more combined courses (Kibbutz teachers and others) financed by the Ministry of Education. The demand for a course in "Alternatives in Teaching" came from two sources:

a. **Inspectors and Head-teachers,** who saw didactic activity at schools as stagnant and demanded alternatives and diversity. They understood the need to train teachers in a variety of methods which will not serve as neutral but calculated and specifically designed tools in order to establish purposeful learning.

b. **Teachers** who felt the need to improve and renew working practices in order to provide better answers to a growing heterogeneous pupil population. Many teachers remarked on their lack of knowledge and confidence in implementing new and varied teaching/learning methods. Others pointed out that they implement different teaching/learning methods (i.e. group work, learning centres, individual work etc.), but that in many cases there was no proof of

purposeful and efficient learning, since time was being wasted on trivial matters, pupils found it difficult to explain what was gained from an activity and how it related to the previous or the general topic. These teachers felt that the diversity itself was undermining the learning process.

The ever-growing demand, together with the consensus that there was no longer a need for a particular course for Kibbutz teachers, brought about a new way of thinking on the nature of the course, and resulted in a newly designed programme which would be open to all teachers of the educational system.

The process of designing the present formula of the course (on which the research is based) will be further illustrated in Section 5).

4. "ALTERNATIVES IN TEACHING" - AIMS

4.1 Participants will be able to analyse teaching predicaments along the different factors: class organisation, learning task, pupil's behaviour, teacher's behaviour (based on Sharan, Hertz-Lazarowitz, 1984; in Hebrew).

4.2 Participants will learn to understand the need of appropriating the four different factors and the problems misappropriation may present.

4.3 Participants will be exposed to a wide range of teaching/learning methods.

4.4 Participants will get to know and interpret the advantages and disadvantages of the methods introduced, and will examine appropriate occasions to implement them in practice.

4.5 Participants will analyse the educational theory behind each method.

4.6 Participants will be able to plan a teaching unit (a sequence of classes in a particular subject) using different teaching methods.

4.7 Participants will be able to explain the pedagogic notion behind their particular design.

4.8 Participants will feel confident about varying their teaching practices with the aid of a range of teaching/learning methods suitable for their class.

5. DESIGNING THE COURSE

5.1 The designing team of the course included the north regional inspector of INSET courses (Ministry of Education), the coordinator of INSET courses at Oranim and pedagogic instructors from Oranim who specialise in alternative teaching methods.

The design team addressed the following principles:

5.1.1 Combining the theoretical and the practical, i.e. training in teaching methods not by "dictating a formula," but by offering a theoretical basis relevant to the students' requirements.

5.1.2 Teaching which would explicate the subjects taught, i.e. "practice what you preach."

5.1.3 Realistic analysis of the field's requirements and choice of methods applicable to an Israeli school, taking into account its particular characteristics (large classes, a demanding and crammed teaching programme, parents' pressures etc.).

5.1.4 Convincing students that changes are indeed workable, through visits to schools that have tried and succeeded in implementing changes.

5.2 Based on the principles above, the design team prepared a model in the form of a workshop, as follows:

a. **Concrete practice**: Participants put into practice the method taught. Example: When group work is taught along the T.G.T. (Teams-Games-Tournaments, established by DeWaris and Edwards and developed by Slavin), participants study the method through the method itself. If classes take place in teaching centres, participants practice within these centres subjects such as Design of the Centre, Tasks Suitable for teaching centres, etc.

b. **Thought and consideration of new circumstances**: Participants assess their experience i.e. observe difficulties and problems, note satisfactory elements

and new aspects they have discovered, bring up questions still unanswered, etc.

c. **Planning Application in consolidating general rules and terms**: Participants discuss and debate suitable occasions for implementing the method in their classes. In the next stage, participants will try to implement the method and report to others on their success/failure.

d. **Conclusions**: Participants formulate the educational notion behind the method and assess its advantages and disadvantages.

5.3   The first few workshops were test-run with students (not yet qualified) at Oranim and at single INSET courses outside the School.

Following the initial trial, some additional elements were included in the course's programme me:

a. Methods of assessing students and the material taught

b. Extended theoretical basis of the curriculum planning

c. Focus on communication skills and the creation of a positive learning climate

5.4   THE FINAL DESIGN INCLUDED THE FOLLOWING:

a. Workshops in alternative teaching/learning methods - 3 hrs.

b. Assessment and appraisal in education - 1 1/2 hrs.

c. Theoretical basis in curriculum planning - 1 1/2 hrs.

d. Practice in communication techniques - 1 hr.

6.   EXAMPLE OF A TEACHING METHODS WORKSHOP ACTIVITY

6.1   Introduction

Following is an example of a teaching methods workshop activity. The activity involves viewing a video film showing four teachers using different teaching methods

in their classes. The teachers in the film speak Hebrew, but even a non Hebrew-speaker would be able to understand the problems presented in the film. Four different teachers were shown (in stages) in the original activity. In this activity, an example of only one teacher is presented. This example was chosen since, in addition to it representing one of the course materials, it illustrates a paramount problem common in many classes throughout Israel in which new teaching methods have been introduced.

The video was filmed entirely in a regional village school. The school had undergone processes of change, particularly with respect to teaching-learning methods. The film selection shown here shows a geography lesson in which the class is discussing the subject of maps. In a previous lesson, each pupil drew a map (sketch) of his/her village. In the filmed lesson, the class is organised into work groups. Their task is to compare the village map which each pupil drew with a topographical map of the region in which the pupils live.

6.2   Objectives of the Activity

1. Participants will be able to analyse teaching predicaments along the different factors: class organisation, learning task, pupil's behaviour, and teacher's behaviour.

2. Participants will learn to understand the need of appropriating the four different factors and the problems that misappropriation may present,.

3. Participants will be able to analyse the teacher's intervention in the learning process using given criteria.

4. After the activity, participants will be able to analyse their behaviour in their classes based on a model analysing the behaviour of the teachers appearing in the film.

6.3 Criteria for Analysing the Teacher's Intervention in the Learning Process

The criteria developed by the course planners were:

a. Goals of the Intervention - Why does the teacher intervene in the learning process?

Examples of possible goals: intervention in order to focus the pupils in terms of content, to raise their level of thinking, to examine them, to encourage them, to expand their knowledge, to teach them to differentiate between essential and trivial information, etc.

b. Means of Intervention - What means does the teacher use during his intervention - verbal or non-verbal?

Points that should be related to: for verbal means - tone, flow of speech, amount of speech relative to the pupils', duration of the thinking process, etc.; for non-verbal means - facial expression, hand movement, body movement, position (sitting, standing over the pupil, etc.)

Other points: duration of the intervention, intervention through movement, intervention in another location, nearby or far away.

c. Timing of the Intervention: When does the teacher intervene in the learning process?

Examples: before, during and after the activity, when disciplinary problems arise, when difficulties arise, when the pupil needs feedback or support, etc.

d. Initiation of the Intervention: Who initiates the teacher's intervention in the process?

Samples of possible initiators: the teacher, one pupil, a group of pupils, an external body such as the head-teacher.

e. Organisation of the Intervention: How is the teacher's intervention organised?

Possible examples: regarding the individual, the pair, the group, the entire forum.

6.4 The Activity Proceedings

As previously mentioned, the video film served as one of the means used in the course. The stages of activity were:

a. In the entire forum: presentation of criteria to be analysed using slides. The participants were requested to suggest examples from their experiences for each criterion presented.

b. Division of roles: each participant was requested to choose two criteria on which he would focus during the observation. The participants stated their choices so that it would be possible to verify that each of the criteria be examined.

c. Observation of one teacher.

d. In the entire forum: responses by the participants in an open discussion.

e. In groups: analysis of the teacher's intervention in the learning process according to the given criteria.

f. In the entire forum: summary of the analysis through group reports.

6.5 Main Points in Analysing the Situation Presented in the Film According to the Given Criteria

a. Goal of the Intervention - The teacher intervened in the pupils' work when a difficulty in understanding the task arose, when it appeared that there was a need to expand the pupils' knowledge, and when the pupils tried to relate their findings to their previous knowledge, both for the purpose of conceptualisation and for getting feedback on the process.

b. Means of the Intervention - the observed teacher's flow of speech and slightly grating tone caught the attention of the observers. The teacher talks a great deal (relative to the pupils), asks many "ping-pong" questions, and some of her interventions actually turn the group work into a 'teacher at the centre' type of lesson. In some cases, the teacher sits with the group. In others, she looms over the pupil and as such, illustrates the problematic nature of this position. The amount of time which the teachers spends with the group of pupils is relatively long with respect to the overall amount of time devoted to the activity. She is not

only unavailable to see what is going on in the other groups, she also controls the group's work, in effect directing a process which was supposed to be independent.

c. Timing of the Intervention - the teacher gives instructions prior to the activity, is very involved in the pupils' work during the activity, and also directs the final discussion.

d. Initiation of the Intervention - the pupils appealed to the teacher when the task was not properly understood and when differences in opinion arose regarding one of the findings. Most of the inventions were initiated by the teacher in light of what she heard and observed while passing in between groups.

e. Organisation of the Intervention - most of the interventions seen in the film relate to the group.

6.6   Main Conclusions Regarding the Activity

a. The film presents an illustrative example of lack of conformity between the different levels: the learning task was directed to self-study work by the pupils. In order to fulfill the task, the pupils had to apply academic and social skills. The teacher, who was supposed to encourage his pupils to work independently, instead directed them, thereby preventing from coping independently with the task.

b. Many teachers, out of a desire to enrich their pupils, flood them with verbal content, far exceeding the pupils' ability to absorb all the information. Observation of the teacher appearing the film reminded the participants of many situations in which they acted in a similar fashion.

c. Using group work in the class requires a change in the teacher's perception of his role. As long as the teacher is uncertain that without his intervention, the pupils will not attain the achievements that he expects them to attain, he will not meaningfully change his role.

APPENDIX 2: QUESTIONNAIRES

2.1 FIRST STEP

An open questionnaire was given to 10 teachers in the Israeli school in London and is described in detail below:

Dear teacher

As part of a study examining the benefits of various INSET courses on teachers' working practices, I would be very grateful if you could fill in the following questionnaire. This questionnaire will enable me to design a further questionnaire which will be distributed amongst teachers throughout Israel.

Answering the questionnaire will be extremely helpful in advancing the research and in improving INSET courses in general.

Thank you very much for your kind cooperation.

Sara

Questionnaire

1. What classes (years) do you teach? _____

2. What subjects do you teach? _____

3. Qualifications acquired at_____

4. When did you qualify (year)?_____

5. Number of years you have been teaching_____

6. Which of the INSET courses you participated in do you consider most beneficial?_____
    _____

7. Please give details of benefits of each course.

    _____
    _____
    _____

8. Please describe the main changes in your work/ideas as a result of the courses.
    At school_____

    _____
    _____

    In the classroom _____

    _____
    _____

9. Are you considering taking other INSET courses? Please give details.

    _____
    _____

10. If you were to persuade other teachers to take INSET courses, what argument/reasoning would you employ?

    _____
    _____
    _____

2.2   THE HEBREW VERSION

2.2.1   The Questionnaire for Group A

השאלון שלפניך הוא אחד מכלי מחקר, המנסה לבדוק את מידת האפקטיביות של השתלמויות המורים.

המחקר נערך במסגרת לימודי באוניברסיטת לונדון, אך מטרתו לתרום לשיפור השתלמויות המורים בארץ ולהתאמתן לצרכיו של המורה.

השאלון הוא אנונימי והשאלות לגבי נתוני הרקע האישי באות לצורך ניתוח התשובות והשוואתן עם תשובות של מורים בעלי רקע דומה.

אין בשאלון שאלות שהתשובות עליהן יכולות להיות נכונות או לא נכונות, אלא בקשה לבחור בפריטים המתאימים ביותר להרגשתכם ודעותיכם.

אודה לך אם תוכל/י להקדיש זמן קצר להשיב על השאלות.

אשמח לקבל כל תגובה, הן על השאלון עצמו והן על הנושא.

תודה מראש על שיתוף הפעולה

שרה קלימן

שאלון למורה המשתלם

1. באילו כיתות את/ה מלמד/ת? _____

2. אילו מקצועות את/ה מלמד/ת? _____

3. כמה שנים את/ה מלמד/ת? _____

4. רשום/רשמי, בבקשה, את כל ההשתלמויות בהן השתתפת ב3 השנים
האחרונות: _____
_____
_____
_____
_____
_____

5. אילו מן ההשתלמויות שרשמת בשאלה 4 תרמו לך את התרומה הרבה
ביותר? (רשום בשורות הריקות לפי הכותרת המתאימה)
תרומה רבה _____
_____
_____
תרומה כלשהי _____
_____
_____

6. נסה לתאר את תרומתה של כל השתלמות לפי הדוגמה.

<u>ההשתלמות</u>   <u>התרומה</u>
דוגמה: מנחי הורים   * כלים להנחיית קבוצות
* כלים לניתוח מערכות יחסים בין
הורים לילדיהם
* שינוי גישתי לנושא יחסי הורים-ילדים

_____

_____

_____

7. מה היו ציפיותיך כאשר נרשמת להשתלמות ב״אלטרנטיבות בהוראה״
ב״אורנים״ (רכישת שיטות חדשות, שינוי גישה, ריענון וכו׳)?

_____

_____

_____

`1-2`

8. האם התגשמו ציפיותיך לגבי התחומים המפורטים לעיל (הקף בעיגול את
התשובה המתאימה)?

`1-2`

* שיטות הוראה   כן / לא

`1-2`

* התכנים הנלמדים   כן / לא

`1-2`

* ניצול הזמן   כן / לא

`1-2`

* אדמיניסטרציה   כן / לא

* אחר (פרט/י)

`1-2`

_____ כן / לא

`1-2`

_____ כן / לא

`1-2`

_____ כן / לא

`1-4`

9. אילו תכנים ציפית לקבל <u>ולא</u> קיבלת? _____

_____

_____

_____

10. אילו מדרכי ההוראה המפורטות לעיל נראות לך היעילות ביותר
בהשתלמות ב״אלטרנטיבות בהוראה״? (סמן v בעמודה המתאימה)

שיטת ההוראה	מאוד יעיל	יעיל	לא כל כך יעיל
הרצאה	☐		
דיון	☐		
סדנה	☐		

`1-3`

`1-3`

`1-3`

שיטת ההוראה	מאוד יעיל	יעיל	לא כל כך יעיל
הנחייה אישית (מפגש אישי עם מרצה)	☐		
ביקורים בבתי"ס	☐		
אחר _____	☐		

1-3

1-3

1-3

11. באילו תחומים את/ה רואה צורך בשיפור (לדוגמה: ניצול הזמן, שיטות הוראה וכו')?

_____

_____

_____

1-6

12. באיזו דרך היית מציע/ה לשפר (רשום/רשמי בטבלה, לפי הדוגמה)?

התחום	השיפור המוצע
דוגמה: שיטות הוראה	יותר הרצאות ופחות סדנאות
דוגמה: תכנים	הפרק העוסק ב"הערכה" - אינו נחוץ
_____	_____
_____	_____
_____	_____

1-3

1-3

1-3

13. להלן רשימה של פעילויות ודרכי הוראה שונות.
התייחס/י לשבועיים האחרונים וסמן/י באיזו תדירות השתמשת בכל דרך, בעבודתך בכתה (סמן v בעמודה המתאימה).

הפעילות	כל שיעור במשך היום	מס' שיעורים במשך היום	מס' שיעורים במשך השבוע	מס' שיעורים במשך שבועיים	כלל לא
מתן הסבר				☐	
הכתבה				☐	
דיון בכתה				☐	
עבודה עצמית (דפי עבודה וכד')				☐	

1-5

1-5

1-5

1-5

הפעילות	כל שיעור במשך היום	מס' שיעורים במשך היום	מס' שיעורים במשך השבוע	מס' שיעורים במשך שבועיים	כלל לא

עבודה בקבוצות ☐

1-5

הפעלת תלמידים ☐
שונים, במשימות
שונות, באותו שיעור

1-5

עריכת ניסוי בכתה ☐

1-5

לימוד מחוץ לכתה ☐

1-5

שימוש בעזרים ☐
(טייפ, וידיאו, סרט וכו')

1-5

הזמנת ☐
"מרצה-אורח" לכתה

1-5

שילוב דרכי הוראה ☐
שונות באותו שיעור

1-5

אחר _____ ☐

1-5

14. רשום/רשמי <u>שלוש</u> דרכי הוראה/למידה אותן אתה מפעיל בכתתך
<u>בתדירות הגבוהה ביותר</u>:

1-11

א. _____

ב. _____

ג. _____

15. הסבר/י מדוע את/ה מפעיל דרכים אלו בתדירות הגבוהה ביותר
(רשום/רשמי את התשובות בטבלה, לפי הדוגמה).

<u>דרך ההוראה/הפעילות</u>	<u>הסיבה להפעלתה</u>
דוגמה: דיון בכתה	לדעתי השיחה היא הדרך היעילה ביותר להוביל את התלמידים לנקודות החשובות

16. לפניך רשימת דרכים שונות לתכנון שעורים.
סמן/י בטבלה את הדרכים בהן את/ה נוקט כאשר את/ה מתכנן את
שעוריך.

דרך העבודה	בדרך כלל	לפעמים	כלל לא

1-3

1. מתייעץ עם אדם נוסף
(מנהל, מרכז מקצוע, מורה
אחר וכו')

1-3

2. משתמש בתכניות מוכנות

1-3

3. מפתח תכנית בעצמך

1-3

4. מעלה כמה אפשרויות ובוחר
לפי הזמן העומד לרשותך

1-3

5. מעלה כמה אפשרויות ובוחר
לפי הכרותך את צרכי תלמידיך

1-3

6. מעלה כמה אפשרויות ובוחר
פעילות שיש בה חידוש וגיוון
("מה מזמן לא עשינו?")

1-3

7. מנסח מטרות ובוחר את הדרך
היעילה ביותר להשגתן, לדעתך

1-3

8. אחר _____
_____
_____

17. לפניך מספר שאלות לגבי הרגשתך לאחר שהשתתפת בהשתלמות
"אלטרנטיבות בהוראה" ב"אורנים":

א. מהי הרגשתך כאשר את/ה מארגן/ת עבודה בקבוצות בכתתך?
(הקף בעיגול את הציון המתאים על קו הרצף)

1-7

בטוח בעצמי   7 ---6--- 5--- 4--- 3 -- 2 -- 1   לא בטוח בעצמי

1-7

מצוייד בכלים המתאימים 7 -- 6--- 5--- 4--- 3 --- 2--- 1   לא מצוייד

1-7

גמיש (מתאים עצמי   7 -- 6--- 5--- 4--- 3--- 2--- 1   לא גמיש
בקלות למצבים משתנים בכתה)

ב. מהי הרגשתך כאשר את/ה מתכנן/ת עבודה עצמית בכתתך?

בטוח בעצמי   7 ---6 ---5 ---4-- 3 -- 2 -- 1   לא בטוח בעצמי

מצוייד בכלים המתאימים   7 ---6 ---5 ---4 ---3 ---2 ---1   לא מצוייד

גמיש   7 ---6 ---5 ---4-- 3 -- 2 -- 1   לא גמיש

ג. מהי הרגשתך כאשר את/ה מתכנן/ת שיעור פרונטאלי?

בטוח בעצמי   7 ---6 ---5 ---4-- 3 -- 2 -- 1   לא בטוח בעצמי

מצוייד בכלים המתאימים   7 ---6 ---5 ---4 ---3 ---2 ---1   לא מצוייד

גמיש   7 ---6 ---5 ---4-- 3 -- 2 -- 1   לא גמיש

18. באיזו מידה את/ה מרגיש/ה חופשי/ה לפעול בבית-ספרך בהתאם לדעותיך והבנתך? (סמן את התשובה על קו הרצף)

מאוד חופשי   7 ---- 6----- 5----- 4 ----3----- 2 ---- 1   מאוד מוגבל

19. כיצד היית מתאר/ת את גישתו של מנהל בית-הספר שלך לעבודתך? (הקף את התשובה/תשובות המתאימה/ות)

א. מנהל ביה"ס שלי מאפשר לי חופש פעולה רב.

ב. המנהל מדרבן אותי להכניס חידושים.

ג. המנהל מגביל ואינו מאפשר לי לפעול על פי יוזמתי.

ד. אני מרגיש שהמנהל מעריך את עבודתי.

ה. המנהל מרבה לבקר בכיתתי.

ו. אני מרגיש שהמנהל בוחן אותי.

ז. המנהל נותן ביקורת בונה.

ח. אחר _____

_____

20. השתמש/י במושגים - לחץ, לחץ רב, תמיכה, תמיכה רבה, חוסר תקשורת או כל מושג מתאים אחר, כדי לתאר את יחסיך עם הגורמים הבאים:

המפקח המחוזי _____

מנהל בית הספר _____

מורים בבית הספר _____

הורי תלמידיך _____

שתי השאלות הבאות עוסקות בדרכי ההערכה. כדי לתאר דרכי הערכה שונות נשתמש בראשי התבות הבאים:

הערכה מסכמת – ה"ס

הערכה מעצבת – ה"ע

21. באילו דרכי הערכה את/ה משתמש/ת למטרות הבאות:
(הקף/י בעיגול את הסוג המתאים)

				1-3
א. בסיום כל יחידה לימודית	ה"ס	ה"ע	כלל לא	☐
ב. להרכבת קבוצות הומוגניות	ה"ס	ה"ע	כלל לא	☐ 1-3
ג. להרכבת קבוצות הטרוגניות	ה"ס	ה"ע	כלל לא	☐ 1-3
ד. לבדיקת יכולת הקריאה	ה"ס	ה"ע	כלל לא	☐ 1-3
ה. כאשר ילדים עובדים בכתה	ה"ס	ה"ע	כלל לא	☐ 1-3
ו. בבדיקת עבודה עצמית	ה"ס	ה"ע	כלל לא	☐ 1-3

22. מה את/ה עושה עם ממצאי ההערכה?
(סמן/י את הסעיפים המתאימים)

1-3
☐

א. דן בתוצאות עם המנהל.
ב. דן בתוצאות עם מורים אחרים.
ג. מנתח את התוצאות בעצמך.
ד. מתכנן דרכים מעשיות לשיפור, בעקבות הממצאים.
ה. מתייק את הממצאים.
ו. לא עושה דבר.
ז. אחר _____
_____
_____

23. לפניך רשימת נושאים שונים הקשורים בעבודת ההוראה. השווה/השווי
את עבודתך היום עם עבודתך לפני 3 שנים ורשום/רשמי האם חל אצלך
שינוי בנושאים השונים.
(סמן ✓ בעמודה המתאימה)

התחום	לא חל שינוי	חל שינוי כלשהו	חל שינוי רב

1. בקיאות בנושאים
אותם את/ה מלמד/ת

<div dir="rtl">1-3 ☐</div>

2. הכרת מגוון של תכניות
לימודים

<div dir="rtl">1-3 ☐</div>

3. יכולת לתכנן את ההוראה
על פי יוזמתך ושיקוליך

<div dir="rtl">1-3 ☐</div>

4. הכרות עם שיטות הוראה
שונות, להוראה בכתה
הטרוגנית

<div dir="rtl">1-3 ☐</div>

5. יישום רעיונות חדשים בכתה

<div dir="rtl">1-3 ☐</div>

6. התאמת שיטות הוראה
שונות לקבוצות שונות של
תלמידים

<div dir="rtl">1-3 ☐</div>

7. הפעלת עבודה בקבוצות

<div dir="rtl">1-3 ☐</div>

8. הכרות עם דרכים שונות
של עבודה בקבוצות

<div dir="rtl">1-3 ☐</div>

9. הכרת צורת החשיבה של
התלמידים

<div dir="rtl">1-3 ☐</div>

10. מודעות לקשיי ולליקויי
למידה

<div dir="rtl">1-3 ☐</div>

11. תכנון שעור ו/או תכנון
יחידת הוראה

<div dir="rtl">1-3 ☐</div>

12. אבחון והערכת תלמידים

<div dir="rtl">1-3 ☐</div>

13. ניצול מגוון של מקורות-
מידע ומשאבי למידה

<div dir="rtl">1-3 ☐</div>

התחום	לא חל שינוי	חל שינוי כלשהו	חל שינוי רב

14. עבודתך כמורה בכתה   1-3 ☐

15. יחסיך עם תלמידיך   1-3 ☐

16. יחסיך עם הורי תלמידיך   1-3 ☐

17. יחסיך עם הנהלת ביה"ס   1-3 ☐

18. מילוי תפקידים שונים בביה"ס   1-3 ☐

19. מעמדך בביה"ס   1-3 ☐

20. סיפוק בעבודה   1-3 ☐

21. מוטיבציה   1-3 ☐

24. מתוך רשימת הנושאים בשאלה 23, רשום/רשמי את שלושת התחומים בהם את/ה חש/ה את השיפור הגדול ביותר:

א. _____

ב. _____   ☐☐☐

ג. _____

25. במבט לאחור על 3 השנים האחרונות – כיצד את/ה מעריך/ה את השינוי שחל בעבודתך המקצועית?
(סמן בעיגול את התשובה המתאימה)

א. השתפרתי באופן ניכר.   1-5 ☐
ב. השתפרתי מעט.
ג. לא חל שינוי מהותי בעבודתי.
ד. במהלך 3 השנים האחרונות חלה אצלי נסיגה.
ה. אחר _____

26. להלן רשימת גורמים שהיו עשויים להשפיע על השינויים בעבודתך
המקצועית, במהלך השנים האחרונות.
אילו מהם, אכן, השפיעו על עבודתך? (סמן בעמודה המתאימה)

הגורם   במידה רבה   במידה מסוימת   מעט   כלל לא

א. העבודה בכתה

ב. השתלמויות בהן השתתפתי

ג. השתלמות מסוימת
פרט/י _____

ד. השתלמות בית-ספרית

ה. תפקידים שמילאתי
פרט/י _____

ו. אחר _____

1-4 ☐
1-4 ☐
1-4 ☐
1-4 ☐
1-4 ☐
1-4 ☐

27. במידה וסימנת בשאלה 23 תחומים מסוימים בהם לא חל אצלך כל שינוי
– מהן הסיבות לכך?
(סמן את התשובות המתאימות)

א. אני מרוצה מהמצב הקיים ואינני רוצה לשנות.

ב. אני רוצה לשנות אך לא יודע כיצד.

ג. אני רוצה לשנות ויודע כיצד, אך לא מקבל את אישור המנהל ו/או
המפקח.

ד. אני רוצה לשנות אך לא יכול/ה לעשות זאת לבד.

ה. אחר _____
_____
_____

1-5 ☐

28. אילו נתבקשת לשכנע מורים לצאת להשתלמויות – באילו נימוקים היית
משתמש/ת?
(רשום/רשמי את נימוקיך בשורות הבאות)

_____
_____
_____
_____
_____

הרבה תודות על שיתוף הפעולה

שרה קלימן

2.2.2   The Questionnaire for Group B

1-4

1. באילו כיתות את/ה מלמד/ת? _____

1-5

2. אילו מקצועות את/ה מלמד/ת? _____

1-4

3. כמה שנים את/ה מלמד/ת? _____

1-11

4. רשום/רשמי, בבקשה, את כל ההשתלמויות בהן השתתפת ב3 השנים האחרונות: _____

_____

_____

_____

_____

1-11

5. אילו מן ההשתלמויות שרשמת בשאלה 4 תרמו לך את התרומה הרבה ביותר? (רשום בשורות הריקות לפי הכותרת המתאימה)
תרומה רבה _____

_____

תרומה כלשהי _____

_____

_____

1-7

6. נסה לתאר את תרומתה של כל השתלמות לפי הדוגמה.

ההשתלמות	התרומה
דוגמה: מנחי הורים	* כלים להנחיית קבוצות
	* כלים לניתוח מערכות יחסים בין הורים לילדיהם
	* שינוי גישתי לנושא יחסי הורים-ילדים

_____

_____

7. להלן רשימה של פעילויות ודרכי הוראה שונות. התייחס/י לשבועיים האחרונים וסמן/י באיזו תדירות השתמשת בכל דרך, בעבודתך בכתה (סמן v בעמודה המתאימה).

הפעילות	כל שיעור במשך היום	מס' שיעורים במשך היום	מס' שיעורים במשך השבוע	מס' שיעורים במשך שבועיים	כלל לא

1-5

מתן הסבר ☐

1-5

הכתבה ☐

1-5

דיון בכתה ☐

1-5

עבודה עצמית ☐
(דפי עבודה וכד')

1-5

עבודה בקבוצות ☐

1-5

הפעלת תלמידים ☐
שונים, במשימות
שונות, באותו שיעור

1-5

עריכת ניסוי בכתה ☐

1-5

לימוד מחוץ לכתה ☐

1-5

שימוש בעזרים ☐
(טייפ, וידיאו, סרט וכו')

1-5

הזמנת ☐
"מרצה-אורח" לכתה

1-5

שילוב דרכי הוראה ☐
שונות באותו שיעור

1-5

אחר _____ ☐

_____

8. רשום/רשמי <u>שלוש</u> דרכי הוראה/למידה אותן אתה מפעיל בכתתך
<u>בתדירות הגבוהה ביותר:</u>

1-11

א. _____

ב. _____

ג. _____

9. הסבר/י מדוע את/ה מפעיל דרכים אלו בתדירות הגבוהה ביותר
(רשום/רשמי את התשובות בטבלה, לפי הדוגמה).

<u>דרך ההוראה/הפעילות</u>	<u>הסיבה להפעלתה</u>
דוגמה: דיון בכתה	לדעתי השיחה היא הדרך היעילה ביותר להוביל את התלמידים לנקודות החשובות

_____

_____

_____

10. לפניך רשימת דרכים שונות לתכנון שעורים.
סמן/י בטבלה את הדרכים בהן את/ה נוקט כאשר את/ה מתכנן את
שעוריך.

<u>דרך העבודה</u>   <u>בדרך כלל</u>   <u>לפעמים</u>   <u>כלל לא</u>

1-3
☐

1. מתייעץ עם אדם נוסף
(מנהל, מרכז מקצוע, מורה
אחר וכו')

1-3
☐

2. משתמש בתכניות מוכנות

1-3
☐

3. מפתח תכנית בעצמך

1-3
☐

4. מעלה כמה אפשרויות ובוחר
לפי הזמן העומד לרשותך

1-3
☐

5. מעלה כמה אפשרויות ובוחר
לפי הכרותך את צרכי תלמידיך

1-3
☐

6. מעלה כמה אפשרויות ובוחר
פעילות שיש בה חידוש וגיוון
("מה מזמן לא עשינו?")

1-3
☐

7. מנסח מטרות ובוחר את הדרך
היעילה ביותר להשגתן, לדעתך

1-3
☐

8. אחר _____

_____

_____

11. לפניך מספר שאלות לגבי הרגשתך במצבים שונים בכתה.

א. מהי הרגשתך כאשר את/ה מארגן/ת עבודה בקבוצות בכתתך?
(הקף בעיגול את הציון המתאים על קו הרצף)

1-7
☐

בטוח בעצמי   7 ---6 ---5 --4 -- 3 -- 2 -- 1   לא בטוח בעצמי

1-7
☐

מצויד בכלים המתאימים 7 -- 6 --- 5 --- 4 ---3 ---2 ---1   לא מצוייד

1-7
☐

גמיש (מתאים עצמי 7 -- 6 ---5 ---4 ---3 ---2 ---1   לא גמיש
בקלות למצבים משתנים בכתה)

ב. מהי הרגשתך כאשר את/ה מתכנן/ת עבודה עצמית בכתתך ?

בטוח בעצמי   7 ---6--- 5--- 4--- 3 -- 2 -- 1   לא בטוח בעצמי

מצוייד בכלים המתאימים   7 ---6--- 5--- 4--- 3--- 2--- 1   לא מצוייד

גמיש   7 ---6--- 5--- 4--- 3 -- 2 -- 1   לא גמיש

ג. מהי הרגשתך כאשר את/ה מתכנן/ת שיעור פרונטאלי ?

בטוח בעצמי   7 ---6--- 5--- 4--- 3 -- 2 -- 1   לא בטוח בעצמי

מצוייד בכלים המתאימים   7 ---6--- 5--- 4--- 3--- 2--- 1   לא מצוייד

גמיש   7 ---6--- 5--- 4--- 3 -- 2 -- 1   לא גמיש

12. באיזו מידה את/ה מרגיש/ה חופשי/ה לפעול בבית-ספרך בהתאם
     לדעותיך והבנתך ? (סמן את התשובה על קו הרצף)

מאוד חופשי   7 ----6----- 5-----4---- 3----- 2 ---- 1   מאוד מוגבל

13. כיצד היית מתאר/ת את גישתו של מנהל בית-הספר שלך לעבודתך ?
     (הקף את התשובה/תשובות המתאימה/ות)

א. מנהל ביה"ס שלי מאפשר לי חופש פעולה רב.

ב. המנהל מדרבן אותי להכניס חידושים.
ג. המנהל מגביל ואינו מאפשר לי לפעול על פי יוזמתי.
ד. אני מרגיש שהמנהל מעריך את עבודתי.
ה. המנהל מרבה לבקר בכיתתי.
ו. אני מרגיש שהמנהל בוחן אותי.
ז. המנהל נותן ביקורת בונה.
ח. אחר _____

     _____

14. השתמש/י במושגים - <u>לחץ, לחץ רב, תמיכה, תמיכה רבה, חוסר תקשורת</u>
     או כל מושג מתאים אחר, כדי לתאר את יחסיך עם הגורמים הבאים:

המפקח המחוזי _____

מנהל בית הספר _____

מורים בבית הספר _____

הורי תלמידיך _____

שתי השאלות הבאות עוסקות בדרכי ההערכה. כדי לתאר דרכי הערכה שונות
נשתמש בראשי התבות הבאים:
הערכה מסכמת – ה"ס
הערכה מעצבת – ה"ע

15. באילו דרכי הערכה את/ה משתמש/ת למטרות הבאות:
    (הקף/י בעיגול את הסוג המתאים)

כלל לא	ה"ע	ה"ס	א. בסיום כל יחידה לימודית	1-3 ☐
כלל לא	ה"ע	ה"ס	ב. להרכבת קבוצות הומוגניות	1-3 ☐
כלל לא	ה"ע	ה"ס	ג. להרכבת קבוצות הטרוגניות	1-3 ☐
כלל לא	ה"ע	ה"ס	ד. לבדיקת יכולת הקריאה	1-3 ☐
כלל לא	ה"ע	ה"ס	ה. כאשר ילדים עובדים בכתה	1-3 ☐
כלל לא	ה"ע	ה"ס	ו. בבדיקת עבודה עצמית	1-3 ☐

16. מה את/ה עושה עם ממצאי ההערכה?
    (סמן/י את הסעיפים המתאימים)

    א. דן בתוצאות עם המנהל.
    ב. דן בתוצאות עם מורים אחרים.
    ג. מנתח את התוצאות בעצמך.
    ד. מתכנן דרכים מעשיות לשיפור, בעקבות הממצאים.
    ה. מתייק את הממצאים.
    ו. לא עושה דבר.
    ז. אחר _____
    _____
    _____

1-3 ☐

17. לפניך רשימת נושאים שונים הקשורים בעבודת ההוראה. השווה/השווי
    את עבודתך היום עם עבודתך לפני 3 שנים ורשום/רשמי האם חל אצלך
    שינוי בנושאים השונים.
    (סמן ✓ בעמודה המתאימה)

התחום	לא חל שינוי	חל שינוי כלשהו	חל שינוי רב

1. בקיאות בנושאים
   אותם את/ה מלמד/ת

1-3 ☐

2. הכרת מגוון של תכניות
   לימודים

1-3 ☐

3. יכולת לתכנן את ההוראה
   על פי יוזמתך ושיקוליך

1-3 ☐

1-3
‏4. הכרות עם שיטות הוראה‏
‏שונות, להוראה בכתה‏
‏הטרוגנית‏

1-3
‏5. יישום רעיונות חדשים בכתה‏

1-3
‏6. התאמת שיטות הוראה‏
‏שונות לקבוצות שונות של‏
‏תלמידים‏

1-3
‏7. הפעלת עבודה בקבוצות‏

1-3
‏8. הכרות עם דרכים שונות‏
‏של עבודה בקבוצות‏

1-3
‏9. הכרת צורת החשיבה של‏
‏התלמידים‏

1-3
‏10. מודעות לקשיי ולליקויי‏
‏למידה‏

1-3
‏11. תכנון שעור ו/או תכנון‏
‏יחידת הוראה‏

1-3
‏12. אבחון והערכת תלמידים‏

1-3
‏13. ניצול מגוון של מקורות-‏
‏מידע ומשאבי למידה‏

התחום	לא חל שינוי	חל שינוי כלשהו	חל שינוי רב

14. עבודתך כמורה בכתה

1-3 ☐

15. יחסיך עם תלמידיך

1-3 ☐

16. יחסיך עם הורי תלמידיך

1-3 ☐

17. יחסיך עם הנהלת ביה"ס

1-3 ☐

18. מילוי תפקידים שונים בביה"ס

1-3 ☐

19. מעמדך בביה"ס

1-3 ☐

20. סיפוק בעבודה

1-3 ☐

21. מוטיבציה

1-3 ☐

18. מתוך רשימת הנושאים בשאלה 23, רשום/רשמי את שלושת התחומים בהם את/ה חש/ה את השיפור הגדול ביותר:

א. _____

ב. _____

ג. _____

☐☐☐

19. במבט לאחור על 3 השנים האחרונות – כיצד את/ה מעריך/ה את השינוי שחל בעבודתך המקצועית?
(סמן בעיגול את התשובה המתאימה)

א. השתפרתי באופן ניכר.
ב. השתפרתי מעט.
ג. לא חל שינוי מהותי בעבודתי.
ד. במהלך 3 השנים האחרונות חלה אצלי נסיגה.
ה. אחר _____

1-5 ☐

20. להלן רשימת גורמים שהיו עשויים להשפיע על השינויים בעבודתך
המקצועית, במהלך השנים האחרונות.
אילו מהם, אכן, השפיעו על עבודתך? (סמן בעמודה המתאימה)

הגורם   במידה רבה   במידה מסוימת   מעט   כלל לא

א. העבודה בכתה

□ 1-4

ב. השתלמויות בהן השתתפתי

□ 1-4

ג. השתלמות מסוימת
פרט/י _____

□ 1-4

ד. השתלמות בית-ספרית

□ 1-4

ה. תפקידים שמילאתי
פרט/י _____

□ 1-4

ו. אחר _____

□ 1-4

21. במידה וסימנת בשאלה 23 תחומים מסוימים בהם לא חל אצלך כל שינוי
– מהן הסיבות לכך?
(סמן את התשובות המתאימות)

□ 1-5

א.   אני מרוצה מהמצב הקיים ואינני רוצה לשנות.
ב.   אני רוצה לשנות אך לא יודע כיצד.
ג.   אני רוצה לשנות ויודע כיצד, אך לא מקבל את אישור המנהל ו/או
המפקח.
ד.   אני רוצה לשנות אך לא יכול/ה לעשות זאת לבד.
ה.   אחר _____
_____
_____

22. אילו נתבקשת לשכנע מורים לצאת להשתלמויות – באילו נימוקים היית
משתמש/ת?
(רשום/רשמי את נימוקיך בשורות הבאות)

_____
_____
_____
_____
_____
_____

הרבה תודות על שיתוף הפעולה

שרה קלימן

2.3 THE ENGLISH VERSION

2.3.1 The Questionnaire for Group A

1. What classes (years) do you teach? _____

2. What subjects do you teach? _____

3. How many years have you been teaching? _____

4. Please list the INSET courses you have participated in over the last three years _____

    _____

    _____

    _____

5. Which of the above INSET courses do you consider beneficial?
   Great benefit _____

    _____

   Some benefit _____

    _____

6. Try and list the benefits of each course:

Course	**Benefits**
Example: Parents **tuition ?**	Techniques for group **tuition ?**
	Techniques for observing parent-child relationships
	Change in approach to the subject of parent-child relation-ships.

   _____

   _____

   _____

   _____

7. What were your expectations when choosing the "Alternatives in Teaching" course at Oranim?
   (acquire new methods, change of approach, etc.)

   _____

   _____

   _____

8. Have your expectations been met? Delete as appropriate.
    Teaching methods   yes / no
    Use of time   yes / no
    Administration   yes / no
    Other (please specify)

    _____   yes / no
    _____   yes / no
    _____   yes / no

9. Which subject(s) were not sufficiently covered?

    _____

    _____

    _____

10. Which of the following teaching methods did you find most useful?
    (Please tick where appropriate).

	Very useful	**Useful**	**Undecided**
Lectures	_____	_____	_____
Workshops	_____	_____	_____
Discussion	_____	_____	_____
One-to-one supervision	_____	_____	_____
Visiting schools	_____	_____	_____
Other	_____	_____	_____
	—	—	

11. Which areas, in your opinion, need improvement (for example: use of
    time, teaching methods, etc.) ?

    _____

    _____

    _____

    _____

12. In what ways would you like to see these areas improved?

Area	**Suggested improvement**
Example:	
Teaching methods	More lectures and less workshops.
Choice of subjects	The part on assessment is unnecessary.

_____

_____

_____

_____

_____

13. Listed below are various activities. Please refer to the last two weeks of your work and indicate how often each was used (tick as appropriate).

Activity	Every lesson in a day	Some lessons in a day	Some lessons in a week	Some lessons in 2 weeks	Not at all
Explaining the subject					
Dictation					
Discussion in class					
Organising group work					
Activating different pupils in different areas of study, in the same lesson					
Experimenting in the classroom					
Teaching outside the classroom					
Using technical aids (film, video, etc.)					
Inviting a guest lecturer to class					
Integrating different teaching methods in one lesson					
Other _____ _____					

14. Based on the list in <u>Question 1</u>, please list the <u>three</u> activities which you use <u>most often</u> in your work.

1. _____

2. _____

3. _____

15. Explain why you use the above more often than others.
(follow the example)

<u>Activity</u>	<u>Reason for using it</u>
Example: discussion in class	It is the most useful way to cover a wide subject. Teacher's intervention is essential and discussion will lead pupils towards the main issues.

_____

_____

_____

_____

16. Listed below are various lesson planning methods. When choosing one out of a number of possibilities, indicate which would be your choice.

	Always	**Sometimes**	**Never**
Consult another person (teacher, dept head, head-teacher etc.)			
Use ready-made programmes.			
Develop your own programme.			
Have a few possibilities and choose depending on schedule.			
Have a few possibilities and choose depending on your knowledge of your pupils' needs.			
Have a few possibilities and choose one which is new and exciting.			
	Always	**Sometimes**	**Never**

Decide on the aims and choose
the most effective way to
achieve them.

_____

Other

_____

_____

_____

17. Listed below are questions regarding your feelings following your participation in the "Alternatives in Teaching" course.

   a)   When you aim to organise **group work** in your class, how do you feel? Please circle your answers on the scales below.

Confident	1	2	3	4	5	6	7	Not confident
Well-equipped	1	2	3	4	5	6	7	Ill-equipped
Flexible	1	2	3	4	5	6	7	Not flexible

   b)   When you aim to organise **individual work**, how do you feel?

Confident	1	2	3	4	5	6	7	Not confident
Well-equipped	1	2	3	4	5	6	7	Ill-equipped
Flexible	1	2	3	4	5	6	7	Not flexible

   c)   When you aim to organise **formal teaching**, how do you feel?

Confident	1	2	3	4	5	6	7	Not confident
Well-equipped	1	2	3	4	5	6	7	Ill-equipped
Flexible	1	2	3	4	5	6	7	Not flexible

18. To what degree do you feel free to work according to your beliefs and understanding at your school? (please circle your answer on the scale)

Very free	1	2	3	4	5	6	7	Very limited

19. How would you describe your head-teacher's attitude to your work? Please choose the appropriate answers.

a) The head-teacher allows me a lot of freedom.
b) The head-teacher encourages me to introduce new practices.
c) The head-teacher restricts me and does not let me use my own initiative.
d) I feel that the head-teacher appreciates my work.
e) The head-teacher visits my class often.
f) I feel that the head-teacher is assessing me.
g) The head-teacher offers sound criticism.
h) Other _____

20. Please describe your relationships with the following, using one of these terms: **pressure, slight pressure, support, a lot of support, no communication, other.**

Head-teacher_____
Colleagues_____
Inspector_____
Parents _____

21. Which methods of assessment do you use - Final assessment (**FA**), Continuous assessment (**CA**) or not at all (**NA**)?
Please circle as appropriate.

a)	At the end of each study unit	FA	CA	NA
b)	To create homogeneous groups	FA	CA	NA
c)	To create heterogenous groups	FA	CA	NA
d)	To test for reading ability	FA	CA	NA
e)	When pupils work on assignments in the classroom	FA	CA	NA
f)	When checking individual work	FA	CA	NA

22. What do you do with the assessment results?
Please choose the appropriate answers.
a) Discuss the results with the head-teacher.
b) Discuss the results with other teachers.
c) Analyse the results yourself.
d) Decide on practical ways of improvement, based on the findings.
e) File the findings away.
f) Do nothing.
g) Other _____

23. Listed below are various areas of work within the school. Please compare, in each area, your work today with your work three years ago.

Please try to answer as precisely as you can, noting the different categories.

Area	No change	Some change	Significant change
1. Knowledge of subjects you teach	_____	_____	_____
2. Familiarity with a variety of teaching programmes	_____	_____	_____
3. Ability to plan teaching on own initiative	_____	_____	_____
4. Familiarity with different teaching methods for heterogenous class	_____	_____	_____
5. Application of new ideas in the classroom	_____	_____	_____
6. Adapting different teaching methods to different groups of pupils	_____	_____	_____
7. Activating group work	_____	_____	_____
8. Method/format of group work	_____	_____	_____
9. Familiarity with pupils' trends of thought	_____	_____	_____
10. Awareness to learning difficulties			

Area	No change	Some change	Significant change
11. Organising a lesson/ course of teaching			
12. Diagnosis & assessment of pupils			
13. Access to various sources of information			
14. Your activity as class teacher			
15. Your relationships with pupils			
16. Your relationships with parents			
17. Your relationships with the management			
18. Engaging in additional duties at school			
19. Your standing/status in school			
20. Work satisfaction			
21. Work motivation			

24. Of the categories listed above, which are the three principal areas in which you feel there has been the most considerable improvement?

First _____   Second _____   Third _____

25. Looking back over the past three years, how would you evaluate the change in your professional work? Please choose the appropriate answer.
   a) I have improved considerably.
   b) I have improved slightly.
   c) There has been no significant change.
   d) The last three years have seen some decline in my work.
   e) Other _____

26. Below are a number of possible causes for changes evident in your professional work in recent years. Please indicate the bearing each has had on your work.

Cause	Largely	Considerable	Slightly	Not at all
a) Work in the classroom				
b) INSET courses I took				
c) A particular INSET course Specify _____				
d) School-based INSET				
e) Duties I held				
f) Other _____				

27. If you marked 'no change' in some areas in Question 23, please give your reasons. Mark the appropriate answer.

   a) I am pleased with the existing situation and do not wish to change it.
   b) I would like to change it but do not know how.
   c) I wish to change it and know how but do not have the approval of the head-teacher and/or school inspector.
   d) I would like to change it but cannot do it alone.
   e) Other _____
   _____

28. Should you be asked to persuade other teachers to take INSET courses, what arguments would you use?

   _____
   _____
   _____
   _____

Thank you for your kind cooperation.

Sara Kleeman

2.3.2 The Questionnaire for Group B

1. What classes (years) do you teach? _____

2. What subjects do you teach? _____

3. How many years have you been teaching? _____

4. Please list the INSET courses you have participated in over the last three years _____

_____

_____

_____

5. Which of the above INSET courses do you consider beneficial?
   Great benefit _____

   _____

   Some benefit _____

   _____

6. Try and list the benefits of each course:

Course	**Benefits**
Example: Parents **tuition ?**	Techniques for group **tuition ?**
	Techniques for observing parent-child relationships
	Change in approach to the subject of parent-child relation-ships.

   _____

   _____

   _____

   _____

7. Listed below are various activities. Please refer to the last two weeks of your work and indicate how often each was used (tick as appropriate).

Activity	Every lesson in a day	Some lessons in a day	Some lessons in a week	Some lessons in 2 weeks	Not at all
Explaining the subject					
Dictation					
Discussion in class					

Activity	Every lesson in a day	Some lessons in a day	Some lessons in a week	Some lessons in 2 weeks	Not at all
Organising group work					
Activating different pupils in different study areas in the same lesson					
Experimenting in the classroom					
Teaching outside the classroom					
Using technical aids (film, video, etc.)					
Inviting a guest lecturer to class					
Integrating different teaching methods in one lesson					
Other _____ _____					

8. Based on the list in <u>Question 1</u>, please list the <u>three</u> activities which you use <u>most often</u> in your work.

   1. _____
   2. _____
   3. _____

9. Explain why you use the above more often than others.
   (follow the example)

<u>Activity</u>

Example: discussion in class

<u>Reason for using it</u>

It is the most useful way to cover a wide subject. Teacher's intervention is essential and discussion will lead pupils towards the main issues.

_____ _____

_____ _____

_____ _____

_____ _____

10. Listed below are various lesson planning methods. When choosing one out of a number of possibilities, indicate which would be your choice.

	Always	**Sometimes**	**Never**
Consult another person (teacher, dept. head, head-teacher, etc.)			
Use ready-made programmes.			
Develop your own programme.			
Have a few possibilities and choose depending on schedule.			
Have a few possibilities and choose depending on your knowledge of your pupils' needs.			
Have a few possibilities and choose one which is new and exciting.			
Decide on the aims and choose the most effective way to achieve them.			
Other			

11. Listed below are questions regarding your feelings, in different situations in the class.

a) When you aim to organise **group work** in your class, how do you feel? Please circle your answers on the scales below.

Confident	1	2	3	4	5	6	7	Not confident
Well-equipped	1	2	3	4	5	6	7	Ill-equipped
Flexible	1	2	3	4	5	6	7	Not flexible

b) When you aim to organise **individual work**, how do you feel?

Confident	1	2	3	4	5	6	7	Not confident
Well-equipped	1	2	3	4	5	6	7	Ill-equipped
Flexible	1	2	3	4	5	6	7	Not flexible

c) When you aim to organise **formal teaching**, how do you feel?

Confident	1	2	3	4	5	6	7	Not confident
Well-equipped	1	2	3	4	5	6	7	Ill-equipped
Flexible	1	2	3	4	5	6	7	Not flexible

12. To what degree do you feel free to work according to your beliefs and understanding at your school? (please circle your answer on the scale)

Very free	1	2	3	4	5	6	7	Very limited

13. How would you describe your head-teacher's attitude to your work? Please choose the appropriate answers.

a) The head-teacher allows me a lot of freedom.
b) The head-teacher encourages me to introduce new practices.
c) The head-teacher restricts me and does not let me use my own initiative.
d) I feel that the head-teacher appreciates my work.
e) The head-teacher visits my class often.
f) I feel that the head-teacher is assessing me.
g) The head-teacher offers sound criticism.
h) Other _____
_____

14. Please describe your relations with the following, using one of these terms: **pressure, slight pressure, support, a lot of support, no communication, other.**

    Head-teacher_____

    Colleagues_____

    Inspector _____

    Parents _____

15. Which methods of assessment do you use - Final assessment **(FA)**, Continuous assessment **(CA)** or not at all **(NA)**?
Please circle as appropriate.

a)	At the end of each study unit	FA	CA	NA
b)	To create homogeneous groups	FA	CA	NA
c)	To create heterogenous groups	FA	CA	NA
d)	To test for reading ability	FA	CA	NA
e)	When pupils work on assignments in the classroom	FA	CA	NA
f)	When checking individual work	FA	CA	NA

16. What do you do with the assessment results?
Please choose the appropriate answers.

    a)   Discuss the results with the head-teacher.
    b)   Discuss the results with other teachers.
    c)   Analyse the results yourself.
    d)   Decide on practical ways of improvement, based on the findings.
    e)   File the findings away.
    f)   Do not do anything.
    g)   Other _____

17. Listed below are various areas of work within the school. Please compare, in each area, your work today with your work three years ago.
Please try to answer as precisely as you can, noting the different categories.

Area	No change	Some change	Significant change
1. Knowledge of subjects you teach	_____	_____	_____
2. Familiarity with a variety of teaching programmes	_____	_____	_____
3. Ability to plan teaching on own initiative	_____	_____	_____
4. Familiarity with different teaching methods for heterogenous class	_____	_____	_____
5. Application of new ideas in the classroom	_____	_____	_____
6. Adapting different teaching methods to different groups of pupils	_____	_____	_____
7. Activating group work	_____	_____	_____
8. Method/format of group work	_____	_____	_____
9. Familiarity with pupils' trends of thought	_____	_____	_____
10. Awareness of learning difficulties	_____	_____	_____
11. Organising a lesson/ course of teaching	_____	_____	_____
12. Diagnosis & assessment of pupils			

Area	No change	Some change	Significant change
13. Access to various sources of information	_____	_____	_____
14. Your activity as class teacher	_____	_____	_____
15. Your relationships with pupils	_____	_____	_____
16. Your relationships with parents	_____	_____	_____
17. Your relationships with the management	_____	_____	_____
18. Engaging in additional duties at school	_____	_____	_____
19. Your standing/status in school	_____	_____	_____
20. Work satisfaction.	_____	_____	_____
21. Work motivation.	_____	_____	_____

18. Of the categories listed above, which are the three principal areas in which you feel there has been the most considerable improvement?

First _____ Second _____ Third _____

19. Looking back over the past three years, how would you evaluate the change in your professional work? Please choose the appropriate answer.

a) I have improved considerably.
b) I have improved slightly.
c) There has been no significant change.
d) The last three years have seen some decline in my work.
e) Other _____

20. Below are a number of possible causes for changes evident in your professional work in recent years. Please indicate the bearing each has had on your work.

Cause	Largely	Considerable	Slightly	Not at all
a) Work in the classroom	_____	_____	_____	_____
b) INSET courses I took	_____	_____	_____	_____
c) A particular INSET course				
Specify _____	_____	_____	_____	_____
d) School-based INSET	_____	_____	_____	_____
e) Duties I held	_____	_____	_____	_____
f) Other _____	_____	_____	_____	_____

21. If you marked 'no change' in some areas in Question 23, please give your reasons. Mark the appropriate answer.

a) I am pleased with the existing situation and do not wish to change it.
b) I would like to change it but do not know how.
c) I wish to change it and know how but do not have the approval of the head-teacher and/or school inspector.
d) I would like to change it but cannot do it alone.
e) Other _____

_____

22. Should you be asked to persuade other teachers to take INSET courses, what arguments would you use?

_____
_____
_____
_____

Thank you for your kind cooperation.

Sara Kleeman

2.4 THE CODING FRAME

The coding frame was developed on the basis of the returned pilot questionnaires. The pilot questionnaires were given out to the group of teachers participating in this year's INSET course (1994-1995). They do not make up part of the research population.

The Coding Frame:

Q: **(1) Which school years do you teach?**

1. Years 1-2
2. Years 3-6
3. Years 7-9
4. Years 10-12

Explanation: The above shows the common divisions in schools in Israel: categories 1 and 2 - primary school, divided into infants and juniors; category 3 - junior secondary; category 4 - senior secondary.

Q: **(2) What subjects do you teach?**

1. Humanities
2. Science
3. A combination of 1 and 2
4. Crafts
5. Other

Explanation: The question aims at getting a general idea of the subjects taught by the interviewee. Science subjects involve experimentation, practical exercises, etc., whereas humanity subjects call for reading texts, theoretical information/references, etc. The question here is whether the differences have any impact on teaching methods used.

Q: **(3) How many years have you been teaching?**

1. 1-5
2. 6-10
3. 11-15
4. 15 and over

Q: **(4) Please list the INSET courses you have participated in over the last three years.**

1. Arts
2. Subjects studied in schools

3.   Subjects not studied in schools
4.   Training for an administrative/professional position
5.   Profession out of school
6.   Special Education and Therapy
7.   Computers
8.   Teaching Methods
9.   Education out of school
10. None
11. Other

Explanation: The categories were taken from the Pilot Study (see p. 38).

Q: *(5) Which of the INSET courses above do you consider* [   ] *beneficial?*

1.   Arts
2.   Subjects studied in schools
3.   Subjects not studied in schools
4.   Training for an administrative/professional position
5.   Profession out of school
6.   Special Education and Therapy
7.   Computers
8.   Teaching Methods
9.   Education out of school
10. None
11. Other

Q: *(6) List the benefits of each course* [   ]

1.   Updating, refreshing and supplementing information in a chosen subject.
2.   Mastering new teaching methods.
3.   Qualification.
4.   Retraining.
5.   Meeting colleagues.
6.   Self-development.
7.   Other.

Explanation: The categories were taken from the Pilot Study (see pp. 40-41)

Q: *(7) What were your expectations choosing "Alternatives in* ☐
Teaching"?

1. Updating, refreshing and supplementing information in a chosen subject.
2. Mastering new teaching methods.
3. Qualification.
4. Retraining.
5. Meeting colleagues.
6. Self-development.
7. Other.

Q: *(8) Have your expectations been met?*

(a) Teaching Methods ☐

    1. Yes
    2. No

(b) Subject matter ☐

    1. Yes
    2. No

(c) Use of time ☐

    1. Yes
    2. No

(d) Administration ☐

    1. Yes
    2. No

(e) Other ☐

    1. Yes
    2. No

Q: *(9) An open questionnaire to be analysed by content analysis.*

Q: (10) Which of the following teaching methods did you find most efficient?

(a)   Lecture

1. Very efficient
2. Efficient
3. Not particularly efficient

(b)   Discussion

1. Very efficient
2. Efficient
3. Not particularly efficient

(c)   Workshop

1. Very efficient
2. Efficient
3. Not particularly efficient

(d)   One-to-one supervision

1. Very efficient
2. Efficient
3. Not particularly efficient

(e)   Visits to schools

1. Very efficient
2. Efficient
3. Not particularly efficient

(f)   Other

1. Very efficient
2. Efficient
3. Not particularly efficient

Q: (11) Which areas in your opinion need improvement?

1.   None
2.   Teaching methods
3.   Use of time
4.   Administration
5.   Subject matter
6.   Other

Explanation: Categories as in Question 8.

Q: *(12) In what way would you like to see these areas improved?*

(a)　Teaching Methods ☐

    1. Expand
    2. Reduce
    3. Other

(b)　Subject matter ☐

    1. Expand
    2. Reduce
    3. Other

(c)　Use of time ☐

    1. Expand
    2. Reduce
    3. Other

(d)　Administration ☐

    1. Expand
    2. Reduce
    3. Other

(e)　Other ☐

    1. Expand
    2. Reduce
    3. Other

Explanation: The question aims at determining whether certain subject matters seem irrelevant, and whether participants wish to include additional material.

Q: *(13) Activities - refer to the last two weeks of your work and indicate how often each was used.*

(a) Activity ☐

1. Explaining the subject
2. Dictation
3. Class discussion
4. Individual work
5. Organising group work
6. Activating different areas of study in the same lesson
7. Experimenting in the classroom
8. Teaching outside the classroom
9. Using technical aids
10. Guest lecturer
11. Integrating different teaching methods in one lesson
12. Other

(b) Frequency ☐

1. Every lesson
2. Some lessons during the day
3. Some lessons in a week
4. Some lessons in two weeks
5. Not at all

Q: *(14) Based on the list in Q (13), list the three activities you use most often.*

Activity

1. Explaining the subject
2. Dictation
3. Class discussion
4. Organising group work
5. Activating different areas of study in the same lesson
6. Experimenting in the classroom
7. Teaching outside the classroom
8. Using technical aids
9. Guest lecturer
10. Integrating different teaching methods in one lesson
11. Other

Q: *(15) An open questionnaire to be analysed by content analysis.*

Q: *(16) Indicate choice in lesson planning methods.*

(a) Consult another person

1. Always
2. Sometimes
3. Never

(b) Use ready-made programmes and adapt to class' needs

1. Always
2. Sometimes
3. Never

(c) Develop your own programme

1. Always
2. Sometimes
3. Never

(d) Choosing from different possibilities depending on schedule

1. Always
2. Sometimes
3. Never

(e) Choosing from different possibilities depending on pupils' needs

1. Always
2. Sometimes
3. Never

(f) Choose one which is new and exciting

1. Always
2. Sometimes
3. Never

(g) Decide on the aims and choose the most effective way to achieve them

1. Always
2. Sometimes
3. Never

(h)   Other

      1. Always
      2. Sometimes
      3. Never

Q: *(17) Your feelings following "Alternatives in Teaching" course.*

I.   Group work

      (a) Confident   ☐

      (b) Well-equipped   ☐

      (c) Flexible   ☐

II.   Individual work

      (a) Confident   ☐

      (b) Well-equipped   ☐

      (c) Flexible   ☐

III.   Traditional teaching

      (a) Confident   ☐

      (b) Well-equipped   ☐

      (c) Flexible   ☐

Q: *(18) To what degree do you feel free to work according*   ☐
to your beliefs and understanding?

      1.   Very free
      2
      3
      4
      5
      6
      7.   Very limited

Q: *(19) Describe your head-teacher's*
        attitude to your work

Explanation: A number of answers are possible here, but all cannot be right for one interviewee.

Q: *(20) Describe your relationships with the following.*

    (a)   Inspector

        1. Pressure
        2. Heavy pressure
        3. Support
        4. Ample support
        5. No communication
        6. Other

    (b)   Head-teacher

        1. Pressure
        2. Heavy pressure
        3. Support
        4. Ample support
        5. No communication
        6. Other

    (c)   Colleagues

        1. Pressure
        2. Heavy pressure
        3. Support
        4. Ample support
        5. No communication
        6. Other

    (d)   Parents

        1. Pressure
        2. Heavy pressure
        3. Support
        4. Ample support
        5. No communication
        6. Other

Q: (21) Which methods of assessment do you use?

(a) At the end of each study unit
   1. Final assessment
   2. Continuous assessment
   3. Not at all

☐

(b) To create homogenous groups
   1. Final assessment
   2. Continuous assessment
   3. Not at all

☐

(c) To create heterogeneous groups
   1. Final assessment
   2. Continuous assessment
   3. Not at all

☐

(d) To test for reading ability
   1. Final assessment
   2. Continuous assessment
   3. Not at all

☐

(e) When pupils work on assignments in class
   1. Final assessment
   2. Continuous assessment
   3. Not at all

☐

(f) When checking individual work
   1. Final assessment
   2. Continuous assessment
   3. Not at all

☐

Q: (22) What do you do with assessment results?   ☐

Q: (23) Compare your work today to three years ago.

(a) Proficiency in subject you teach

☐

   1. No change
   2. Some change
   3. Significant change

☐

(b)   Familiarity with a variety of teaching programmes

     1. No change
     2. Some change
     3. Significant change

(c)   Ability to plan on own initiative

     1. No change
     2. Some change
     3. Significant change

(d)   Familiarity with different teaching methods for heterogeneous class

     1. No change
     2. Some change
     3. Significant change

(e)   Application of new ideas in the classroom

     1. No change
     2. Some change
     3. Significant change

(f)   Adapting different teaching methods to different groups of pupils

     1. No change
     2. Some change
     3. Significant change

(g)   Activating group work

     1. No change
     2. Some change
     3. Significant change

(h)   Method/format of group work

     1. No change
     2. Some change
     3. Significant change

(i)   Familiarity of pupils' trends of thoughts

       1. No change
       2. Some change
       3. Significant change

(j)   Awareness of learning difficulties

       1. No change
       2. Some change
       3. Significant change

(k)   Organising a lesson

       1. No change
       2. Some change
       3. Significant change

(l)   Assessment of pupils

       1. No change
       2. Some change
       3. Significant change

(m)   Access to various sources of information

       1. No change
       2. Some change
       3. Significant change

(n)   Your activity as class teacher

       1. No change
       2. Some change
       3. Significant change

(o)   Your relationships with pupils

       1. No change
       2. Some change
       3. Significant change

(p)   Your relationships with parents

       1. No change
       2. Some change
       3. Significant change

(q)   Your relationships with the management   ☐

    1. No change
    2. Some change
    3. Significant change

(r)   Engaging in additional duties at school   ☐

    1. No change
    2. Some change
    3. Significant change

(s)   Your standing in the school   ☐

    1. No change
    2. Some change
    3. Significant change

(t)   Work satisfaction   ☐

    1. No change
    2. Some change
    3. Significant change

(u)   Work motivation   ☐

    1. No change
    2. Some change
    3. Significant change

Q: *(24) Of the above, which are the three principal areas where there has been the most considerable improvement?*   ☐

Explanation: The coding is as for Q23.

Q: *(25) How would you evaluate the change in your professional work over the last three years?*   ☐

1.   I have improved considerably
2.   I have improved slightly
3.   There has been no significant change
4.   My work has declined
5.   Other

Q: **(26) Indicate the bearing each cause has on your professional work.** □

    (a)   Work in the classroom

            1. Largely
            2. Considerably
            3. Slightly
            4. Not at all

    (b)   INSET courses   □

            1. Largely
            2. Considerably
            3. Slightly
            4. Not at all

    (c)   One particular INSET course   □

            1. Largely
            2. Considerably
            3. Slightly
            4. Not at all

    (d)   School-based INSET   □

            1. Largely
            2. Considerably
            3. Slightly
            4. Not at all

    (e)   Duties held   □

            1. Largely
            2. Considerably
            3. Slightly
            4. Not at all

    (f)   Other   □

            1. Largely
            2. Considerably
            3. Slightly
            4. Not at all

Q: **(27) Give reasons for "No change" in Q (23).**   [ ]

1.   I am pleased with the present situation and do not wish to change it.
2.   I would like to change it but do not know how.
3.   I wish to change it but do not have the approval of seniors.
4.   I would like to change it but cannot do it alone.
5.   Other

Q: **(28) An open questionnaire to be analysed through content analysis.**

The answers to the questions will be summarised in the following charts:

2.5 PILOT QUESTIONNAIRE — RESULTS

The pilot questionnaire aimed at examining the level of clarity of the questions, gaining an initial insight into the type and quality of answers, and experimenting in summarising and analysing the results/findings. Thirty questionnaires were sent to Israel and distributed to participants attending the "Alternatives in Teaching" course at Oranim in the 1994/95 academic year (these respondents are not included in the research target population). Nineteen questionnaires were returned; of these, two respondents explained that they were still students and therefore only answered the relevant questions, i.e. questions relating to the course itself and not to teaching in the classroom. Another respondent explained that this was her first year of teaching and she could only answer some of the questions.

Representation of the Results

1. School years

Year 1-2	5
Year 3-6	12
Year 7-9	0
Year 10-12	0
Total	17

(19 less the 2 students mentioned above)

From the total number, the question is posed whether the course, in its essence, may only be suitable for primary school teachers; and whether teachers in junior and higher secondary schools do not see the need for a course of this kind, or whether they assume it does not meet their requirements.

2. Subjects taught

Subjects	No. of respondents
Humanities	4
Science	1
Various subjects	11
Other	1
Total	17

(Physical Education)

(19 less the 2 students mentioned above)

In Israeli primary schools, the main class teacher usually teaches most subjects (especially Years 1-4). Since Question 1 indicates that the majority of respondents are primary school teachers, it is not surprising that most teach different subjects.

3. Teaching experience

No. years	No. of respondents
1-5	3
6-10	5
11-15	1
Over 15	8
Total	17

The senior group is predominant. They apparently feel, more than others, the need for rejuvenation and stimulation.

4. Previous INSET courses taken by respondents

Courses	No. of respondents
Teaching methods	12
Subjects studied in schools	7
Special education and therapy	6
Art	5
Training towards professional position	3
Subjects not studied in schools	2
None	1

It is interesting to note the choice of courses mostly deal with teaching methods and subjects taught in schools. This finding, repeated for a larger sample, might indicate a certain direction of the teachers' needs.

5. **Courses that were very beneficial**

Course	No. of respondents
Teaching methods	11
Special education	4
Art	3
Training towards professional position	2
Subjects studied in schools	1

Satisfaction with teaching methods courses is obvious (11 out of 12 respondents). On the other hand, only one out of seven respondents noted that subjects studied in school were beneficial.

6. **Type of benefit**

Benefit	No. of respondents who mentioned it
Updating, refreshing and supplementing information on a chosen subject	2
Self-development	3
Mastering new teaching methods	15

There is emphasis on mastering various teaching methods. According to the number of respondents (15), it seems that methods were also acquired in courses that are not "proper" teaching methods courses (for example, special education).

7. **Expectations from the course**

Expectation	No. of respondents
Updating, refreshing	4
Mastering new teaching methods	17

Two of the teachers noted that they had both types of expectations. None mentioned any other expectation.

8. Fulfillment of the expectations in various areas

Area	Yes	No	No answer
Teaching methods	19	-	-
Contents	14	1	4
Use of time	10	3	6
Administration	7	5	7

There is clear satisfaction from the course programme, i.e. teaching methods and the contents studied. It may be noticed that only the area of teaching methods was answered by all the respondents. Are the other areas not clearly defined and/or are they of no importance to the respondents?

9. Teaching methods used in the course

Method	Very useful	Useful	Not so useful	No answer	Total
Lecture	2	12	3	2	19
Discussion	7	9	1	2	19
Workshop	11	4	2	2	19
One-to-one supervision	2	9	4	3	19
Visiting schools	10	5	1	3	19

The course includes many workshops and it appears that a large number of the respondents view it positively. The course programme also includes about five visits to schools, which are also viewed positively.

10. Areas in need of improvement

Area	No. of respondents
None	1
Teaching methods	2
Use of time	4
Administration	0
Contents	4
Did not answer	9 *

* Some respondents marked more than one area in need of improvement. It is difficult to know if nine respondents did not answer the question due to course satisfaction or any other reason.

11. Ways of improvement

Area	Suggested way
Teaching methods	4 suggested additions
Contents	4 suggested additions

Fifteen of the respondents did not answer this question. Possibly, the reason is (as in the previous question) that they did not see a need for improvement or that the question is unclear. This question must be therefore examined in the interviews as well.

12. Frequency of using various teaching methods

Method	Every lesson in a day	Some lessons in a day	Some lessons in a week	Some lessons in 2 weeks	Not at all	No answer
Explaining	2	8	3	-	-	6
Dictating	-	1	1	3	4	10
Discussion in class	-	6	5	1	-	7
Individual work	1	9	1	1	1	6
Group work	-	6	5	2	-	6
Various activities in one lesson	-	4	5	3	-	7
Experiment in class	-	1	1	3	6	8
Teaching outside the classroom	-	1	3	3	5	7
Using technical aids	-	-	6	5	1	7
Inviting a "guest lecturer"	-	-	-	2	10	7
Integrating various teaching methods	-	2	7	4	1	6

It is very noticeable that a relatively large number of respondents did not answer this question. The question should be examined, and a note should be added to explain that where a method is not used, it should be marked in the "not at all" column rather than leaving the column empty. The design of the table is perhaps not clear enough. The summary table, although not completed, indicates use of the varied teaching methods.

13. Frequency of using various methods

Teaching method	No. of respondents who use it very frequently
Explaining	4
Dictating	-
Discussion in class	7
Individual work	6
Group work	15
Various activities in one lesson	3
Experiment in class	-
Teaching outside the classroom	1
Using technical aids	3
Inviting a "guest lecturer"	-
Integrating various teaching methods	-
Did not answer	3

There is a high frequency of "group work" (which is emphasised during the course). However, there is no use of "integrating various teaching methods" in one lesson. "Explaining" and "using technical aids" were mentioned only in a few questionnaires.

It is possible that the respondents chose to note the more "impressive" methods rather than the usual ones. This is perhaps because they completed the questionnaire while still taking the course, and their attention was centered around a subject that was widely covered in the course.

14. Ways of planning a lesson

Way	Always	Sometimes	Never	No answer
Consult another person	3	10	2	4
Use ready-made programme	1	12	1	5
Develop your own programme	5	9	-	5
Have few possibilities and chose depending on time schedule	8	7	1	3
Have few possibilities and chose depending on knowledge of pupils' needs	7	9	-	3
Have few possibilities and chose one which is new and exciting	10	5	-	4
Decide on the aims and chose the most effective way to reach them	10	6	-	3

Many responses were marked under "Sometimes," indicating that the respondents are not using only one particular way. This is also shown by the few responses under "Never." It seems that the questions require a note to clarify that the column "never" should be completed rather than leaving the column empty. It is also possible to examine the various subsections, although the sample is too small to draw any conclusions. For example, the last subsection is surprising, since many studies have shown that teachers do not decide on aims.

15. Feeling while using various teaching methods

Group Work

Category	No. of respondents marking the following							
	1	2	3	4	5	6	7	No answer
Self-confidence					3	9	5	2
Use of aids			1	1	4	4	7	2
Flexibility			1		4	5	7	2

Individual Work

Category	No. of respondents marking the following							
	1	2	3	4	5	6	7	No answer
Self-confidence						8	8	3
Use of aids				1	4	4	7	3
Flexibility				1	6	5	4	3

Frontal lesson - Formal/Training teaching

Category	No. of respondents marking the following							
	1	2	3	4	5	6	7	No answer
Self-confidence					2	3	11	3
Use of aids					1	1	12	3
Flexibility	1		1		4	5	5	3

As stated earlier, it is impossible to draw any conclusions from such a small sample. When analysing the results of the study, a frequency analysis will be made in each category. The results above indicated a feeling of confidence when using all three methods. However, the category "flexibility" had much lower marks, and one should question whether a lack of flexibility does not arise from lack of confidence.

16. Level of feeling freedom in the school

Marks	1	2	3	4	5	6	7	No answer
Findings		2			2	5	7	4

17. Teacher's perception of the head-teacher's attitude

Attitude of head-teacher	No. of respondents
Enables a lot of freedom	11
Encourages me to make innovations	6
Limits and does not enable using own initiative	2
Appreciates the work	9
Visits class very often	2
I feel that the head-teacher is testing me	-
Gives constructive criticism	4

These findings show the head-teachers to be very supportive, encouraging and allowing freedom to the teachers. It is perhaps not a coincidence that the respondents in the "Alternatives in Teaching" course had head-teachers who encouraged them to participate in the course, and are interested in making innovations in their school.

18. Teacher's relationship with various bodies

Body	Pressure	Great pressure	Support	Great support	No commu- nication	No answer
Regional inspector	4	1	4	2	4	4
Head-teacher	-	-	5	9	-	5
Colleagues	-	-	9	6	-	4
Parents of pupils	1	-	6	7	-	5

This question, like the previous one, shows a picture of supportive head-teachers. There are no clear findings regarding the relationship with the inspector. The fact that there is support between the teachers themselves could be related to the quality of their relationships with the head-teacher and to the atmosphere in the school.

19. Ways of assessment

Situation	Way of assessment			
	Final assessment	Continuous assessment	None at all	No answer
At the end of each study unit	10	4	-	5
To create homogeneous groups	4	8	2	5
To create heterogeneous groups	4	10	-	5
To test for reading ability	4	7	-	8
When pupils working in classroom	4	9	-	6
When checking self-work	9	4	-	6

It is clear that in most cases, there is more use of continuous assessment. This way was extensively dealt with in Israel over recent years. It should be examined (perhaps through interviews) if it is actually carried in practice.

20. Ways of dealing with the assessment results

Way	No. of respondents
Discuss the results with the head-teacher	4
Discuss the results with other teachers	3
Analyse the results yourself	10
Decide on practical ways for improvement, following the findings	15
File the findings away	5
Do nothing	0
No answer	4

The findings show the "isolation of the teacher" and raise the question if this "isolation" is a result of not wanting to share with others (perhaps because of fear of criticism) or that the teacher did not find any interested body to share his/her opinions with.

21. Changes during the past three years

Area	Level of Change			
	No change	Some changes	Many changes	No answer
Knowledge of subjects you teach	1	8	5	5
Familiarity with variety of teaching programmes	-	3	12	4
Ability to plan teaching on own initiative	-	6	8	5
Familiarity with different teaching methods	1	5	9	4
Application of new ideas in the classroom	-	6	8	4
Adapting different teaching methods	1	6	8	4
Activating group work	1	6	8	4
Method/format of group work	-	8	7	4
Familiarity with pupils' trends of thought	3	7	5	4
Awareness of learning difficulties	2	4	8	5
Organising a lesson and/or course of teaching	-	10	5	4
Diagnosis and assessment of pupils	1	6	8	4
Access to various sources of information	1	9	4	5
Your activity as class teacher	1	6	8	4
Your relationships with pupils	6	4	5	4
Your relationships with parents	6	5	4	4
Your relationships with management	6	4	4	5
Engaging in additional duties in school	4	7	3	5
Your standing/status in school	5	6	3	5
Work satisfaction	6	5	4	4
Work motivation	4	5	6	4

At first glance of this small sample, it is clear that there have been changes in most areas for the majority of teachers. In the study itself, a more extensive analysis will be made to examine the areas both in which the most changes were made and in which no changes were made.

22. Areas that had the most considerable improvement

Area	No. of respondents stating this area
Knowledge of subjects you teach	-
Familiarity with variety of teaching programmes	2
Ability to plan teaching on own initiative	1
Familiarity with different teaching methods	5
Application of new ideas in the classroom	6
Adapting different teaching methods	5
Activating group work	5
Method/format of group work	5
Familiarity with pupils' trends of thought	1
Awareness of learning difficulties	2
Organising a lesson and/or course of teaching	1
Diagnosis and assessment of pupils	3
Access to various sources of information	-
Your activity as class teacher	-
Your relationships with pupils	2
Your relationships with parents	1
Your relationships with the management	1
Engaging in additional duties in school	2
Your standing/status in school	-
Work satisfaction	1
Work motivation	-

The previous questions have shown that changes were made in most of the areas mentioned. It is, therefore, surprising that in this question, each area was claimed by only a few respondents to be an improvement. It is noticeable that areas related to acquiring and using new methods received a high grade in relation to other areas.

23. Evaluation of the recent changes

Change	No. of respondents stating this change
Considerable improvement	12
Slight improvement	2
No significant change	1
Some decline	0
No answer	4

Again, it is noticeable that most of the respondents felt a considerable improvement. This is perhaps an overall feeling and does necessarily apply to a specific area.

24. Factors influencing the changes

Factor	No. of respondents stating this factor				
	Largely	Considerably	Slightly	Not at all	No answer
Work in the classroom	5	6	2	-	6
Training courses taken	8	7	-	-	4
Particular training course taken	5	4	-	-	9 *
School-based training course	4	7	3	-	5
Duties held in the school	2	1	1	-	15 **

* Some have listed the courses taken in this subsection, but did not state the level of their influence, therefore, they were not included as respondents.

** It is difficult to know if many did not answer this subsection because they did not hold duties or felt that holding duties did not influence changes. There is perhaps a need for further explanation of the question to assist the respondents.

25. Reasons for not making changes

Reason	No. of respondents stating this reason
Pleased with the existing situation; do not want to change	5
Want to change but do not know how	1
Want to change but do not have approval	-
Want to change but cannot do it alone	2
No answer	11

This question referred only to those areas in which no changes were made, and in most areas in the previous question, it was noted that changes were made. This fact can explain why only a few respondents answered.

Summary of the Open Questions

Question 9: What contents did you hope to receive and what did you not receive?

Only eight of the 19 respondents answered this question. Perhaps the others received what they had hoped for.

Summary of the analysis:

Category	TP	DC	PC
No. of sentences	6	2	1

Clearly, most of the answers dealt with the hope of acquiring more skills and methods. The respondents stated hopes to acquire "coping skills," "teaching skills," "organisational skills," etc. The answers centred around the teacher's need to acquire skills, and no mention was made of the school, class and/or pupils. Two sentences

referred to time wastage and lack of focusing during the course. One sentence referred to incorrect course planning.

Question 15: Explain why you use a certain teaching method very frequently.

Fifteen of the 19 respondents answered this question. Two of the four who did not answer are the students mentioned at the beginning of this section.

Summary of the analysis:

Category	P	C	TP	WS
No. of sentences	22	11	6	5

Total 44 sentences

These findings indicate that teachers explain their choice of a certain teaching method, primarily in terms of the pupils' needs and the class' needs. The terms "individual rate" (of the pupil, "personal ability," "motivation," and "weak pupil" appeared in most of the answers. The teacher's skills and the demands of the studies programme in Israel appeared much less.

Question 28: If you were asked to persuade teachers to take training courses, what reason would you use?

The question was answered by 15 of the 19 respondents.

Summary of the analysis:

Category	TP	TD	TTE	P	C	IS	SD	PC	DC
No. of sentences	34	2	1	3	2	2	1	2	2

Total 49 sentences

It is very noticeable that the respondents mainly used terms of "teacher's properties." Terms such as "refreshing" and "acquiring skills" appeared in most all of the answers. However, the reward of the training was only mentioned in two sentences. It is interesting to note that the teachers mainly used terms relating to rewards for the teachers, such as enrichment and refreshing, and very few terms relating to benefits for the pupils (who are supposed to be benefited).

As stated earlier, the Pilot Questionnaire served as a way of measuring the clarity of the questions to receive preliminary information regarding the expected answers, and as a first experiment in processing and analysing the data. Since it is such a small sample, there is no point in drawing conclusions and making generalisations.

2.6 SUMMARY OF QUESTIONNAIRE FINDINGS

A. TREATMENT GROUP (GROUP A)

Question No.	1	2	3	4				5			6		7		8 a	b	c	d	10 a	b	c	d	e	f	11	12 c	d	e
1	1	3	4	3	4	7	8	4	8		1	2	1	2	1	1	1		3	1	1	2	1	1	3			
2	2	1	2	1	6	8		1	8		1	2	1	2	1	1	1	1	3	1	1	3	1		5			
3	2	3	4	2	6	7	8	2	6	8	2	7	1	2	1	1	1		3	2	1				3			
4	2	1	3	2	3	7	8	3	7	8	2	6	1		1	1	1	1	2	1	2	2	1		3	1		
5	2	3	3	2	7	8		2	7	8	2	6	1	2	1	1	1	1	2	1	1	3	1		6	1	2	
6	3	2	4	2	6	7		2	6		1	2	2		1	1	1	1	2	1	1	1	1		2	1	1	
7	1	3	3	2	8			8			2		2		1	1	1		2	1	1	2	1	1				
8	2	1	4	2	8			2	8		2		2		1	1	1	1	2		1	3	1		6			
9	1	3	4	2	7	;		2			1	2	2		1	1	1		2	1	1	2	1		3		1	
10	2	1	4	2	7			2	7		1	2	2		1	1	1	1	2	2	2	2	2		3	1	1	
11	2	3	4	2	6	7	8	2	8		2		2		1	1	1	1	2	1	1	2	1		5			
12	2	3	2	2	3	7		2	3		2		1	2	1	1	1	2	2	2	1	1	3					
13	1	2	4	2	8			8			2		1	2	1	1	1		3	1	1	3	1		1			
14	2	1	4	4	6	8		4	8		1	2	2		1	1	2	1	3	2	1	3	1		3	1		
15	2	3	2	1	2	3	8	1	8		1	2	1	2	1	1	1	1	2	2	1	2	1				1	
16	1	3	4	1	8			1	8		2	6	2		1	1			2	2	1	2	1		2	1	1	
17	1	3	4	2	6	8		6	8		2	6	2		1			2	2	2	2	2	2					
18	2	3	2	2	6	8		2	6		2		2		1	1	1		2	1	1	2	1					
19	2	3	1										2		1	1	2	1	2	2	1	1	1		3			
20	2	1	4	1	8			1	8				1	2	1			2	2	2	3	2	2		3			
21	2	5	4	1	8			1			2	6	2		1	1	1	2	2	2	2	3	2	2	5	1		
22	2	3	4	4	8			8			2		2		1	1	1		2	2	1	2	2		5			
23	2	3	1	2	3	6	8	8			2		2		1	1	1	1	2	1	1	2	1					
24	1	3	2	1	6	8		8			2		2		1	1	1	1										
25	2	3	1	1	8			8			2		2		1	1	2	2	1	2	1	3	1		3	1		
26	2	3	2	2				2			2		2		1	1	1	1	3	3	3		3					
27	2	1	3	2	7	8		8			1	2	1	2	1	2	1		2	1	1		2					
28	1	2	2	6	8			6	8		1	2	1	2	1	1	1	1	1	1	2	2						
29	2	1	4	2	4			4			1	2	1	2	1	1	1	1	1	1	1	1	1		3			
30	2	1	2	2	7	8		2	8		1	2	1	2	1	1	1	1	2	1	1	1	1		5			

Questionnaire No. / Question No.	13 a	b	c	d	e	f	g	h	I	j	k	14 a	b	c	16 a	b	c	d	e	f	g	h	17 A a	b	c	B a	b	c	C a	b	c	18	19	20 a	b	c	21 d	a	b	c	d	e	f	22	23 a	b	c	d	e	f	g	h	I	j	k	l	m	n	o	p	q	r	s	t	u	24	25	26 a	b	c	d	e	f	27
1	1	2	3	3	3	1	3	4	4	5	2	4	5	3	2	2	2	1	1	2	1		7	6	6	6	6	6	5	6	5	7	A	D	5	4	3	4	1	2	2	2	2	1	B D	3	3	2	3	2	3	3	2	2	3	2	3	3	2	2	2	3	3	3	3	3	J	F	L	1	3	1	1	2	1	
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16		1	5	8					2	2	1	1	2	1		7	7	7	7	7	7	1	7	A B D			4	4	4	1	3	2	1	1	A C D	2	3	3	2	3	2	3	3	2	3	3	2	3	3	3	3	3	3	3	G	H	O	1	1	2		3		5
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19	2	2	2	2	3	5	5	4	5	4	3	5	2	2	1	1	1	1	1		6	7	3	3	3	3	3	3	3	4	A B D			1	4	3	3	1	2	2	1	1	C D	2	3	2	3	2	2	2	2	2	2	2	3	3	3	3	2	2	2	2	F	H	O	1	1	1	2	1	2	1
20	2	3	3	2	3	4	5	4	5	4	3	5	9	2	2	1	1	1	1		6	5	6	7	7	7	7	7	6	A			3	4	3	1	3	2	1	1	A D	2	3	2	2	3	3	2	2	2	2	1	1	1	1	1	1	1	2	D	F	G	1	1	2	1	1		4
21	1	5	4	5	3	4	3	4	4	5	3	3	4	5	2	1	2	1	2	1	1	6	5	7	6	5	6	7	5	7	A D G			5	4	4	3	1	2	2	1	C D E	2	3	3	3	2	3	3	2	3	3	2	1	1	1	1	1	1	2	D	E	G	1	1	1	2	3		
22	3	1	3	2	3	3		3	4	4	5	3	5	3	2	2	2	2	1	2	6	5	6	6	5	5	6	6	6	A			3	3	4	6	2	2	2	2	2	1	C D G	1	2	2	3	2	3	2	3	3	3	3	2	2	2	2	2	1	1	F	I	J	1	2	1	1		
23	2	4	3	4	2	2	3	4	3	4	3	5	1	2	1	1	1	1	1	7	7	7	7	7	7	7	7	7	A B D			1	4	3	4	1	1	1	A B D	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3	E	H	L	1	1	1	2		
24														5	5	5	7	6	5	7	7	5	7	G			3	4	3	4					G	3	3	3	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	G	H	R	1	2	1	1	1	1	1
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26	2	1	2	2	3	4	5	5	3	5	4	3	4	5	1	1		2	1	2	6	6	5	6	6	6	6	6	7	A B D			4	4	4	1	2	2	1	1	A D	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	D	G	J	1	1	1				
27	2	4	3	2	2	3	5	3	5	3	3	4	5	2	2		2	2	1	1	6	7	7	7	6	7	7	5	7	A B D			5	4	4	3	2	1	1	1	2	C D E	2	3	3	3	3	2	2	2	3	3	2	2	1	1	1	1	1	1	E	F	G	1	2	1		2	3	1
28	2	4	3	2	2	3	2	4	5	3	5	7	2	2	1	2	2	6	6	5	6	5	5	5	5	5	2	C			1	3	3	1	2	2	1	1	C D	2	3	2	2	2	2	2	1	2	2	2	1	1	1	1	1	1	1	B	C	L	1	2	2		2		
29	2	3	3	2	3	4	5	5	4	5	3	1	5	3	2	2	1	1	2	5	5	5	5	5	5	5	5	5	A B D	3	4	3	4	1	2	2	2	2	1	A B D	2	3	2	2	1	1	2	1	1	2	1	2	2	2	2	2	2	2	1	D	E	H	3	2	2		3	2	2
30	3	3	3	4	4	5	5	5	5	4	3	4	5	2	2	1	1	1	1	1	7	6	6	6	6	7	7	6	6			5	3	4	3	2	2	1	1	2	2	C D	2	3	3	3	3	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	D	E	F	1	1	1	2	1	1	1

B. CONTROL GROUP (GROUP B)

Questionnaire No. / Question No.	1	2	3	4				5			6		8				1 0						11	12		
													a	b	c	d	a	b	c	d	e	f		c	d	e
1a	1	3	2	2	6	7		2	6	7																	
2a	2	1	2	1	2	3	7	2																			
3a	2	3	1	2	7			2																			
4a	2	3	3	2	3	7		2	3		1	2															
5a	2	3	3	2	7			7			1	2															
6a	3	2	4	2	6	7		7			2	6															
7a	2	1	2	2	6	8		8			2																
8a	2	1	1	2	2																						
9a	1	3	4	2	4	6	8	8			2	6															
10a	2	1	2	2	4	6	8	2	8		2	6															
11a	1	3	2	2	6	7	8	2	6	8	2	7															
12a	2	3	2	2	3	7		2			2																
13a	1	3	4	2	7	8		7			2																
14a	2	1	4	4	6	7	8	4	8		1	2															
15a	2	3	4	2	3	4	7	3	4	7	2																
16a	3	3	4	2	6	7		2	6	7	2	6															
17a	2	3	4	2				2																			
18a	2	3	2	2	6	7		2	6	7	1	2															
19a	2	3	1	1	2	3	7	2	7																		
20a	2	1	4	2	3	6	7	2	3		1	6															
21a	2	5	4	2	6	7		7			2	6															
22a	2	3	4	2	6	8		6	8		1	2															
23a	2	3	1	2	4	6	8	2	6	8	2	6															
24a	1	3	2	2	3	7		2	7		2																
25a	2	3	1	2	6	7		7			2	6															
26a	2	3	2	1	2	3	7	2	7		2	7															
27a	2	1	3	2	3	6	7	2	6	7	1	2															
28a	1	2	2	1	2	3		2																			
29a	2	1	4	2	4	3		4			2																
30a	2	1	1	2	6	7		2	6	7	2	6															

Questionnaire No.	13a	13b	13c	13d	13e	13f	13g	13h	13i	13j	13k	14a	14b	14c	16a	16b	16c	16d	16e	16f	16g	16h	17Aa	17Ab	17Ac	17Ba	17Bb	17Bc	17Ca	17Cb	17Cc	18	19	20a	20b	20c	20d	21a	21b	21c	21d	21e	21f	22a	22b	23a	23b	23c	23d	23e	23f	23g	23h	23i	23j	23k	23l	23m	23n	23o	23p	23q	23r	23s	23t	23u	24	25	26a	26b	26c	26d	26e	26f	27
1a	2	4	2	3	1	1			1	5	3	5	6	4	1	2	2	2	1	3	1		5	5	6	7	5	5	7	7	5	7	a d g	5	3	4	1	1			1	2	1	b	c d	3	3	2	2	3	2	2	2	3	3	3	3	3	3	3	2	2	3	3	2		1		1	1	1	1	1		4
2a	1	4	2	1	2	1	5	5	2	4	3	3	5		2	2	1	2	1	2	2		5	5	4	5	5	4	3	4	3	6	a d	3	4	3	4	1	1	1	1	1	1	a	d	2	2	2	3	3	2	2	3	3	3	3	3	3	2	1	2	1	3	3	3		p	s	1	2	2	4	3	4	1
3a	3	5	2	1	2	2	5	2	4	5	3	3	4	5	2	2	1	1	1	1	1		6	6	6	7	7	7	7	7	7	6	a b d	3	4	3	3	1	2	2	1	2	1	a	c d	3	3	3	3	3	3	3	3	3	1	2	3	3	3	3	3	3	3	3	3	3	a	p q	1	3	1	1	1	2	4
4a	1	5	1	3	5	5	5	5	5	5	2	3	4		3	3	1	2	1	2	1		7	7	7	7	7	7	7	7	7	5	a	5	3	3	5	1	2	2		2	2	b	c d	1	2	2	3	2	1	1	3	2	3	2	3	2	2	3	1	1	1	1	2	1	b	l o	3	4	2	1	2	3	1
5a	2	4	1	2	2	2	3	2	2	5	2	1	3	5	2	2	1	2	1	2	1		5	7	5	6	7	5	7	7	4	4	b g	3	1	4	4	1	2	2	1	2	2	c	d	2	3	2	3	2	1	1	3	2	3	2	3	3	3	2	1	3	2	1	2	2	n	s t	3	1	2	1	2		
6a	1	5	2	3	4	5	5	5	4	5	4	1	4	5	3	2	1	2	1	2	1		6	7	5	7	2	5	6	7	4	3	c	5	2	4	3	1	2	2	1	1	2	a	b	2	1	1	3	2	3	3	3	2	3	2	3	2	2	1	1	1	1	2			d	g j	2	2	2	1	4	1	3
7a	1	3	1	3	2	2	5	2	5	1	3	5	6	3	2	1	1	1	1	2	1	2	7	7	7			7	7	7	6		a b d	3	4	4	3	1	2	1	1	1		c	d e	2	2	3	3	3	3	3	3	2	2	2	3	2	1	1	2	2	1	2	3		d	e f	1	2	2	1	1	1	4
8a	2	2	1	1	4	4	5	4	4	5	1	3	4	5	1	2	2	2	1	1	1		4	7	7	7	7	7	7	7	7	7	a b	3	3	3	3	1	1	1	1	1	2	b	c d	3	3	3	3	2	2	2	3	2	2	2	2	3	1	1	1	1	1	1	1		b	e l	2	2	2		1	2	
9a	1	3	1	1	3	2	4	4	4	4	3	1	4	5	2	2	2	2	1	1	1		6	7	7	6	6	7	7	7	6		a	5	3	3	3								d	2	3	3	2	3	3	2	3	2	3	3	3	3	3	2	2	2	3	2	2		n	r u	1	1	1	1	2	1	
10a	3	3	3	4	4	3	3	4	2	3	3	3	5		2	2	1	2	1	2	1		7	7	7	7	7	7	7	7	7	7	a b d	4	3	3	1	1	2	2	1	2	1	a	b c	2	3	2	3	3	3	3	3	2	3	2	3	3	3	2	3	2	3	2	2		o	q s	1	1	1	1	1		
11a	2	3	3	2	2	4	4	4	4	3	5	1	1	4	5	1	2	2	1	1	2	3	7	7	6	7	7	7	7	4	6	5	a d e	5	3	4	3	1	2	2	2	2	1	a	b c	3	2	3	3	3	3	2	3	2	3	3	3	3	3	1	1	1	3	2		b	g j	1	2	1		1	1	1
12a	2	4	2	3	3	4	4	4	3	4	2	3	4		5	2	2	1	1	1	1		6	6	7	7	7	7	7	7	6		a b d	5	4	3	1	2	2	2	2	1	b	c d	3	3	3	2	2	1	2	2	3	1	1	1	3	3	3	3		a	b s	2	2	3		2	1	
13a	1	2	1	2	3	4	5	5	5	5	2	3	4		2	2	2	1	1	1	1		6	6	7	6	6	7	7	6	6		a	3	4	4	1	2	1	3	2	2	a	b c	2	3	2	2	2	2	2	2	3	3	3	2	1	1	1	1	1	1	2		b	j k	3	2	2		3	2	5
14a	2	4	2	3	1	1	5	5	1	5	3	4	5	6	1	2	2	2	1	2	1		5	5	6	7	5	6	7	6	5	6	a d g	5	3	4	1	2	2	1	2	1	b	c d	3	3	3	2	3	2	2	2	4	3	3	3	3	2	2	2	3	3	3	2		b	q s	1	1	1	1	1		4
15a	3	5	2	2	2	2	5	4	3	4	3	1	3	4	2	1	2	1	1	1	1		7	7	7	7	7	7	7	7	7		a b d	5	4	3	4	1	2	1	2	2	b	d g	2	3	3	2	3	3	3	2	3	2	2	3	2	2	2	2	2	2	2		f	g i	1	1	1	1	2	2	1
16a	1	4	2	2	3	4	5	5	4	5	4	1	3	5	2	1	3	2	2	1		5	5	5	6	6	5	5	5	6	b c	5	1	3	3	1	2	2	1	2	2	b	c d	3	3	2	3	3	2	2	2	2	2	2	2	3	3	2	1	2	1		a	n o	2	2	1	2	1	3	4
17a	3	3	3	3	2	1	2	4	5	4	5	1	5		1	2	2	2	1	2	1		7	7	7	7	7	7	7	7	5	e	4	4	4	4							c	d	2	2	2	3	3	2	2	3	3	2	2	1	1	2	3	3	3		d	u t	1	1	1	2	3	3	
18a	1	4	2	1	2	1	5	5	4	3	4	3	5		1	2	1	2	1	2	2		5	5	4	5	5	3	4	4	5	a b d	3	4	4	1	1	1	1	1	1	c	d	3	3	2	3	3	2	2	3	3	3	3	3	3	2	1	2	3	3	3		d	p s	1	2	2	4	3	4	
19a	1	5	1	4	4	5	5	5	5	5	2	3	4	5	3	2	1	2	1	2	1		7	6	7	7	7	7	7	6	a b d	5	3	3	5	1	2	2	1	2	2	b	c d	2	2	3	2	1	1	2	2	3	2	3	2	2	1	1	1	1	2		b	o s	1	4	2	1	2	3	1
20a	1	5	2	3	3	5	5	5	4	5	4	3	4	5	3	2	1	2	1	2	1		6	7	5	7	5	5	6	7	4	4	b c	5	2	4	3	1	2	2	1	2	a	b	2	2	1	3	2	3	3	3	2	3	2	2	1	1	1	1	2	2		b	c l	2	2	2	1	4	1	3
21a	2	5	44	3	3	4	3	4	5	3	3	4	5	2	2	1	2	2	1	1	1		6	5	6	6	5	6	6	6	5	6	a d g	5	4	4	3	1	2	1	2	1	c	d e	2	2	3	2	3	3	3	2	3	2	3	2	1	1	1	1	2	3		d	e g	1	1	1	2	3	1	1
22a	3	3	3	2	3	3	3	3	4	4	5	1	3	5	2	2	2	2	1	2		6	5	6	6	5	6	6	6	6	a	3	3	4	2	2	2	2	1	c	d	2	2	2	3	2	3	3	3	3	2	3	3	2	2	1	1		f	l j	1	2	1	1	1	1	1
23a	2	4	3	3	2	2	4	3	3	3	3	3	4	5	1	2	1	1	1	1		6	6	6	6	6	6	6	6	6	a b d	1	4	3	4	1	1	1	1	1	a	b d	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	2	1	1		e	h l	1	1	1	1	2	2	1
24a	2	3	3	4	2	4	4	3	3	5	1	1	4	5	1	2	2	1	2	1		7	7	6	7	7	6	7	5	6	5	a d e	5	3	4	3	1	2	2	2	1	a	b c	2	3	2	3	3	3	2	3	3	3	3	3	3	1	1	1	2	2		f	g j	1	2	1	1	1	1	1
25a	3	4	2	2	4	2	5	2	4	5	2	1	3	5	1	2	2	2	1		6	5	6	6	5	5	6	6	6	a	2	3	3	4	2	2	2	2	2	d	g	3	3	3	3	2	2	2	3	2	2	2	3	1	1	1	1	1	1		b	e g	2	2	2	1	2	1	
26a	2	3	2	3	2	2	5	5	2	5	1	3	5	6	1	2	1	1	1	2	1		7	7	7	7	7	7	7	7	7	a b g	3	1	4	3	1	2	2	1	1	c	d e	2	2	3	3	3	3	2	2	2	3	1	1	2	2	2	1	1	3		d	e f	1	2	2	2	1	4	
27a	2	3	1	1	3	2	3	4	4	4	4	3	1	5	4	1	2	2	1	1	1		6	7	6	6	6	7	7	7	7	a b d	5	3	3	1	1	1	1	1	1	c	d	2	3	3	2	3	3	3	3	3	3	2	2	3	2	1	1	3		n	o s	1	1	1	2	1		
28a	2	3	2	3	3	4	4	3	4	2	4	3	4	5	1	2	2	1	1	1		6	6	6	6	6	6	6	6	6	a b g	5	4	3	1	1	1	1	1	1	b	c d	2	3	2	3	1	2	2	3	3	1	1	3	3	3		a	b s	2	2	2	1			
29a	2	4	1	2	2	2	2	2	5	2	1	3	5		2	2	1	2	1	2	1		5	6	5	6	7	5	6	6	5	5	b g	3	1	4	4	1	2	2	1	2	2	c	d	2	3	2	3	2	1	1	3	2	3	2	1	1	2	1	3	2	2	2	2		b	s t	2	1	2	2	1		
30a	2	3	3	4	4	3	4	3	3	3	3	5		1	2	1	2	1	2	1		6	6	6	6	6	6	6	6	6	a b d	3	3	3	1	1	2	2	1	2	1	a	b c	2	3	2	3	3	3	3	2	2	3	3	2	1	3	2	3	2	2		f	q s	1	1	1	1	1		

C. DESCRIPTIVE STATISTICS: ANALYSIS OF AVERAGES AND STANDARD DEVIATIONS OF THE QUESTIONS IN THE QUESTIONNAIRE: GROUP A

	N	Minimum	Maximum	Mean.	Std. Deviation
q1	30	1	3	1.77	0.5
q2	30	1	5	2.37	1.03
q3	30	1	4	3.03	1.1
q4(1)	29	1	6	2.069	1.0667
q4(2)	28	2	8	6.2143	1.833
q4(3)	16	3	8	7.1875	1.2764
q4(4)	6	8	8	8	0
q5(1)	29	1	8	3.7931	2.7305
q5(2)	18	3	8	7.2222	1.3086
q5(3)	3	8	8	8	0
q6(1)	28	1	2	1.6071	0.4973
q6(2)	17	2	7	3.4706	2.0651
q7(1)	30	1	2	1.5667	0.504
q7(2)	12	2	2	2	0
q8a	30	1	1	1	0
q8b	28	1	2	1.0357	0.189
q8c	27	1	2	1.1111	0.3203
q8d	21	1	2	1.2381	0.4364
q10a	29	1	3	2.1034	0.5571
q10b	28	1	3	1.5	0.5774
q10c	29	1	3	1.3103	0.6038
q10d	26	1	3	2.0769	0.6884
q10e	27	1	3	1.3704	0.6297
q10f	3	1	2	1.3333	0.5774
q11	20	1	6	3.6	1.3917
q12a	8	1	1	1	0
q13a	28	1	3	1.8571	0.7052
q13b	28	1	5	3.3214	1.3068
q13c	28	1	4	2.2857	0.81
q13d	28	1	5	2.3929	0.9165
q13e	28	1	4	2.7857	0.7868
q13f	27	1	5	3.1111	1.1875
q13g	27	2	5	4.1857	0.9623
q13h	28	2	5	4.0714	0.94

q13i	28	2	5	3.6071	0.994
q13j	28	3	5	4.7143	0.5345
q13k	28	1	5	3.0714	0.8576
q14a	29	1	5	3	1.3628
q14b	27	3	8	4.5926	1.1522
q14c	20	3	11	5.75	1.9702
q16a	29	1	3	2.0845	0.5659
q16b	28	1	3	1.9643	0.3313
q16c	27	1	2	1.4816	0.5092
q16d	29	1	3	1.6552	0.6139
q16e	28	1	2	1.4286	0.504
q16f	28	1	2	1.4286	0.504
q16g	28	1	2	1.25	0.441
q16h	1	2	2	2	
q17Aa	30	4	7	6.0333	0.8087
q17Ab	30	3	7	5.9667	0.9994
q17Ac	30	3	7	5.9667	0.9994
q17Ba	30	3	7	6.4	0.855
q17Bb	30	3	7	6.1667	1.0532
q17Bc	30	3	7	5.9667	1.0662
q17Ca	29	3	7	6.2069	1.0135
q17Cb	29	3	7	6.4138	0.9826
q17Cc	29	1	7	5.4828	1.5264
q18	30	2	7	6.1333	1.1666
q19a	30	1	11	4.2	2.62
q19b	30	1	6	2.97	1.92
q19c	30	1	6	2.07	1.44
q20a	29	1	5	3.5862	1.524
q20b	29	1	5	3.5517	0.8275
q20c	30	3	4	3.3333	0.4795
q20d	30	3	6	3.7333	0.6915
q21a	28	1	2	1.2857	0.46
q21b	26	1	3	1.8462	0.5435
q21c	27	1	2	1.7407	0.4466
q21d	25	1	2	1.52	0.5099
q21e	27	1	2	1.7037	0.4653
q21f	27	1	2	1.3333	0.4804
q22a	30	2	9	4.63	2.17
q22b	30	1	9	5.6	2.11
q22c	30	1	9	3.33	2.58
q22d	30	1	5	1.73	1.53
q23a	28	1	3	2.25	0.6455
q23b	30	2	3	2.7667	0.4302
q23c	29	2	3	2.6897	0.4708
q23d	30	1	3	2.6667	0.5467
q23e	30	2	3	2.6	0.4983
q23f	30	1	3	2.4667	0.5713
q23g	30	1	3	2.5333	0.5713
q23h	30	2	3	2.5333	0.5074
q23i	29	1	3	2.1724	0.6584
q23j	29	1	3	2.3448	0.7209
q23k	30	2	3	2.4	0.4983
q23l	30	1	3	2.4667	0.5713
q23m	29	1	3	2.4483	0.5724
q23n	30	1	3	2.4667	0.5713
q23o	30	1	3	2.1333	0.7761
q23p	30	1	3	1.8333	0.7915
q23q	29	1	3	1.7931	0.8185
q23r	29	1	3	1.8276	0.7106
q23s	29	1	3	1.9655	0.7311
q23t	30	1	3	2.1	0.7589
q23u	30	1	3	2.3	0.7497
q24a	30	3	20	10.83	4.66
q24b	30	3	26	11.47	5.39
q24c	30	2	26	12.03	6.57
q25	30	1	3	1.2333	0.5683
q26a	29	1	4	1.7931	0.8185
q26b	30	1	2	1.4	0.4983
q26c	19	1	2	1.4211	0.5073
q26d	28	1	4	1.8214	0.7724
q26e	17	1	4	1.7647	0.9034
q26f	3	1	1	1	0
q27	17	1	5	1.9412	1.6382

D. DESCRIPTIVE STATISTICS: ANALYSIS OF AVERAGES AND STANDARD DEVIATIONS OF THE QUESTIONS IN THE QUESTIONNAIRE: GROUP B

	N	Minimum	Maximum	Mean.	Std. Deviation
q1	30	1	3	1.87	0.51
q2	30	1	5	2.4	1.04
q3	30	1	4	2.63	1.19
q4(1)	30	1	4	1.9333	0.5208
q4(2)	29	2	7	4.5172	1.7853
q4(3)	26	3	8	6.0385	1.7084
q4(4)	11	7	8	7.4545	0.5222
q5(1)	29	2	8	3.5862	2.3071
q5(2)	16	3	8	6.0625	1.5692
q5(3)	8	7	8	7.25	0.4629
q6(1)	23	1	2	1.6957	0.4705
q6(2)	17	2	7	4.7059	2.0846
q13a	30	1	3	1.8667	0.7303
q13b	30	2	5	3.7333	0.9072
q13c	30	1	4	2	0.8305
q13d	30	1	4	2.4667	0.9732
q13e	30	1	5	2.7333	0.9803
q13f	30	1	5	2.8667	1.306
q13g	29	2	5	4.2069	0.9403
q13h	29	2	5	4.069	1.0327
q13i	30	1	5	3.3	1.1492
q13j	30	3	5	4.5	0.7311
q13k	30	1	5	2.5	1.0422
q14a	30	1	5	2.5	1.2798
q14b	29	3	6	4.1034	0.817
q14c	24	2	6	4.875	0.7974
q16a	30	1	3	1.7667	0.7279
q16b	30	1	3	1.9	0.4026
q16c	30	1	3	1.5667	0.5683
q16d	30	1	2	1.6667	0.4795

q16e	30	1	2	1.1333	0.3457
q16f	30	1	3	1.6667	0.5467
q16g	30	1	3	1.1667	0.4611
q16h	1	2	2	2	
q17Aa	30	4	7	6	0.8305
q17Ab	30	5	7	6.2	0.8469
q17Ac	30	4	7	6.1	0.9229
q17Ba	29	5	7	6.4483	0.6317
q17Bb	29	2	7	6.0345	1.149
q17Bc	29	4	7	6.069	0.9232
q17Ca	30	3	7	6.3333	1.0613
q17Cb	30	4	7	6.2667	0.9803
q18	30	3	7	5.7333	0.9444
q19a	30	2	9	2.63	1.54
q19b	30	1	7	2.83	1.84
q19c	30	1	5	2.2	1.49
q20a	29	1	5	4	1.165
q20b	30	1	4	3	0.9826
q20c	30	3	4	3.4333	0.504
q20d	30	1	5	3.1	1.2134
q21a	28	1	2	1.1071	0.315
q21b	27	1	2	1.7778	0.4237
q21c	27	1	2	1.7407	0.4466
q21d	27	1	3	1.2593	0.5257
q21e	28	1	2	1.6429	0.488
q21f	28	1	2	1.4286	0.504
q22a	30	1	7	3.07	1.93
q22b	30	1	8	4.23	1.85
q22c	30	1	8	2.9	1.95
q22d	30	1	4	1.27	0.64
q23a	29	1	3	2.2759	0.5276
q23b	30	1	3	2.6333	0.5561
q23c	30	1	3	2.2667	0.5833
q23d	30	2	3	2.6	0.4983
q23e	30	2	3	2.6333	0.4901
q23f	30	1	3	2.4	0.724
q23g	30	1	3	2.2333	0.7739
q23h	30	2	3	2.5333	0.5074
q23i	30	2	3	2.3	0.4661
q23j	30	2	4	2.7	0.535
q23k	30	1	3	2.3333	0.5467
q23l	30	1	3	2.6	0.6215
q23m	30	1	3	2.4667	0.6814
q23n	30	1	3	2.4333	0.6261
q23o	30	1	3	2.0667	0.7849
q23p	30	1	3	1.8	0.8469
q23q	30	1	3	1.7	0.7022
q23r	30	1	3	1.7333	0.8277
q23s	30	1	3	2	0.871
q23t	30	1	3	2.1333	0.6814
q23u	30	1	3	2.1333	0.7303
q24a	30	1	17	7.27	4.76
q24b	30	1	27	14.33	7.97
q24c	30	1	25	14.33	7.58
q25	30	1	3	1.4667	0.6814
q26a	28	1	4	1.8214	0.8189
q26b	30	1	3	1.5667	0.5683
q26c	25	1	4	1.4	0.866
q26d	29	1	4	1.931	0.9232
q26e	25	1	4	2	1.291
q26f	4	1	1	1	

E. SCALED COMPARISON OF MEAN VALUES OF THE QUESTIONNAIRE

	Mean group 1	Mean group 2	sig.		Mean group 1	Mean group 2	sig
q1	1.77	1.87		q21a	1.2857	1.1071	
q3	3.03	2.63		q21b	1.8462	1.7778	
q13a	1.8571	1.8667		q21c	1.7407	1.7407	
q13b	3.3214	3.7333		q21d	1.52	1.2593	
q13c	2.2857	2		q21e	1.7037	1.6429	
q13d	2.3929	2.4667		q21f	1.3333	1.4286	
q13e	2.7857	2.7333		q23a	2.25	2.2759	
q13f	3.1111	2.8667		q23b	2.7667	2.6333	
q13g	4.1852	4.2069		q23c	2.6897	2.2667	*
q13h	4.0714	4.069		q23d	2.6667	2.6	
q13i	3.6071	3.3		q23e	2.6	2.6333	
q13j	4.7143	4.5		q23f	2.4667	2.4	
q13k	3.0714	2.5		q23g	2.5333	2.2333	
q16a	2.0345	1.7667		q23h	2.5333	2.5333	
q16b	1.9613	1.9		q23i	2.1724	2.3	
q16c	1.4815	1.5667		q23j	2.3448	2.7	*
q16d	1.6552	1.6667		q23k	2.4	2.3333	
q16e	1.4286	1.1333		q23l	2.4667	2.6	
q16f	1.4286	1.6667		q23m	2.4483	2.4667	
q16g	1.25	1.1667		q23n	2.4667	2.4333	
q16h	2	2		q23o	2.1333	2.0667	
q17Aa	6.0333	6		q23p	1.8333	1.8	
q17Ab	5.9667	6.2		q23q	1.7931	1.7	
q17Ac	5.9667	6.1		q23r	1.8276	1.7333	
q17Ba	6.4	6.4483		q23s	1.9655	2	
q17Bb	6.1667	6.0345		q23t	2.1	2.1333	
q17Bc	5.9667	6.069		q23u	2.3	2.1333	
q17Ca	5.2069	6.3333		q25	1.2333	1.4667	
q17Cb	6.4138	6.2667		q26a	1.7931	1.8214	
q17Cc	5.4828	5.9		q26b	1.4	1.5667	
q18	6.1333	5.7333		q26c	1.4211	1.4	
q20a	3.5862	4		q26d	1.8214	1.931	
q20b	3.5517	3	*	q26e	1.7647	2	
q20c	3.3333	3.4333		q26f	1	1	
q20d	3.7333	3.1	*	q27	1.9412	1.7778	

Note: in the column heading "Sig," the asterisk *
refers to the question in which there was a
meaningful difference. In reviewing the table, no
meaningful differences between groups based on
mean values of the questionnaire may be
observed.

APPENDIX 3: INTERVIEWS

3.1 HEAD-TEACHERS AND INSPECTORS

1. **Please give a brief description of your school.**
   <u>Prompt</u>: Number of classes, age groups, the kind of population the school caters to.

2. **How would you describe your policy/attitude to teachers participating in INSET?**
   <u>Prompt</u>: How many teachers participate in courses? Who initiates participation (the teacher, Head-teacher, other) ? Is there guidance towards a particular course?

3. **Which INSET courses are your teachers taking this year?**
   <u>Prompt</u>: Length of the course (one day a week, one day a month etc.), subject matter, type of institution (university, college, pedagogic centre, etc.), what does the course offer (qualification, academic degree, inset benefit, etc.).

4. **What are your expectations from teachers participating in INSET courses?**
   <u>Prompt</u>: Why do you consider it important?

5. **Do you find that your expectations are fulfilled?**
   <u>Prompt</u>: In what way?

6. **When one of your teachers is taking a course - how involved are you in the course itself?**
   <u>Prompt</u>: With regard to subject matters, participant's satisfaction, difficulties etc.

7. **What teaching methods are most prevalent in your school?**
   <u>Prompt</u>: What about?

8. **Which of the teaching methods you listed are most acceptable to you?**
   <u>Prompt</u>: Why is that?

9. **When you wish to introduce a new programme or changes in your school, how do you do it?**
   <u>Prompt</u>: The head-teacher decides and announces the changes? The head-teacher presents ideas and holds a discussion? Staff discuss proposals freely? Other?

10. **Teaching programmes in the classroom - how are they planned/set?**
    Prompt: Within the school? Are there discussions on teaching methods? Is staff involved in the planning? Do programmes come from the Ministry of Education? Are there individual programmes (i.e., of each member of the teaching staff)? Other?

11. **How would you describe working practices between management and staff?**
    Prompt: Does the head-teacher hold individual meetings with teachers? Does he/she consult working parties? Does a management committee instruct teaching staff? Is the head-teacher actively involved in developing and instructing principal forces in the school?

12. **What do meetingswith the head-teacher involve**
    Prompt: Discussing special needs of individual pupils? Instruction directly related to teaching practices? Planning teaching programmes? Reviewing reports, examinations? Other?

13. **How involved are the teachers in making decisions?**
    Prompt: Do they approve teaching programmes? Plan school events? Determine teaching methods? Do teachers sanction/dispute the school's manifesto? Do they have a say in matters of discipline and organistion? Other?

14. **How do you get information on individual classes?**
    Prompt t: Visits to classes (how and when do you visit)? Teachers' reports? Heads of years' report? Other?

15. **When a teacher suggest a new idea/initiative - how do you proceed?**
    Prompt: Ask him/her to present it at staff meeting? Examine the idea and mke a decision? Enable the teacher to experiment and report? Other?

16. **How would you describe staff relationships in your school?**
    Prompt: Teachers cooperate (in what ways)? Teachers often argue and disagree? Are teachers divided into "cliques"? Do they help each other?

17. **So far, could you describe the overall benefits of INSET in your school?**

18. **Is there any aspect of which you think could be improved?**

3.2   SAMPLE OF GROUP A TEACHERS

1. **Please fill in a few background details:**
    Your name: _____
    Number of years in teaching: _____
    Classes and subjects you teach: _____

2. **Could you tell me why you decided to participate in the "Alternatives in Teaching" course?**
    Prompt: What were your expectations?

3. **Would you say your expectations had been met?**
    Prompt: Why is that?

4. **What teaching methods do you use most in your daily work?**
    Prompt: What about ....?

5. **What teaching methods don't you use at all?**
    Prompt: Why is that?

6. **Which of these (above) methods do you value most?**
    Prompt: Why is that?

7. **Which aspect of the course would you like to see improved?**
    Prompt: In what way?

8. **How do you plan your teaching work?**
    Prompt: Discuss it with the head-teacher? Discuss it with colleagues? By yourself? Other?

9. **Could you describe instances where you tried to apply new methods you studied in the course?**
    Prompt: What ideas did you try to introduce? How did you initiate them? What happened in the classroom? What was the outcome?

10. **Further to Question 9, why, in your opinion was the outcome as you described?**

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3.3 SAMPLE OF GROUP B TEACHERS

1. **Please fill in a few background details:**
   Your name: _____
   Number of years in teaching: _____
   Classes and subjects you teach: _____

2. **What teaching methods do you use most in your daily work?**
   Prompt: After the teacher answers, the interviewer could ask about methods not mentioned - what about ....?

3. **What teaching methods don't you use at all?**
   Prompt: Why?

4. **Which of these (above) methods do you value most (which are the most important, which are the most effective)?**
   Prompt: Why?

5. **How do you plan your teaching work?**
   Prompt: Discuss it with the head-teacher? Discuss it with colleagues? By yourself? Other?

6. **Have you tried overt he past few years to apply new teaching methods/new ideas?**
   Prompt: How did you implement them in the class (what was the process?) What happened in the classroom? What was the outcome?

7. **Further to Question 6, what, in your opinion, were the factors influencing the results?**

3.4 FOLLOW-UP OBSERVATION IN THE CLASSROOM

An Unstructured Interview with the Teacher

It is important, from both personal and professional aspects, to share with the teacher any follow-up discussion about the lesson (Wajnryb, 1992).

The unstructured interview is not dissimilar to an open conversation between two equal adults. The researcher respects the fact that the teachers agree to let her into his/her classroom in order to observe him/her and the pupils. The researcher would therefore wish to avoid a situation whereby the teacher might view it as an encounter between trainee and superior.

With the aim to share the data with the teacher and to consider the observer's impressions, the researcher will encourage the teacher to address the following topics:

1. **The aims of the lesson.**
   - What were they?
   - To what extent are aims/targets planned?

2. **Planning the lesson.**
   - What was the original plan?
   - To what degree are lessons planned in advance?
   - What elements are taken into account when planning a lesson?

3. **During the lesson.**
   - How did he/she feel during the lesson?
   - Which activities were most valuable to the pupils? Why? Could he/she isolate the factors responsible?

4. **After the lesson.**
   - What is he/she planning for the next lesson?
   - What will be the focus?
   - What balance of activities is being considered?
   - Levels within the class?

3.5 CLASSIFICATION OF INTERVIEWED HEAD-TEACHERS' RESPONSES ACCORDING TO THE QUESTIONS

Example of details of subjects for each response during every interview (sample of four interviews):

Question	1	2	3	4	5	6	7	8	9
Interview No. 1	IS,SD, SD	TTE, TC,SN, SN,SN, IS,IS, IS,DC, DC,SN, SN,IS, IS,DC, DC,DC	TTE, TC,TC	HB, HB,TB	AC,HS, HS,AC, AC	HS,HS, HS	SN,SN, SN,SN, SN,SN, SN,SN, SN,SN, SN,SN	SN,SN	SD,IS, PC,HB, HS,HS, HS,SN, WS,SN, SN,TC, HS,TC
Interview No. 2	SD,SD, SD	PC,WS, HS,SN, SN,HS, HS,PC, HS	TTE, TTE, TB,TB, TB, TTE, TTE, HS,HS, SN,SN, HS	HB,HB, TC,TC, TTE, SN,SN, SN	AC	HS,HB, HS,HB	SN	HB,WS, WS,SN, SN,SN, SN,HB, HS,SN, C,HB,H B,SN, SN,SN, HB,SN, IS,HB, HS,HS	HS,TC, HS,HS, HB,TC, TC
Interview No. 3	SD,SD, SD	PC,PC, WS,HS, SN,SN, HS,HS, PC,HS	TTE, TTE, TB,TB, TB,TB, TTE, TTE, HS,HS, SN,SN, HS	HB,HB, TC,TC, TTE, SN,SN, SN	AC	HS,HB, HS, HB	SN	HB,WS, WS,SN, SN,SN, HB,HS, SN,C, HB,HB, SN,SN, SN,HB, SN,HB, IS,HS, HS	HS,TC, HS,HS, HB,TC, TC
Interview No. 4	IS,SD, SD,SD, TB,SD	TB, TTE, TB,TB, HS, TTE, TTE, TC,PC, TC,HB, PC,DC, HS	TTE	HB	SN,TC, AC,HB, HB,TC, HB,HB, SN,SN	HS,HS, HB	SN,SN, SN,SN, SN,SN	HB,P	SN,SN, SN
Question	10	11	12	13	14	15	16	17	18

Interview No. 1	SN,SN, SN,SN	SN,SN, SN	SN,SN, SN,SN, SN,SN	SN	HS,SN, SN,SN	SN, TTE, HS,HS	SN,IS, SP,HB	AC	SD,SD, SN,SN, SN
Interview No. 2	SN,SN, SN,SN, SN	HS,SN, HS,SN, SN	SN,HS, SN	HS,HS, HB,HS, HB	SN,HS, HS,HS, SN	HS,SH, SN,TB, TTE, SN	SN	AC	DC,AC, HB,HB
Interview No. 3	SN,SN, SN,SN, SN	HS,SN, HS,SN, SN	SN,HS, SN	HS,HS, HB,HS, HB	SN,HS, HS,HS, HS,SN	HS,HS, SN,TB, TTE,SN	SN	AC	DC,AC, HB, HB
Interview No. 4	SN,SN, SN	HS,HS, HS,HS, HS,SN, SN,SN, HS	SN,HS, HS	SN,TC, TC,HS	HS,HS	SN,SN, HS	SN,SN, SN,HS, HB	DC,DC, TC, AC	DC,SN

APPENDIX 4: OBSERVATIONS

THE OBSERVATION SHEET

The observation sheet was developed based on the premises of the INSET course content described in "Alternatives in Teaching." One of the subjects at the workshop was the four class factors and the need to make them compatible.

The factors are:
(1) Class structure
(2) Learning task
(3) Pupils' behaviour
(4) Teacher's attitude and role.

<u>**Following are the categories for each factor:**</u>

1. Class structure

    (a)   Audience (facing teacher)

    (b)   Individual

    (c)   Groups

Note: (a) and (b) look identical, but since the teacher's position changes, they appear as separate structures.

2. Learning task

    (a)   Uniform - pupils are asked to perform the same task within a given time.

    (b)   Individual - the task is either identical to all, or a group is given a particular task. Each pupil works individually, at his/her own speed.

    (c)   Shared by group members - all groups are given the same task. Members of the group divide it into sub-tasks in order to fully complete the task.

    (d)   Shared by group members and coordinated with other groups - each group is given a different task (could be a sub-text of the general subject taught at the time). Members of the group share the group task and receive information on other tasks of other groups.

3. Pupils' behaviour

(a) One- or two-sided communication (teacher > pupil, pupil > teacher) - the teacher speaks to the pupils, the teacher asks a question and pupils answer.

(b) One- and two-sided communication, initial interaction of pupils, comparison of results (teacher < > pupil, pupil < > pupil).

(c) Multi-sided communication within the group.
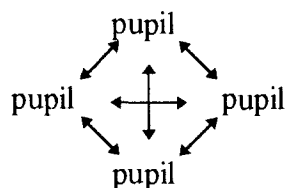
(e) Multi-sided communication within the group and with other groups.
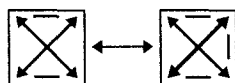
4. Teacher's attitude

(a) Lecture, assessment questions.

(b) Planning the tasks, pupil assessment and supervision.

(c) Advising and guiding the groups.

(d) Advising and guiding the groups, coordinating.

The following are two observation samples which were carried out at the Israeli School in London in order to examine the tool.

During the first 11 minutes, pupils sat in a semi-circle facing the teacher, listening. The teacher introduced a new vowel, wrote it on the board, demonstrated its sound, and asked the children to say out loud, words with the new vowel. A number of pupils gave examples. From the 12th minute on, the pupils returned to their desks, which were arranged in groups.

The task consisted of individual work on specified work sheets. The pupils continuously compared their work and discussed matters unrelated to the learning task. The teacher moved among the pupils and in certain cases, sat next to a pupil and guided him/her for several minutes.

During the last five minutes, the teacher tried to explain a certain difficulty faced by some of the pupils and asked them to revise the chapter at home. Not all pupils seemed attentive, some continued talking or writing in the work sheet.

Analysis:

The observation aims at examining which of the teaching methods are most prevalently used and whether they are used efficiently, i.e., whether the various factors present are compatible.

In the observation in question, the lesson started with 11 minutes of formal teaching. Pupils sat on their chairs (away from their desks) in a semi-circle facing the teacher and the board. The teacher introduced a new vowel, wrote it on the board and demonstrated its sound. She then asked the pupils to come up with examples of words with the new vowel. A number of pupils gave examples. The children then (minute 12) retuurned to their desks with their chairs and sat in groups.

Each pupil was asked to work individually and independently on his/her work sheet. The teacher moved among the puupils and sat down with a number of pupils to listen to their reading and explain the given task. At this point, there was no apparent compatibility of the different factors. Being seated in groups (when the task was individual) prompted pupils to make comparisons and in conversations unrelated to the task.

During the last five minutes, the pupils remained seated at their desks while the teacher returned to the board and tried to explain a certain mistake repeated by a number of pupils. Only five children (out of 15) seemed attentive. Others continued with their work or carry on in their conversations.

Two teaching methods were used in the lesson: **formal teaching** and **individual work**.

The first 11 minutes demonstrated compatibility of the four factors. From the 12th minute onwards, class structure and learning task were incompatible, resulting in lack of concentration and a temptation to multi-sided communication, which delayed accomplishment of the task.

In this lesson, no change was apparent regarding the different factors. Throughout the lesson, the teacher stood in front of the board and the pupils faced him. The teacher read out a story and asked questions. Pupils answered when asked. All pupils were very attentive throughout the lesson.

Only one teaching/learning method was used in this lesson - formal teaching. The four different factors were appropriately compatible from beginning to end.

APPENDIX 5: COURSE CURRICULUM ANALYSIS

Course curriculum analysis and evaluation serves several purposes. A great deal of the literature dealing with curriculum analysis is intended for curriculum planners and developers. The analysis primarily services to gather data that will facilitate decision-making at the various stages of curriculum development, pilot studies, and the broader implementation of a particular curriculum.

In other cases, analysis tools serve the teacher, the principal, and the school staff as curriculum users and developers.

In this research, analysis tools were required to help the researcher to reveal the inherent potential of the curriculum and its effectiveness (in terms of ability to implement the material learned). In order to design this tool, the researcher made use of models presented in the literature review (Bolam, 1998; Robson, 1988), as well as a judgmental analysis design with criteria having a particular scale of values (Gibboney, 1980). The criteria to be analysed are divided into four main components: goals, subject matter, teaching-learning process, and contact with teachers before and after the course.

A design of the analysis is presented below:

GOALS

1. The goals are related to learning results and process in a balanced fashion.

1	2	3	4	5
Result-dominant Process-dominant		Balance towards result or process		Good balance between result and process

2. The goals are tentative and may change during the course of the learning process.

1	2	3	4	5
Goals do not permit flexibility		Goals permit some flexibility		Goals permit great flexibility

3. The course goals are consistent.

1	2	3	4	5
Goals are contradictory		Goals are consistent up to a point		Goals are highly consistent

4. Most goals are relevant to the students and reflect their needs.

1	2	3	4	5
Goals do not relate to students' needs		Goals relate to students' needs to some extent		Goals relate to students' needs

5. The goals have an immediate value.

1	2	3	4	5
Goals have no immediate value		Goals have some immediate value		Goals as a whole have intrinsic immediate value

SUBJECT MATTER

6. Activity content conforms to the goals.

1	2	3	4	5
Content does not conform to goals at all		Content conforms to goals to some extent		Content greatly conforms to goals

7. The subject matter is organised meaningfully for the students (meets their awareness and development levels).

1	2	3	4	5
Subject matter is not related to students' perceptions		Subject matter is related to students' perceptions to some extent		Subject matter as a whole is related to students' perceptions

8. The content of teaching materials is scientifically up-to-date.

1	2	3	4	5
Materials are outdated		Some materials are outdated, some up-to-date		Materials are very up-to-date

9. The content of teaching materials legitimises different points of views.

1	2	3	4	5
Content presents fixed points of view		Content allows some differences in points of view		Content allows differences points of view

10. The content relates to the needs of the student community.

1	2	3	4	5
Content ignores community needs		Content is partially related to community needs		Content is closely related to community needs

TEACHING-LEARNING PROCESS

11. Teaching methods are suited to the goals.

1	2	3	4	5
Methods interfere with the goals		Methods suite the goals to some extent		Methods suit the goals

12. Learning activities are relevant to the student.

1	2	3	4	5
Activities are irrelevant to the student		Some activities are relevant to the student		Most activities are relevant to the student

13. Teaching methods encourage experimentation (active learning).

1	2	3	4	5
Methods do not encourage experimentation		Methods enable a certain degree of experimentation		Methods are based on experimentation

CONTACT WITH THE STUDENTS

14. The students are required to complete a project in preparation for the course.

1	2	3	4	5
No preparatory work is required		Students are only required to present some of their work in an interview		Students are required to prepare an extensive project

15. Students should have supportive follow-up after the course.

1	2	3	4	5
No contact with the student after the course		Loose contact is maintained with the student after the course		Close follow-up is made with each student after the course

This design will be used to analyse every component (see course curriculum in Appendix 1), since there will be different answers for different sections, making it impossible to give a single unequivocal answer for all of the subjects.

The answers will be plotted on a graph designed to present the course profile and from which it will be possible to determine if the profile is consistent or contradictory, what direction the profile takes ("5" represents the positive direction), etc.