The Perceptions of Jewish and Arab Physical Education Student-Teachers of the Practicum in a Jewish Training School

TEZĂ DE DOCTORAT

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CLUJ-NAPOCA
2011
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Abstract

This work reports a study seeking to examine Jewish and Arab Physical Education student-teachers’ perceptions of their practicum in the Jewish training school. It is highly important to expose these perceptions in order to improve teacher-education and make it more effective, especially in the case of student-teachers coming from one culture and practicing in a school belonging to another culture, such as the Arab student-teachers in Israel. Learning about their perceptions and attitudes is significant for teacher-education since there is no clear Ministry of Education policy regarding multicultural education and teacher-education.

The research design is mixed-methods combining qualitative and quantitative methods. The data collected in the first stage, from which the findings derived were gathered via semi-structured interviews. Twenty student-teachers from both Jewish and Arab sectors were interviewed. The interviews were conducted in the college, recorded and content-analyzed (Shkedi, 2003). The second stage of the research consisted of 72 questionnaires including statements gathered from the interview findings. Questionnaires were filled by 34 Jewish student-teachers and 38 Arab student-teachers, and were statistically analyzed.

The main findings reveal that student-teachers from both sectors regard the practicum in the Jewish school as highly significant and express satisfaction with the master-teachers, the staff, the pupils and the school climate. An additional finding indicates that Arab students experience a cognitive dissonance in their practicum in the Jewish school. Nevertheless, most student-teachers prefer to practice in the Jewish schools due to the better conditions and good, positive attitude to Physical Education. They maintain their culture of origin does not affect their attitudes to the practicum.

These findings are consistent with studies in the domain of teacher-education (Zilberstein, 1998; Krothagen, 2001; Zeichner, 2010) discussing the significance of the practicum and seeking to narrow the gaps of knowledge in the domain of multiculturalism in the teacher-education process.

It can be said that the research has expanded the existing knowledge regarding Jewish and Arab Physical Education student-teachers’ perceptions regarding the practicum in the Jewish training school, which might improve the teacher-education process of a multi-cultural college.
Preface

My interest in conducting this research stems from my role as a pedagogical instructor in the past two decades. The college where I teach is an academic teacher-education college training teachers in the various teaching routes such as early childhood, general teachers and Physical Education teachers. The college is located in an area where the population is multicultural and includes Jews, Arabs, religious and non-religious persons constituting the student-body in the college.

Furthermore, I have been active in the domain of teaching and education for some 35 years, in a variety of roles such as a Physical Education teacher, Physical Education coordinator, the head of the pedagogical instructors in the college and now – the head of the forum of heads of pedagogical teams in Israeli colleges.

Over the years, the Israeli education system has gone through many changes (Reichel, 2007). Some of the changes have also applied to the teacher-education system. Different committees have been set-up, practicum models such as the PDS Professional Development Schools – College-School partnership) model were embraced, and in recent years numerous teacher-education hours were cut, mostly practicum hours in the training schools (Dovrat, 2001; Ariav, 2006). In the Physical Education teacher-education program, theoretical hours were added, while practical hours were cut, despite the abundance of studies on the significance of the practicum (Krothagen, 2004; Zeichner, 2010).

In a previous research I conducted about the student-teachers’ expectations of the practicum (Hadari, 2003), I found that Physical Education student-teachers attribute great significance to the practicum. Conversations I have had over the years with student-teachers revealed the same. This led to my need to investigate the student-teachers’ perceptions of the practicum in general and in particular the Arab student-teachers’ perceptions of their practicum in the Jewish school where they are placed for their practicum.
Our college is a multi-cultural college, and has students from both the Arab and the Jewish sectors. Teacher-education is the same for all, as the college is defined as a Jewish college, so Arab students are also sent to Jewish training schools in the course of their teacher-education, though they are sent at least once to an Arab school. This led me to the investigation as to what happens to students from one culture entering another. How do these students cope with the cultural differences? And whether their culture of origin hinders their practicum in the Jewish school, or does it help them? These questions led me to reading the literature written about them such as:

- General Education and Physical Education theories;
- Theories of pedagogical approaches to teacher-education in general and Physical Education teacher-education in particular;
- Theories of the teaching practicum;
- Theories of multiculturalism around the world and in Israel;
- Theories pertaining to the cognitive dissonance;

These theories reinforce the research in a number of directions and provide the conceptual framework of the current research. They are described in the literature review of this thesis.

The first chapter presents general education in Israel on all its aspects in general and Physical Education in particular. Further, this chapter describes Arab education and multiculturalism in Israeli education. The second chapter reviews the pedagogical approaches to teacher-education in Israel in general and to Physical Education teacher-education in particular, emphasizing the practicum and its different styles.

The significance of this research is in narrowing the gap in knowledge pertaining to teacher-education in Israel with multicultural aspects and in the suggestions for improving teacher-education programs in multicultural colleges.
It has to be noted that this research pertains to Physical Education student-teachers from the Arab sector in Israel, is a research investigating a population that is unique, as there are hardly any populations in the world who are citizens of a state that is in conflict with their nation. Arabs are a minority in the State of Israel; they are Israeli citizens, whose nationality is Arab-Palestinian, a nationality in an ongoing conflict with their state.

As mentioned before, the research sought to investigate the Jewish and Arab student-teachers perceptions of their practicum in the Jewish training schools. Moreover, the research examined the issue of the Arab student-teachers’ cognitive dissonance, which develops upon their entry into the Jewish training school. The research also sought to find if and how the student-teachers’ culture influences their perceptions of their practicum. The overall goal of the research is to improve practical experience, while emphasizing better integration of the Arab students in a multi-cultural college and in the Jewish training schools, so as to prepare better future teachers while taking into consideration their home culture, their perceptions.

**The research addressed the following questions:**

1. What are the perceptions of Jewish and Arab Physical Education students about the practicum in the training Jewish school?
2. What are the main issues of cognitive dissonance in the Arab students upon entering the practicum in the Jewish school?
3. How does the culture of origin influence the perceptions of these students of their practicum?

The research questions were phrased and focused as the research progressed in the context of its conceptual framework (Corbein & staruss, 1990). These questions are questions of the first order focusing on information directly offered by the informants, challenging the researcher to get as close as possible to their world and the ways in which they perceive it (Shkedi, 2003). The research questions were the grounds for the questions posed to the participants in the interviews conducted in the first stage of the research, and their analysis in the second research stage.
The research population consisted of Physical-Education student-teachers. The students were studying in a teacher education college in the north of Israel. The year the study was conducted was their second year in a four-year college program. The student-teachers came from two sectors of the population: ten from the Arab sector and ten from the Jewish sector. All the student-teachers had their practicum in Jewish primary schools in the North of Israel. The group was chosen randomly according to the student-teachers’ availability and wish to be interviewed. The interviews were content-analyzed, and this analysis yielded the statements for the questionnaires administered in the second research stage. In the second stage of the research closed-ended questionnaires were administered to 72 second year students, practicing in the Jewish school: 38 Arab students and 34 Jewish student-teachers. The questionnaires were statistically analyzed. The research design is mixed-methods combining qualitative and quantitative methods. This type of research examines perceptions and behavior as they occur (Glaser & Strauss, 1967; Sabar Ben-Yehoshua, 2001). The research paradigm is mixed qualitative/quantitative for the enrichment of the data.

Qualitative data were processed via content analysis, using the scientific analysis method of Strauss and Corbin (1990), maintaining that a researcher who follows instructions step by step will succeed in building a good scientific study. Their method offers a systematic way of collecting and analyzing the data which is relevant to the phenomenon under investigation. The use of this research approach suits the current research seeking to examine perceptions and differences between cultures as it describes and explains phenomena and leads to the development of theories relevant to the phenomena (Guba & Lincoln, 1985). The research tools in this study were semi-structured interviews in the first stage; the summary of the data analyzed in the interview stage served as grounds for the second stage, when closed-ended questionnaires were administered to a greater number of student-teachers in order to enhance the data. The research was conducted during the academic years 2009 - 2010. The next section presents the theoretical perspectives that underpinned this research.
CHAPTER I: Theoretical Perspectives

This section presents the research literature depicting the theories on which the present study is based. The chapters present the perspectives, the issues, and the trends pertaining to the research field. The literature review focuses on a critical approach, explaining the significance of the practicum in the teacher-education multicultural college in Israel.

The chapter presents the literature review for this research engaging in the Jewish and Arab Physical Education student-teachers’ perceptions of their practicum in the teacher-education process in a multicultural college in Israel in light of the Arab student-teachers’ transition from one culture into another culture in the Jewish training school, and the cognitive dissonance they experience.

This chapter depicts the theories on which this research is based. These theories are the heart of the conceptual framework of the research. The issues discussed in this chapter constitute a critical review of the current literature pertaining to the research topic pertaining to education in Israel, Arab and Jewish education, Physical Education in both sectors, practicum in the training process and the issues of perceptions in general and educational perceptions in particular, multiculturalism and the cognitive dissonance which are necessary for understanding the research issues.

I.1. Perceptions of Teacher- Education in Israel

Since the establishment of the state of Israel, perceptions of teacher training programs have evolved concerning training content and methods. These changes have also led to structural modifications. The source to these changes derives from three main factors as defined by Kermer-Hayon (1997)

A. Developments and shifts regarding the perception of teaching and teacher training, namely - from conservatism towards openness and progress. This development manifested itself in the sought-after image of teacher training
program alumni; emphasizing – much more than before – higher professional functions, responsibility for pupils’ achievements, autonomous pedagogical decision making and self learning abilities. In the experience element of training, emphasis has shifted from rational-technical teaching by didactic principals to teaching that constantly mobilizes to meet changes based on reflective thinking (Schon, 1987; Shulman, 1986, 1987).

B. Pedagogical knowledge growth – teacher training researches in past decades point out status reinforcement and the significance of personal practical knowledge (Leinhardt, 1989; Carter, 1990; Fenstermacher, 1994; Clandinin & Connelly, 1996; Hargreaves, 1996). In addition, accelerated development in technology has brought teacher training policy makers to realize the need for balancing technological and humanistic aspects of curriculums.

C. Society’s demands for teacher status and responsibility – accelerated development in technology and science and the rise of different fields of knowledge sprung new vocations that earned a high professional status, while teachers’ professional status is declining in an age of society’s demands to hold educational institutions responsible for their achievements. This situation forced policy makers to raise the bar for teacher training to an academic-professional basis (Hoban, 2004).

Hence, in the 1990s, the idea of academization of teacher-education developed, emphasizing mostly the disciplinary aspects of the various subject-matters, basing the practicum on a theoretical rationale and research and prolonging the teacher-education period (Kfir and Ariav, 2004; Shagrir, 2001). All these changes required a longer studies period, and indeed, since the establishment of the State of Israel, the teacher-education time has changed from two years in a teaching seminary to three years for the purpose of teacher certification. With the transition to academic studies, the teacher-education period has changed to four years, at the end of which the graduate receives a B.Ed certificate. High School Teachers are required to obtain a B.A Degree.
A study conducted by Kfir and Ariav (2004) seeking to assess the results of academization revealed that there have been numerous significant changes in most colleges in terms of physical infrastructure (upgrading libraries). The findings regarding improvements in the quality of the colleges’ teaching staffs reveal that eight of the academic colleges of the 1990s managed to enlist more teachers with Ph.D degrees than they had before the academic revolution. However, their rate (nearly 30%) is still not satisfactory. Moreover, the criterion of a Ph.D degree is not enough to determine the staff’s academic and professional quality, if their employment contract does not require them to study further and develop, and if they do not get the opportunities to do so. Among the reasons why the academic reform has not achieved its goals regarding the staff, Kfir and Ariav (2004) mention the fact that terms of employment, professional development and advancement of staff members have not improved.

Consequently, there has been greater disappointment in the domain or recruiting student-teachers. The higher entry threshold, together with the promise of an academic degree did not yield the desired change – student-teachers did not flow into the teacher-education colleges, nor were the new applicants different from old ones (Kfir, Feigin and Adler, 1996). Furthermore, much like in many other countries, it is hard to attract good candidates to teaching, and it is even harder to keep the graduates in the system for a long time, due to the low status of the teaching profession and the teachers’ meager working conditions (Kfir and Ariav, 2004).

The reforms of the 1990s did not lead to the desired improvement, and lack of satisfaction with the level of prospective teachers prevails, and includes teachers who graduate and are absorbed into the education system (Ben-Peretz, 2001). The Peretz committee established in 2000 by the Minister of Education, was required to review the most significant and practical issues pertaining to the essence, structure and process of teacher-education in Israel. The committee recommended that the existing teacher-education colleges be developed, and that the Ministry of Education be the national body responsible for the planning of manpower needs in teaching, and in that framework, the
committee recommended to identify the need for teachers, map the spread of colleges so as to adjust them to the different needs and finance the teacher-education program on a multi-year basis; to promote M.Ed studies and expand the academic independence of the colleges. As for prospective teachers, the committee recommended that the threshold for acceptance be raised, sorting processes improved and reinforcement given so as to motivate student-teachers to take up teaching. In addition, the committee recommended that conditions for obtaining a teaching license be formed “as part of the overall effort to raise the level of teaching and the status of teachers in Israel” (p. 18 of the report). Indeed, some of the recommendations are applied to this day (The Ben-Peretz Committee, 2001).

Moreover, in 2005, an additional committee, “The Dovrat committee” suggested an overall plan for a general reform in the education system in Israel. Regarding teacher-education, the committee determined that the threshold of acceptance to academic teacher-education departments in colleges and the universities be raised, and that those seeking to be accepted be assessed by behavioral and cognitive parameters. Furthermore, the committee recommended the closing of some of the teacher-education colleges due to a decrease in the number of student-teachers enrolling in teacher-education studies. Moreover, the committee recommended the development of new guidelines for teacher-education, whereby the issue of partnerships arises as a requirement for all teacher-education frameworks (Ariav and Smith, 2006).

Evidently, the “Ariav Committee” was set up for the purpose of developing the new guidelines. It was a joint committee for the high Education board and the Ministry of Education. The committee was asked to determine new guidelines for teacher-education, which would be based on college studies for a B.A or B.Ed degrees and components in the pedagogical training that suit the needs of the education system. The components of the guidelines would oblige all teacher-education institutions – both colleges and universities so as to reach a significant improvement in the studies of the subject matter and in the teacher-education program.
Subsequently, the committee submitted its report towards the end of 2006. The report, entitled “Guidelines for Teacher-Education in Higher Education Institutions in Israel”, compares various teacher-education programs in terms of hours devoted to the discipline and the practicum. In the past, university teacher-education programs emphasized the disciplines at the expense of pedagogy and practicum which was trivial. Colleges emphasized parts of pedagogy and the practicum more than the discipline. The new guidelines seek to increase the part of practicum in the universities and the discipline parts in the colleges. Consequently, practicum hours were removed from college programs and added to university programs. Indeed, many practicum hours were cut despite numerous studies that have revealed how valuable these hours are. More particularly, the new guidelines pay close attention to the issue of practice in teacher-education. They continue the “Dovrat” report and recognize the PDS (Professional Development School) idea for the first time. The PDS notion developed experimentally from the field, and has become a central axis in the prospective teachers’ field experience according to these guidelines.

So it seems that like in other countries, the Israeli teacher-education system keeps changing and decision-makers are trying to find the best formula for good teacher-education. Things said by Prof. Miriam Ben-Peretz towards the fifth International conference – “Teacher-Education at the Crossroads” illustrate the need for adequate teacher-education programs: “One of our main problems today is getting good manpower into teaching. The profession has lost its prestige and teachers have hit rock-bottom…prospective teachers claim that the most effective part of teacher-education is the practicum. I do not believe that is the situation in other professions…teacher-education curricula are based on traditional models, and it seems that new models have to be developed. I do not believe it is right to enforce a uniform teacher-education model, and we have to allow for the development of different models, as long as there is supervision…..” (Mofet Institute Monthly, 28, p. 6). In their training process, the student-teachers enter the schools to practice teaching. The Israeli education system’s approach is taught in method lessons in the college and applied in the school,
I.2. The Education System in Israel

The Israeli education system consists of formal and informal education. Formal education consists of the following stages: pre-primary education, primary education, secondary education (Junior High School and High School), higher and academic education. Informal education includes activities in society and youth as well as adult education in the community. Pre-primary education involves ages 0 – 6. It includes the pre-school system, which in 2005 included 388,000 children aged 2 – 6 in public and private kindergartens and day-care centers.

The goal of education in early childhood is to lay the educational foundations including the development of language and thinking, advancing their learning abilities and creating and nurturing social skills. Furthermore, in the other age groups, different reforms have been introduced throughout the years, and today’s education system consists of a six-year structure in primary school (1st Grade to 6th Grade), a three-year Junior high School (7th Grade to 9th Grade) and three-year High school (10th Grade to 12th Grade). There are still a few schools where the structure is 8 years of primary school.

An additional stage is that of higher and academic education. The framework of non-academic high education includes institutions that provide knowledge and training in a variety of domains such as technology, administration and arts. The framework of academic education includes the universities, the Open University, academic colleges, which also include teacher-education colleges.

Figure 1: The Structure of the Israeli Education System:
The general education system in Israel also includes education in different sectors such as the religious sector and the Arab sector.

Since some of the population in the current research is from the Arab sector, products of the Arab education system which have shaped their perceptions about education and teaching (Shkedi, 2009), it is important to become familiar with the system. The following section discusses Arab education in Israel.

I.3. Arab Education in Israel

I.3.1. Israeli Arabs - General Background

When the State of Israel was established, there were 156,000 Arab residents in it, constituting some 13% of the state’s population. The Arab population consisted of Moslems (70%), Christians (21%) and Druze (9%). They were a minority, without social or political elites. Most of the Arabs were illiterate and mostly engaged in agriculture. They lived in villages, two big cities – Nazereth and Shfar’am as well as in mixed cities such as Jaffa, Haifa and Acre. Most of them had lived under military regime for 18 years, confined to the land of Israel, a new state at war with the neighboring Arab countries. They had neither social nor cultural contacts with the external Arab world. A great part had fled the country in 1948, which caused the disintegration of their cultural and educational institutions. They had turned from a majority into a minority. This complex situation had an impact on the policies toward the Arab population. The first characteristic of Israeli Arabs is that unlike other minority populations, this is not an immigrant minority but a minority of local people.

A second characteristic of Israeli Arabs is that they are citizens of the state which is in a state of war with their people, the Palestinians and the Arab nation, and hence the suspicious approach toward them on the part of Israeli government. A third characteristic is that they are the citizens of a state defining itself as a Jewish state, rather than the state of all its citizens (Mi’ari, 1981; Samocha, 1994).
Since the establishment of the state, the Arab population has grown, and constituted 18.8% of the population in 1994. This is a result of higher rates of natural growth in the Arab population compared to the Jewish one. The attitudes of Jews in Israel to Israel Arabs have always been attitudes of suspicion, merely because of their nationality. Israeli Arabs have also been given hostile attitudes from the Arab countries, and with the lack of a social elite and leadership, the state has developed such leadership among the Arabs, and that leadership has actually represented the interests of the regime, rather than those of the Arabs. Since the establishment of the State of Israel there have been many changes in Arabs’ education, especially for the Arab girls, where there has been a genuine revolution. Change has taken place in the structure of employment and society in the Arab sector. In recent years, Arab women have also joined the work market, and the number of working women has been on the increase. Changes have also taken place in infrastructure, appearance and the services of Arab villages. Most of the villages are connected to the electricity system and to comfortable roads, and have developed health and education services. The Israeli Arabs’ level of education has also been on the rise and illiteracy has been disappearing rapidly. Out of 50% illiteracy rate in the 1960s, only 10% are now illiterate. The rate of high-education has risen from 1.5% to 13%.

The face of Arab leadership has also changed. The leadership now represents the Arab’s interests. They regard themselves as part of the Palestinian people and advocate the establishment of a Palestinian state next to the Jewish one.

The 1990s constituted a significant landmark in the life of the Arab population and in Israeli life in general. Following the peace agreement with Egypt, Jordan and the Palestinian Authority, the cycle of terror broke. The Arab embargo on Israel was lifted and a process of normalization in the relationship between Israel and Arab countries began. This situation had direct implications for Israeli Arabs, who live in two worlds, one – the world of the suspicious Israel, and the other – the Arab countries that alienated them. Now they were accepted by both sides. The Arab world opened up, and Israelis trusted them more. Most state authorities are open and
outgoing to Arabs, willing to provide solutions to their problems, allocating more funds to Arab communities. In the domain of education, the state has made great efforts to close the gaps between the Israeli and the Arab education systems. The rise in the level of education and the daily contacts with the Jewish population keep contributing to changes with Israeli Arabs in all life domains. The power of the ethnic group has become weaker in the face of modern life. There have also been changes in childbirth rates. Nowadays the average Arab family has four children compared to eight in the past (Zirzur, 1999).

I.3.2. The Israeli-Arab Education System

Arab society is essentially patriarchal, due to its history as a rural society, which is traditional and conservative. Its education system is a mirror of Arab society in general, and the local one in particular.

With the establishment of the state of Israel, the Arab education system was meager – it lacked teachers, as the intelligent elite and the teachers had left because of the war. The system lacked classrooms and operating equipment, and it operated in a society that was mostly illiterate. Consequently, the system accepted teachers who were not certified, and who lacked pedagogical education, which damaged the quality of teaching.

In the first two decades, the number of Arab pupils increased ten times and the development of the Arab education system could not catch up with the increase in the number of pupils. The Ministry of Education allocated minimum funds to the Arab education system and did not pay much attention to its development. As a result, the gaps between Jewish education and Arab education widened. The Arab education system was not able to introduce the changes introduced to the Jewish system in the 1970s. Many aspects of the Arab system were not addressed at all.

In the 1980s, awareness of education in the Arab sector increased to the top of the agenda. At the same time, the Ministry of Education set up a committee to assess the situation and the needs of the Arab sector. Classrooms were built and gaps were
narrowed by a more egalitarian allocation of resources to all sectors, while engaging in affirmative action. Cooperation between the Ministry of Education and local authorities improved.

In recent years, mostly during the last decade, there has been a clear problem of teachers’ and principals’ authority in the Arab sector in Israel. The severity of the problem differs from one district to another and from one community to another and is influenced by such factors as socio-economic status, geographical location and more (Zirzur, 1999).

**Goals of Arab Education**

The goals of Arab education constitute a complex issue. Is there a need for separate goals for the Arab education system? Ever since the goals of Israeli education were defined in the 1950s no unique goals were set for the Arab sector. There were many contradictions, such as whether Arab children would be educated according to the Jewish culture as goals were phrased. Up until the Oslo Accords (1993), Israel had not recognized the Palestinian People, and now when this recognition is in effect, there has been a change in Israel’s attitude to its Arab population. In the 1970s there was an attempt to cope with setting unique goals for the Arab education while acknowledging the culture of the Arab minority.

Hence, the Arab pupils are educated according to these goals. They encounter the Jewish culture, which is the majority culture in the state. This helps them understand the Jewish population and create human, social and economic ties. However, these goals still do not address the national components of the Arab youths’ identity. Setting the goals also constituted problems in the construction of the curriculum.

Initially, Arab schools had no curriculum, and they were not allowed to introduce national contents into their teaching. This was contrary to the Jewish sector’s curriculum where nationality, national Jewish consciousness and love of the Jewish people all over the world were emphasized. Arab curricula were developed by the Arab teachers. The Ministry of Education translated curricula from the Jewish sector, such as in Mathematics
and English, into Arabic. However, difficulties were encountered in such subjects as history, geography, civics and Arab language and literature. Nowadays the curriculum is in a process of being re-written with emphasis on the Arab child’s affiliation to the Arab Nation, and expanding their knowledge of the Arab society’s social, cultural and political history. The Kremnitser Report published in 1995 relates to Israeli Arabs as part of the Palestinian people, and emphasizes their need to nurture their national identity alongside nurturing their Israeli citizenship (Zirzur, 1999).

Like the Jewish education system, the Arab one consists of early-childhood education, primary education and secondary education. After that, most studies occur in the Israeli academic institutions including some three Arab teacher-education colleges, and hence, we see that student-teachers from the Arab sector who participated in this research had been educated in the above depicted system, where their perceptions of teaching and education were formed. They arrived in the teacher-education college equipped with these perceptions.

As for pre-school education, contrary to the Jewish sector, Arab kindergartens belong to the primary schools and they are situated in the school building. Teachers are professionally independent, but cooperate with the school’s staff, so when in kindergarten, the child becomes familiar with the school which he or she will attend. Currently, the Ministry of Education builds separate buildings for kindergartens, but there are still very few separate ones. There is also need to separate, as there is a need to expand the activities in kindergarten and preschool.

**Primary Education**

The number of Primary schools in the Arab sector has increased from 45 when the state was established to 139. Despite that massive growth, the level of achievements in the Arab schools has remained low in comparison with the Jewish sector. There are many reasons for that.
Different starting points;
Low level of teachers, especially in the first years of the state;
Harsh physical conditions in which primary Arab schools operate: overcrowded classrooms and lack of equipment;
Low quality of textbooks;
Social conditions that are different from those of the Jewish sector, such as parents’ education and size of family;
Low socio-economic status;
Unequal allocation of resources to the Jewish and the Arab school systems;
Relatively low level of parental involvement in education, in contrast to the Jewish sector;

The Ministry of Education allocates hours to all sectors in the country. Standard teaching hours are for the regular studies, while other hours are allocated for promoting projects, enrichment and pedagogical initiatives. The greater part of these hours is allocated to Jewish schools, although in recent years the Ministry has allocated many hours to underprivileged pupils and to the implementation of pedagogical initiatives such as strengthening weaker populations.

As for the low level of teachers in primary schools, this level keeps rising. In the 1970s the rate of uncertified teachers was 70% while today it is about 7%. In addition, Student-teachers enrolled in Teacher-education institutions are also on a higher level than in the past, and have all passed the threshold exams administered by the Ministry of Education.

**Secondary Education**

Most members of the Arab sector are not required to serve in the army for three years as are their Jewish counterparts. They enter colleges and universities directly after they graduate from high-school. At that stage, their perceptions of education and teaching are formed. We can see that this is the background of the Arab student-teacher who participated in this research.
Secondary schools now exist in all Arab cities and large villages in the north and in the south, including in the Bedouin community, due to an increase in the number of Arab pupils continuing to secondary education.

In recent years, programs have been implemented seeking to help the weak pupils pass their “Bagrut” (Matriculation) examinations, and The Ministry of Education set a goal to increase the rate of pupils in the technological stream in a variety of subjects such as electricity and electronics, architecture, office administration, fashion design and nursing. Many Arab pupils take the technological route.

Nevertheless, the dropout problem exists in all stages of schooling in the Arab sector. The main reasons for dropout are mainly low academic achievements, and frameworks that are unsuitable for the pupils’ skills, social and economic problems, difficulties adjusting to a binding framework, lack of personnel engaging in dropout issues and lack of classrooms. Due to the low level of studies in Arab schools, Arab pupils in mixed cities enroll in Jewish schools. As of 2004 there has been an increase in the number of Arab pupils seeking to enroll in Jewish schools.

There is an ongoing debate in the Arab sector regarding this issue. Many claim that enrolling in Jewish schools weakens the Arab population and leads to loss of national identity and Arab culture, especially with the good pupils. According to one Israeli Arab leader, mixed schools are not the solution for raising the level of Arab education. He believes the solution lies in opening private Arab schools which will compete with the Jewish schools and raise the level of Arab pupils (One such school has been established, but is still not recognized by the Ministry of Education). An additional solution is the establishment of bi-lingual schools, such as the “Misgav” School in the Galilee, where both Arab and Jewish pupils study in two languages and about the two cultures, thus maintaining their national identities, traditions and languages (Dayan, 2005).

As mentioned earlier, upon graduation, some Arabs turn to teacher-education in the different domains, such as the Arab student-teachers in the current research.

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1 Final High School Certificate
Teachers and Teacher-Education

Sliman, Raid and Torne (2007) examined the reasons for choosing teaching as a profession in the Arab sector. The research concluded that many Arabs now choose to become teachers, and the sector is inundated with teachers, mostly female teachers. Reasons for choosing the profession are intrinsic such as intellectual development, enjoyment and contact with the children. The research also found that parents were a great influence in choosing teaching as a profession, especially with the father’s being a teacher in the Arab sector. According to El-Haj (1996), parents, especially the fathers, have a great influence on their children’s choice of profession, and he found that the two most significant factors in the choice were the father’s request or persuasion by a relative. The current research also confirmed these were the reasons why the Arab student-teachers chose to take Physical Education as their teaching subject.

Current teacher-education takes place in a number of colleges throughout Israel. Teacher-education in most colleges is academic and entitles the student-teachers to an academic degree, after participating in a four-year program towards the B.Ed degree. The subjects of teacher-education are Physical Education, Accountancy, Administration, Communications, Science and Technology, Engineering, Arts and so forth. The five-year teacher-education curriculum emphasizes adjusting the volume of teacher-education to the needs of the Arab sector, expanding academization, including the practicum in the process of absorbing teachers and enhancing the profile of student-teachers. Hence, the teachers’ level of education seems to be improving constantly. More than half of the teachers are women, mainly in primary education, but also in secondary education. Men dominate the domain of management and inspection, and in primary education only 10 out of 310 principals are women. The process of feminization in the Arab education system intensifies with modernization. The phenomenon is mostly apparent in teacher-education colleges, where the number of female student-teachers is on the rise.

Due to the limitations on Arab academicians’ employment in top positions, the education system has become a central employment arena. About 40% of the university graduates are employed in the education system (compared to the Jewish sector where only 15% are
employed in the education system). A major part of the Israeli Arab leadership consists of former teachers (ElHaj, 1996).

In summary, it seems the cultural and academic background of the Arab student-teachers is of great significance, as this background accompanies them to the Jewish training schools, which differ in background and climate from the Arab ones. This research examined these differences. As this research engaged in Physical Education student-teachers, I will discuss the issue of Physical Education in Israel in both the Jewish and the Arab sectors, including the curricula which they have to study and teach in the training schools.
Table 1: Comparison of the Education System in the Jewish Sector and the Arab Sector in Israel

<table>
<thead>
<tr>
<th></th>
<th>Jewish Sector</th>
<th>Arab Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The system</strong></td>
<td><strong>Formal and informal</strong></td>
<td><strong>Formal and informal</strong></td>
</tr>
<tr>
<td></td>
<td>Six-year primary school (1st Grade to 6th Grade)</td>
<td>Six-year primary school (1st Grade to 6th Grade)</td>
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<td></td>
<td>Three-year Junior High School (7th Grade to 9th Grade)</td>
<td>Three-year Junior High School (7th Grade to 9th Grade).</td>
</tr>
<tr>
<td></td>
<td>Three-year High school (10th Grade to 12th Grade)</td>
<td>Three-year High school (10th Grade to 12th Grade)</td>
</tr>
<tr>
<td><strong>Academic Education</strong></td>
<td>Universities, the Open University, Academic Colleges, Teacher-Education Colleges.</td>
<td>Three Arab Teacher Education Colleges, access to all other universities in Israel</td>
</tr>
<tr>
<td><strong>Goals of Education</strong></td>
<td>Jewish Culture</td>
<td>Arab Culture</td>
</tr>
<tr>
<td></td>
<td>Nationality, national Jewish consciousness and love of the Jewish people all over the world</td>
<td>Jewish culture (the majority culture in the state), Not allowed to introduce national contents into their teaching.</td>
</tr>
<tr>
<td><strong>Curriculum</strong></td>
<td>Ministry of Education</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curriculum is in a process of being re-written with emphasis on the Arab child’s affiliation to the Arab Nation, and expanding their knowledge of the Arab society’s social, cultural and political history.</td>
</tr>
<tr>
<td><strong>Achievements</strong></td>
<td>High levels</td>
<td>Low level of teachers, Harsh physical conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social conditions</td>
</tr>
<tr>
<td><strong>Serving in the army</strong></td>
<td>Mandatory: boys – three years; Girls – two years</td>
<td>Not required to serve in the army</td>
</tr>
<tr>
<td><strong>Academic Graduates</strong></td>
<td>15% are employed in the Education System</td>
<td>40% employed in the Education System</td>
</tr>
</tbody>
</table>
I.4. Physical Education in Israel

Since the establishment of the state of Israel to this day, perceptions of Physical Education have changed, just as those in other educational and cultural domains in Israel. The first years were years of focusing the activities and thinking on political-economic survival. In such times, educational thinking constitutes part of the national line of thought seeking to reach social-national goals on the agenda, and the mind is not free to such “trivial” leisure issues such as arts and sports, which are perceived as individual domains seeking to improve the individual’s well being and quality of life (Hermon, 1978).

When confidence in the state increased, so did understanding regarding the significance of physical activity to a person’s fitness and well being, and although the system still manifested preference of the social-national goals, the necessity of Physical Education was acknowledged, and the goals of the subject were first phrased. In time, the horizon of the national educational perception in Israel has developed, and the state started attending to cultural issues, which were considered secondary on the national agenda. Hence, the general perception of the goals of education seeking to serve society has been translated into goals detailing the abilities of individuals in society. The objectives clearly point to the development of an ideal person who is both physically and mentally healthy, and engages in sports as a routine. Moreover, that was the first time when the objectives referred to the child’s life here and now (“in the present and in the future” – the Physical Education Curriculum, 1996) rather than just a means in the service of society, a child whose life in the present is dedicated to learning and practicing future social roles.

Hence, the attempt to look into the future of Physical Education in Israel may testify to the increasing tendency towards individual Physical Education, adjusted to the goals of personal physical fitness, which has to do with the individual’s physical and emotional health. Such a program will offer a wide variety of choices and will involve the development of theoretical knowledge and understanding of the essence of physical activity, pertaining to health, fitness and the acquisition of skills and tools for personal
choice and assessment. The goal is to acquire tools for self-planning of activities which will serve the individual’s needs throughout an entire life cycle from infancy to old age (Ram, 2003). These approaches are applied in the Physical Education programs in Israeli schools.

There are more than 3,000 schools in Israel, and in most of them there is a Physical Education teaching system, and teachers are hired for this purpose. The goals of Physical Education in this system are to enhance the pupil’s health, develop the pupil’s physical fitness, which will contribute to the pupil’s performance of the tasks required on a daily basis (Ram, 1999). In addition, the state employs dozens of Physical education inspectors and other functionaries, and so the state maintains a system of Physical Education colleges for the training and enrichment of the teachers, and these colleges employ a variety of personnel (Ruskin, 2001). Physical Education is one of the teaching subjects, which engages in the development of Physical capabilities, physical fitness and proper movement and posture habits. Unlike other teaching subjects, Physical Education does not engage much in theory (Efrati, Artzi and Ben-Sira, 1995). According to the findings of different studies, the Physical Education subject is considered enrichment or a non-mandatory subject (Hanegbi and Feigin, 1998). Much like in other countries, Physical Education is still mandatory at least in some of the school years. Implementation is 100%, the highest percentage compared to other countries.

I.4.1. New Physical Education Curriculum in Israel

The new Physical Education curriculum was developed and implemented in all sectors: Jewish, Arab and religious (The Physical Education Curriculum for Grades 3 – 12 and Special Education in secular, religious, Arab and Druze Schools, Jerusalem: 2006). This curriculum was determined after years where there had been no change in the curriculum originally written in the 1970s (Proposal suggested by the Center for Curricula development in 1974). The goals of the old curriculum were to nurture the individual’s shape to improve health and shape personality and social behavior so as to train
individuals to effectively perform their roles in Israeli society, at school, at work, in the army and in their leisure time. These goals constituted the grounds for the activities at each age group.

The new curriculum seeks to develop and nurture the pupil’s patterns of action and physical and sport behaviors and teamwork and the limits of personal potential. This program seeks to ensure the pupil’s quality of life, health and harmonious personality at present and in the future. The curriculum sets specific physical and social goals as well as ones in the domains of emotion and character. For each set of goals the program details skills and behaviors as well as the required domains of knowledge and consciousness (State of Israel, Ministry of Education, Culture and Sports, 2006).

Furthermore, the new curriculum seeks to meet society’s social, cultural, economic and technological needs. The daily physical activity has been the center of attention for many people, and the curriculum seeks to help the young learners how to adjust to society’s needs.

The main principle in the new curriculum is that of choice. Providing choice in Physical Education may cater to the needs of pupils at different ages while shifting the responsibility from the teacher to the pupil. Personal choice, especially in adolescence enhances the pupils’ motivation to participate in sports activities and increase their involvement in sports and movement domains.

According to the new curriculum, the teacher’s role is to teach the value of physical activity as an integral part of a healthy lifestyle. It also emphasizes the adjustment of physical activity to each pupil so as to reach ultimate performance according to the pupil’s abilities and needs. The curriculum also includes theoretical aspects seeking to develop knowledge and understanding of the human body, principles of movement and the place of physical activity in the promotion of health. It is directed at all pupils in all sectors including pupils with special needs in the normative education system so as to alleviate their integration into society (The New curriculum, 2006).
The Physical Education curriculum seeks to meet societal needs in the social, economic, cultural and technological domains. The daily activities and professional competitive sports are the focus of interest for many people, and the curriculum helps pupils adjust to society’s demands and challenges.

**Curriculum Structure and Contents:**

The curriculum is structured according to age groups:

1. Pre-school – movement and music;
2. First and Second Grade – basic subjects;
3. Third – Sixth Grades – “A Market of Skills”
4. Seventh-Ninth Grades - A variety of sports;
5. Tenth-Twelfth Grades – Choice out of a limited selection.
The subjects taught are about 65% subjects “for life” and 35% “traditional” sports. In the higher grades (7th and above the ration is about 50%-50%. There are mandatory subjects (about 75%) and optional ones (25%), which teachers can decide out of a variety of options offered in the curriculum. According to the program, the teacher is a source of inspiration and direction for thinking about health and physical activity, so as to reach the goals of movement, physical activity and health.

**Theoretical Learning Subjects**

Obligation to integrate theoretical subjects into the practical activities whereby the theoretical contents are grounds for implementing the practical program, and the theoretical subjects will be taught as part of the practical lessons;

The subjects will be divided according to age groups (Ministry of Education, 2007).
The Physical Education curriculum is divided into two parts:

1. The Early Childhood curriculum is built on the continuum between kindergarten and the second grade. The program is divided based on two aspects – one part is devoted to pre-school, its teacher and the Physical Education teacher that joins her. The second is directed at the first and second grades of primary school and is directed at the Physical Education teacher as the person in charge of Physical Education at school. Both parts relate to the fact that the children are in a process of accelerated growth, and the learning contents are supposed to support the process and enable each child to build solid grounds for continuing to learn at school and for the rest of his or her life.

2. A curriculum for Grades 3-12 and for children with special needs for all sectors of the population.

Additional Physical Curriculum Items:

- Dancing School – suitable for breaks and mass public dances so popular in Israel;
- Active break – organizing activities and sport tournaments in the breaks, seeking to provide solutions for violence;
- Sports classes – allows talented pupils to exhaust their potential in the different sports in a three-year framework where they get about 7 – 10 hours of Physical Education, usually in Gymnastics, Table Tennis, ball games and exercise. Some of the hours are the regular Physical Education lessons and others are extra-curricular classes in the afternoon.

In 1989, the frameworks of sports classes were expanded into competitive Physical Education sports classes, which are like classes for gifted pupils, seeking to nurture athletes for representative teams. In 1972, the first Physical Education matriculation examination took place (Zimri & Erlich, 1999). The pupils were tested in Physical Education as an elective subject and had to combine Physical Education with a variety of theoretical topics (sports psychology and sociology and more). Furthermore, dance routes
have been established in high schools. A main principle of the new curriculum is the principle of choice: providing choices that will cater to the needs of the learners at the different ages while shifting the responsibility from the teacher to the pupil. Personal choice, where the pupils take responsibility for both the process and the product mainly in adolescence, increases motivation to take greater part in physical activities and increase their involvement in sports and movement subjects. This program caters to the needs of Physical Education teachers to help their pupils genuinely learn the value of physical activity as an integral part of a healthy lifestyle (RAviv, Eldar, Navel, Lidor, 1995).

Most Physical Education teachers are also responsible for health lessons, which are part of their curriculum. In addition, some of the colleges have introduced Physical Education specialties in the domain of health and nutrition. Schools have health promotion lessons and health weeks. There is a clear curriculum for teaching health from early childhood to the 12th Grade. Currently, awareness has increased, and most schools dedicate resources to the issue. Therefore, Physical Education student-teachers have to study the curriculum and have to master their subject matter in the course of their teacher-education program.

Furthermore, Physical Education teachers take regular in-service courses – once a week on an annual basis. The in-service courses are part of a national layout of courses organized by the Physical Education Teachers’ Organization. Physical Education teacher-education colleges also offer a variety of in-service courses, the largest being the Wingate Institute. Furthermore, the schools’ Physical Education teachers train boys towards the army as a result of the army’s complaint about the new recruits’ low physical shape. Special units for preparing the boys for their army service were established in the community centers as well. In schools, Physical Education teachers engage in this preparation throughout the 12th Grade.
I.5. Training Physical Education Teachers

Upon the establishment of the state of Israel, there were some 200 Physical Education teachers, graduates of the Denmark training program, and the rest were trained in short courses. Some were new immigrants or general teachers absorbed into the Physical Education system. In 1952, the Physical Education Teacher Training became part of the Teacher Training department, and the one-year course developed into a two-year course. A year later, Physical Education trainees were required to train for the teaching of another subject, so that when they got older, Physical education teachers would have another teaching option, which was mostly geography or calculus. This lasted until 1969, when teacher-education started offering specializing in Physical Education, such as early childhood or adults’ Physical education specialty.

The Wingate Institute of Physical education was established, and Physical Education teacher-education programs have been taught there. Two additional Physical Education colleges were built in the 1960s: the Kaye Academic College in the south and the Givat Washington Academic College for the religious sector.

The Ohalo College, where this research was conducted, was established in the 1970s (Zimri & Erlich, 1999). All Israeli teacher-education colleges train Physical Education teachers from pre-school to high school, and provide their student-teachers with the skills of physically training adults. In the course of their studies, the student-teachers are provided with theoretical and practical knowledge as well as skills in the domains of education, teaching and Physical Education so as to train Physical Education teachers with comprehensive knowledge and multi-disciplinary skills.

Graduates of Physical Education teacher-education programs constitute a skilled professional body of teachers regarding their work as a mission, who can integrate into both formal and informal education systems and approach Physical Education as part of teaching the sciences in school.
College entry demands are usually the same for all sectors in the population: A high matriculation certificate average (85 and above) and meeting the State of Israel’s threshold examinations. The route is a four-year route at the end of which the student-teachers receive a Physical Education degree and a teaching certificate (More details about the training of Physical Education teachers will follow in a separate chapter).

## I.6. Physical Education in the Arab Sector

The state of Physical Education in the Arab Sector is rather miserable. Up until the 1980s there were few Physical Education teachers in the Arab sector (80 teachers for 126,000 pupils). Today most Arab schools allocate one weekly Physical Education hour in primary school and two hours in secondary school. Some of the high schools and most primary schools lack sports facilities, gymnasiums and courts that are necessary for physical activity. This situation makes it hard to engage in consecutive, serious Physical education lessons. The situation is even worse with girls in the Arab sector. Due to gender differences in the perception of Physical Education on the personal and system levels, Moslem girls are influenced and have to face all the religious cultural factors as well as behavior codes that affect their participation in Physical Education lessons (Arar, 2006).

Objection to Physical Education is also expressed when the teacher is a woman. An Israeli Arab Moslem with good physical skills may encounter many obstacles trying to realize her potential in that area. Hence, on the one hand, the Arab society perceives participation in Physical Education as “manly”, and on the other hand, if a girl participates in dance and public shows, it will be perceived as “vulgar”. Participation in competitions entails shunning and other sanctions (Benn, 2000).

Physical Education in high schools in the Arab sector are not perceived as valuable or significant for high education, especially when Arabs do appreciate high education and emphasize it as leverage for employment and social advancement (Arar and Abu-Asba, 2007). The same is true for regarding Physical Education as good preparation for military
service, as most Moslems do not have to serve in the army. Therefore, many principals are tempted to cancel Physical Education hours and use them for other academic subjects (Arar, 2006). The Physical Education inspectorate does not fulfill its duties of maintaining the standards in this subject either. Badir (2005) and Physical Education inspector in the Arab sector discuss a new way of increasing awareness of Physical Education lessons and their significance in Arab schools.

As in the Jewish sector, many children in the Arab sector are overweight, but in the Arab world obesity stems from lack physical activity. The pupils want to engage in physical activity, but they are not aware of the essence and significance of physical activity to a healthy lifestyle. Both pupils and teachers relate to Physical Education lessons as trivial. In some schools the pupils are not even given a grade in Physical Education. “Seven years ago, when I started teaching and gave grades I was gravely criticized by parents who asked how their children who get 100 in Mathematics, only gets 70 in Physical Education. It took a while until they realized that it is a lesson in itself and has no connection to the child’s other achievements” (Badir, 2005).

Badir claims his educational goal is first to improve the image of Physical Education and the Physical Education teacher. However, he admits that “We have not yet taken the first step. With all due respect to the great number of schools that participate in competitions, and to the teachers’ motivation, Physical Education and the way it is perceived is way behind what is happening in the Western world. I suggest not to be blinded by cups and medals we have obtained in recent years, because” (Badir, 2005).

Nonetheless, the last decade has shown positive developments. Many male and female teachers with academic degrees have joined the system and they have brought with them a new spirit with clear operational achievements such as setting up sports routes, taking Physical Education to “Bagrut”\(^2\) and teaching academic physiology topics in the school’s curriculum. Naturally, these initiatives require adjustment on the part of the schools, the parents and the community (Arar, 2009).

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\(^2\) Final High School Certificate
As for training physical education teachers, none of the Arab Academic colleges in Israel has a Physical Education program, and therefore, most Physical Education student-teachers are enrolled in the Jewish colleges all over the country. Entry requirements in Arab colleges are much like those in the Jewish colleges. Usually, after graduation, Arab student-teachers integrate into schools in the Arab sector.

Table 2: Physical Education in Israel

<table>
<thead>
<tr>
<th></th>
<th>Jewish</th>
<th>Arab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum</td>
<td>New Physical Education Curriculum</td>
<td>New Physical Education Curriculum</td>
</tr>
<tr>
<td>Sports facilities</td>
<td>Sports facilities, courts and gymnasiums in most schools</td>
<td>Lack of sports facilities, gymnasiums and courts</td>
</tr>
<tr>
<td>Attitudes to Physical Education</td>
<td>Equal to all other subjects</td>
<td>Physical Education is not perceived as valuable or significant for high education.</td>
</tr>
<tr>
<td>Gender in Physical Education</td>
<td>Egalitarian attitude to both sexes</td>
<td>Participation in Physical Education is considered “manly”, or “vulgar”.</td>
</tr>
<tr>
<td>Teachers</td>
<td>Academic degrees</td>
<td>In the last decade Many male and female teachers with academic degrees have joined the system and they have brought a new spirit with them</td>
</tr>
<tr>
<td>Training Physical Education Teachers</td>
<td>In the Jewish colleges</td>
<td>None of the Arab Academic colleges in Israel has a Physical Education program. Most Physical Education student-teachers enroll in the Jewish colleges.</td>
</tr>
<tr>
<td>Graduation</td>
<td>Jewish student-teachers integrate into schools in the Jewish sector.</td>
<td>Arab student-teachers integrate into schools in the Arab sector.</td>
</tr>
</tbody>
</table>

There is a discrepancy between the Jewish and Arab education systems. This discrepancy is manifested in the contents of studies, the structure and the budgets. In Physical
Education, too, we are aware of this discrepancy in the principals’ and parents’ perception of the subject-matter. Nevertheless, in recent years some changes have occurred and more budgets are allocated to the Arab education system, and more young college graduates take charge and attempt to change the face of Arab schools.

The population in the present research consists of young people from both Jewish and Arab sectors who study Physical Education in a Jewish college. Some of the Arab student-teachers will return to their towns and villages after getting proper training and attempt to introduce changes and innovations to Physical Education. There are also more in-service courses available to Physical Education teachers, where they learn new materials and techniques. However, it is this writer’s opinion the Arab teachers’ way will not be easy due to the Arab sector’s conservativeness and traditionalism, which pose obstacles to new ways in education (for instance, gender issues).

The following chapter introduces the various approaches to teacher-education, and Physical Education, while emphasizing two major approaches which are applied in Israeli Physical Education teacher training.
CHAPTER II: Pedagogical Approaches to Teacher-Education in Israel

Teacher-education is a field which is much younger than teaching. For generations it had been sufficient to master the domains of knowledge to become a teacher. There was no need for teacher-education, as teaching was provided but to a small minority of the children. Schooling for all has presented challenges to teachers.

The Twentieth Century enabled formal education to all. This presented teachers not only with the challenge of “what”, but also “how” to teach. This challenge evoked the need to provide teachers with professional training, and make teacher-education a separate field (Shkedi, 2009).

The teacher-education system has undergone great changes in recent years. The changes have developed due to social, economic and political reasons raising the question who the worthy teachers are and what the process of their training is (Cochran-Smith and Kries, 2001). Debating the questions led to frequent changes and different fads in the teacher-education processes. An examination of the common teacher-education processes can point to numerous approaches that differ from each other, but the extent to which they are fashionable or not changes constantly. What all the approaches have in common is that they all relate to four components: knowledge of the subject-matter, academic-pedagogical knowledge, professional-pedagogical knowledge and practical teaching knowledge. The differences between the approaches are expressed in the nature of emphasizing each of the bodies of knowledge and the connections among them (Shkedi, 2009). Research reveals that there is no one teacher-education program that is better than others, but there are good teacher-education programs point to conceptual frameworks which can determine the quality of the training program, including preparing the teachers for genuine coping with teaching issues, and equipping teachers with the necessary thinking skills (Feiman-Nemser, 1990b; Howey, 1996). Student-teachers often come to teacher-education programs with knowledge and many concepts about teaching. It is doubtful that this is the case with other professions. Student-teachers rely on their
memories and experiences of themselves as pupils and so they learn about teaching through what Lortie (1975) calls “apprenticeship of observation”, a process of unintended and unconscious observation, and constitutes the teachers’ primary encounter with the world of teaching.

Research reveals that teachers insights are largely influenced by their previous assumptions, concepts, beliefs, values and capabilities, which they bring with them to the college. The student-teachers teaching experiences have been gained in different guiding jobs (Shkedi, 2009).

The teaching profession and teacher-education have constantly been under political attack. We keep hearing about the decline of teacher-education programs, teachers are not doing a good job, society is deteriorating because of the bad teachers, and the feeling is that the system is constantly defending itself (from the virtual international conference “Opening Gates in Teacher-education – facing the Challenges of Education and Teaching” in Mofet Institute). Over the years there have been numerous changes in the approaches to teacher-education in Israel, but it does seem that each college adopts its own approach to teacher-education. Recently, the “Ariav Guidelines” is binding all colleges, while they are autonomous regarding the structure of the hours allocated to the different subjects in the framework of the allocated hour-budget.

In light of all of the above, the search for alternative teacher-education programs has accelerated in the last decade. Findings of empirical studies reveal that the traditional approaches do not succeed in preparing prospective teachers to their performance in class (Zeichner, 1988; McCutcheon, 1995), and the traditional approach maintaining that teaching is an applied science, and hence the expectation that prospective teachers are to apply in class what they have studied in theory cannot materialize due to the great gaps between abstract principles and the complex teaching situations which novice teachers face (Zilberstein, 1991). Still, in most Physical Education colleges in Israel, the following two approaches are applied.
II. Two Main Approaches to Teacher-Education

There are two approaches representing thinking patterns and research in literature pertaining to teaching research and the development of teachers and their training. The first approach regards teaching in class as an applied science, while the second approach regards teaching as a reflective practice (Kagan, 1993; Zeichner, 1990). These two approaches prevail in teacher-education and Physical Education colleges in Israel.

1. Teaching as an Applied Science

As in any other applied science, teachers have to control bodies of knowledge and theories stemming from basic subjects and other relevant subjects as well as demonstrating capabilities and control of strategies for implementing this knowledge in the subject the teacher engages in.

The teacher has to control all subjects in the discipline he or she teaches, such as in Physical Education, psychology on all its domains, especially developmental and social psychology, educational philosophies and theories of measurement and assessment. These are the grounds for the applied didactics and applied pedagogy which teachers have to manifest in class. This approach led to the layer approach in the training programs (Sykes and Bird, 1992; Zeichner, 1990). Teacher-education programs rely on a hierarchic structure based on layers. This is the approach that mostly guides the planning and organization of teacher-education programs in Israeli colleges and universities. This approach goes from theory to practice.

In the first layer, the student-teachers study all introductory subjects in education such as psychology, sociology and educational theories.

In the second layer the student-teachers study all pedagogy and didactic subjects such as teaching methods, planning the curriculum, class management in heterogeneous groups – things that do not relate to a specific subject-matter.

The third layer – methodology studies for teaching specific subjects, general pedagogy together with the pedagogy of a specific subject.
In the fourth layer: practice comes in. At this stage student-teachers are expected to implement in class the theories they have learnt in the basic courses of pedagogy and methodology of their subject-matter. According to this approach, disciplinary knowledge is part of the basic studies whereby the student acquires knowledge in his or her field of teaching (Shulman, 1986, 1987). This knowledge is supposed to turn into pedagogical knowledge that will help the student-teacher prepare lesson plans in the subject matter, such plans that will interest the learner and can be taught in heterogeneous classes. In the practical aspect, the student-teacher is required to implement the teaching and education theories he or she has studied in college.

It can be seen that the “applied science” approach emphasizes practice and principles arising from teaching research, including studies that have presented a line of generic teaching characteristics, skills and capabilities which are not related to a specific subject matter but guarantee effective teaching (Zilberstein, 2001).

Teacher-education also focuses on these characteristics which include both demonstration techniques and apprenticeship ones, assuming master-teachers are good role models with relevant knowledge, especially in the domain of Physical Education. The teacher’s control of professional knowledge and proper demonstration will lead to better results. This is the most common approach in western countries as well as in Israel (Sykes & Bird, 1992).

Nonetheless, objections to this approach refer to the fact that the theoretical studies in college have minor effects on the formation of the novice teacher and his or her behavior in class compared to other factors such as school processes, the influence of memories of previous teachers, the influence of training teachers and the expectations dictated by the Ministry of Education (Feiman-Nemser, 1986; Zeichner, 1988; McCutcheon, 1995; Ziv, 1998).
2. Teaching as a Reflective Practice

Teaching is a reflective practice belonging to a group of practical professions seeking to improve the conditions of human existence. Its main characteristic is the need to choose and act, and teaching as an educational tool certainly has these properties (Schwab, 1964). Teaching is a reflective practice, in other words, it looks back at the action that has been taken or reflects while acting (Schön, 1988).

Researchers have different definitions of reflective thinking in teaching. For instance, Technical reflection in imparting organization, management and class management skills, student-teachers consider this part of their training to be of great significance. They feel this provides them with tools for successful coping when entering the classroom.

Practical reflection occurs when the novice teacher gains experience and realizes that teaching is a series of dilemmas requiring him or her to make choices, Critical reflection occurs when social and moral aspects become part of the considerations, such as caring (Nodding, 1984; Henderson, 1992).

All three types of reflection are important in teacher-education programs and in-service training.

Teachers are required to engage in reflective thinking not only when problems arise or when performance does not suit the plan, but rather all the time. Teachers’ thinking ought to be constantly reflective, thus enriching their professional world and promoting their teaching goals.

These two approaches are used in most Physical Education programs in Israel; the first approach is more dominant, but more colleges now integrate the second, reflective approach into their programs. The two approaches constitute the grounds on which Physical education teacher-education programs are constructed in Israel (Eldar, 1995).

The following table summarizes the two approaches to teaching:
Table 3: Two Main Approaches to Teacher-Education

<table>
<thead>
<tr>
<th>Teaching as a Reflective Practice</th>
<th>Teaching as an Applied Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching is a reflective practice</td>
<td>Teachers have to control bodies of knowledge and theories</td>
</tr>
<tr>
<td>Its main characteristic is the need to choose and act, and teaching as an educational tool certainly has these properties</td>
<td>Layer approach in the training programs</td>
</tr>
<tr>
<td>Reflective thinking in teaching is important in teacher-education programs and in-service training.</td>
<td>From theory to practice</td>
</tr>
<tr>
<td>Teachers are required to engage in reflective thinking not only when problems arise or when performance does not suit the plan, but rather all the time</td>
<td>Emphasizes practice and principles arising from teaching research, including studies that have presented a line of generic teaching characteristics, skills and capabilities which are not related to a specific subject matter but guarantee effective teaching</td>
</tr>
<tr>
<td>Used in most Physical Education programs in Israel</td>
<td>The most common approach in western countries as well as in Israel. More dominant in Physical Education programs</td>
</tr>
</tbody>
</table>

II.2. Additional Approaches to Teacher-Education

The two approaches described above are the main two approaches on which teacher-education programs in Israel and in the world are based. Shkedi (2009) lists the approaches which are common in teacher-education institutions according to their significance and level of importance they attribute to the types of knowledge which are necessary for teacher-education. One of the approaches described by Shkedi (2009) is the Apprenticeship Approach.

The Apprenticeship Approach – a teacher-education pattern that is based in school and on imparting practical teaching knowledge in way of imitating experienced professionals (Zeichner, 1995). The trainee learns what to do according to a single example which is considered standard. According to this approach, academic-educational knowledge and
professional-pedagogical knowledge are not defined as unique domains and are not related to any. Knowledge of the subject-matter is also not part of the training process, but a precondition for teaching. This is an approach characterizing many of the master-teachers, mostly in the domain of Physical Education, where master-teachers expect the student-teachers to imitate their teaching style and class management techniques without considering other domains of the practicum.

Shkedi (2009) claims most of the approaches refer to teaching processes as more-or-less general processes which apply to all teachers. Only the Personality, Reflective and Support approaches give some expression, though limited, to the diversity of prospective teachers. The reference to teachers is as “clean slates”, as a uniform group – they must first learn the basics of teaching and then express their unique characteristics. This point reaffirms the findings of the current research, which examined the student-teachers’ perceptions of their practicum. These findings express the diversity of the Physical Education student-teachers’ perceptions.

Furthermore, the following phenomenon occurs in practice: knowledge of teaching is characterized by two different manifestations. On the one hand, there is teaching knowledge that is imparted to the student-teachers by their teacher-educators. This knowledge is of universal nature and is expressed in practice and model lesson, overtly and tacitly, under the teacher-educators’ careful eyes. On the other hand, there is practical teaching knowledge, which is personal, often tacit, and is expressed when the classroom’s door closes and the teachers engage in the teaching-learning process with their pupils. This knowledge mostly derives from existing beliefs and perceptions which the teachers have been carrying long before enrolling in the teacher-education program. Calandinin & Connelly (1996) refer to the first type of knowledge as “sacred knowledge”, as it is knowledge delivered in academic frameworks; the second type of knowledge is referred to as “secret knowledge”, as it is mostly hidden from the eye, including that of the teachers who hold it. The two types of knowledge ping-pong in the teacher-education process, and the more removed the teachers are from the focus of
training, and the more they invade into the classroom, the more dominant the “secret knowledge”, and the “sacred knowledge” fades away.

Another approach suggested by Shkedi (2009), to which he refers as “Constructivist-specializing”. The approach is “constructivist” as it assumes that the perception of teaching and practical teaching have been constructed with teachers even before enrolling in teacher-education, and it continues to be constructed, with each teacher according to his or her personal way – in the course of the teacher-education process, and after it ends (Holt-Reynolds, 2000). The approach is “specializing” as it focuses teacher-education on accumulated experience in practical teaching in real teaching situations, out of the student-teachers’ full, but carefully monitored responsibility of student-teachers for the teaching process (Wilson et. al, 2002). According to this approach, academic grounds and other auxiliary elements accompany the practicum. This approach contradicts the accepted approaches constructed as pyramids, whereby the wide base contains all the theoretical subjects and the subject-matter (the theoretical grounds), and at the top – the practical experience. Shkedi (2009) maintains that this pyramid-like pattern is not to be overlooked, but rather, there ought to be integrated among all teacher-education components.

The assumption is that teaching is a complex phenomenon, which is shaped by the accumulation of its components and cannot be broken (Eisner, 2002, 1991). Practicing certain skills is not like using the same skills in a heterogeneous class full of pupils. It is likely that the common assumption is that experiencing isolated items in controlled conditions will lead to proper application in genuine circumstances, has no grounds in reality. Hence, the additional approach described above derives from the belief that the student-teacher does not arrive at the college a clean slate, but rather with experience gained when they were pupils and took part in different guiding frameworks in youth movements or in the army. This approach, therefore, is suitable for Physical Education student-teachers, as Physical Education, by definition, is a practical subject.
II.3. Pedagogical Approaches to Physical Education Teacher-Education

The perception of the Physical Education subject has changed over the years. First it was perceived the individual’s fun activity for one’s personal quality of life, and it was not considered important in schools. However, over the years, understanding has developed as to the significance of Physical activity both to the individual and society. Therefore, these approaches are applied in the Physical Education programs in schools (Ram, 2003).

The research of pedagogy in Physical education has developed in the footsteps of general education and has applied similar research methods (Eldar, 1997). It can be said that the domain of physical education is lagging some ten years behind general education research. Recently some progress has been made, and gaps between the two domains are beginning to close. The comparison of research findings pertaining to teaching Physical Education and those of general education reveal a good deal of resemblance, although Physical education research has been conducted in motion versus studies conducted while sitting in class, conscious learning compared to motor learning and more.

The two major Physical Education approaches are consistent with the approaches to general education, meaning – the applied science and reflective teaching approach. Since Physical Education is mostly a practical subject, the practical approach suits it the most. Lately, the most common approach in Physical Education teacher-education colleges has emphasized the characteristics of effective teaching at schools and teacher-education colleges. One characteristic of effective teaching is imparting teaching skills for the development of teaching and learning processes (Harari, 1992; Eldar, 1997).
Teaching Skills: The Tools Assisting in the Development of Effective Teaching and Learning Processes

Teaching studies both in general education and in Physical Education point to a number of domains of knowledge as the most significant for the teacher’s professional and effective performance, which have a positive influence on learning at different ages in the various disciplines. As mentioned before, The domains identified for the implementation of effective teaching are: knowledge of the specific contents which the teachers accumulate in the course of their teacher-education theory lessons; theoretical, pedagogical and practical knowledge gained in the training process, and pedagogical knowledge of contents (Schulman, 1986); this knowledge is shaped by the teacher while implementing teaching-learning processes in an educational reality and a particular learning environment. Therefore, teachers have to know how to adapt the specific contents they have chosen to the abilities and needs of their pupils. Teachers have to use pedagogical knowledge and teaching skills so as to motivate the student-teachers to be involved in the teaching tasks and succeed in accomplishing them. These skills are the teachers’ working tools, and using them helps teachers plan, organize, carry out and assess their work (Yariv, 1999; Siedentop & Tannechill, 2000; Hativa, 2003). Mastery of the teaching skills is what constitutes the teacher’s professional status (Zilberstein, 1994) and the possibility of resolving problems that have to do with teaching-learning contexts. Hence, teaching skills are part of the pedagogical abilities that can be acquired in the process of teacher-education, acquiring pedagogical and content knowledge in the course of the practicum. Prospective Physical Education teachers practice the use of these tools in the course of their practicum, thus improving their abilities, increasing their self-confidence and enhancing their teaching capabilities (Evans & Tribble, 1986).

In the course of their work as teachers and as they take in-service courses, they enhance their content knowledge; they combine imparting knowledge with the application of teaching skills and their abilities to influence their student-teachers’ products (Hativa, 2003; Ingvarson, Maeirers & Beavis, 2005). All these are directed at the teaching-learning goals which are:
Imparting contents and new skills via systematic purposeful teaching so as to help learners develop in the motor, social-emotional-cognitive domains.

Practice, improvement and preservation of familiar skills and abilities in order to help the learner become familiar with his or her abilities and enjoy a life full of consistent sports activities.

Acquiring relevant knowledge about a healthy lifestyle, so that people will know how to maintain a healthy quality of life.

In order to reach these goals, the prospective Physical Education teachers must be familiar with a number of teaching skills which will help them in their professional educational work. These are skills that help the planning of teaching procedures, skills that alleviate the implementation of teaching via organization and management of the learners and the learning environment, developing proper communication which conveys messages to all the senses, encouraging and motivating the learners to think, exercise and ore, as well as providing the learners with thinking skills required for assessing the products of learning

Structure of the Physical Education Training Program

The Physical Education curriculum was developed according to all of the above, and the “Ariav Guidelines” (2006). The program spreads over four years:

1. Studies for teaching Physical Education – 36 hours including: developmental and educational psychology, psychology of Physical Education, Descriptive statistics, assessment methods, academic orientation, sociology of Physical Education, Methods of Physical Education, Teaching application and practicum, issues in class management, practice workshops, integrating children with special needs, introduction to special education.

2. Disciplinary studies – Physical Education – 56 hours – sports branches, theory of movement, nurturing posture, motor control, bio-mechanics, anatomy and
laboratory introduction to life science, physiology of effort, organizing sports enterprises, choice seminar, specializing in a secondary academic subject such as adult education, promoting health and recreation.

3. Basic studies and enrichment – 6 hours, including English, language skills, computer skills, education for democracy and national heritage.

Total: 96 hours over four years of training for teaching Physical Education – as required by Ministry of Education’s teacher-education guidelines.

The following section describes the practicum in the teacher-education process as described in the current research.

**II.4. The Practicum**

A Chinese proverb reads: “Tell me and I’ll forget; show me and I may remember; involve me and I’ll understand; Step back and I will act.”

The practicum is an integral part of the student-teacher’s training process. In the course of their practicum, the prospective teachers become acquainted with the “real world” of teaching. The experience exposes them to a variety of educational models. Research reveals that teachers regard the practicum component to be of great significance in the process of teacher-education (Darling-Hammond et. al, 1999) in Israel and around the world (Black & Ammon, 1991; Garibaldi, 1992; Bullough et al., 2002).

In Israel, the teacher-education academization process has emphasized the teachers as intellectuals above all, and according to the new “Ariav Layout”, the practicum takes up no more than 16% of the teacher-education process. The also includes observations of lessons in addition to practical teaching. If we compare that to the process taken in other practical subjects such as medicine, we can see that whatever differentiates the certain professionals from other professionals is not knowledge per se, but the practical training. Only after their practicum, do the professionals become specialists in their field. Medicine is one example of a subject which places emphasis on teaching and learning by
the patient’s bedside. Other subjects also emphasize the practicum to which the student-teachers who participated in this research have been exposed, when entering the practicum in their training schools. Since the research engages in their perceptions of the practicum, it is important to review some relevant literature.

Acquiring a profession, including teaching, is a developmental process with constant changes. This process consists of a number of stages, where behaviors, beliefs, interests and research focus change (Berliner, 1986; Kermer-Hayon, 1991; Brown, 1975) and it last throughout the teacher’s career.

This section seeks to clarify the role of the practicum in teacher-education, to present the different practicum models, and to discuss the different aspects of the practicum in order to examine the student-teachers’ perceptions of their practicum.

**The Practicum’s Significance and Goals in the Process of Teacher-Education**

Not too long ago, teacher-education programs were heavily criticized for being too theoretical and having no connection to actual teaching (Darling-Hammond & Hammerness, with Grossman, Rust, Shulman (2005)

Traditional teacher-education programs place the practicum at the margins of the program. Nowadays the approach is to engage in the practicum throughout the duration of the program, so the student-teachers study the theories, and at the same time they engage in their practicum in the field.

The first stage in the teacher’s process of professional development is that of training in a teacher-education college. Odell (1992) characterizes this process as a long, interactive process whereby the trainee develops professionally while interacting with pupils, teachers and other trainees. The training stage includes two main aspects: the academic-theoretical aspect, and the practical one. The theoretical aspect includes everything the student-teachers learn in the training college, and the practical aspect includes all that is learnt in the training class and the training school. Academic-theoretical studies include
the subject-matter, the discipline, and education studies (Ministry of Education, 2003); The practicum component – experiencing teaching with peers and in training schools of different models, whereby the goal is to apply theory in the genuine school environment on all its components, meaning, in the “real world”.

As already discussed in this chapter, research engaging with the professional development of teachers distinguishes between two basic teaching approaches: the perception of teaching as an applied science, and the perception of teaching as reflective practice (Kagan, 1993; Zeichner, 1990; Zilberstein, 1998). The perception of teaching as an applied science focuses on the use of what has been learnt, educational-didactic theories and content knowledge bodies of the subject matter. According to this approach, teachers have to acquire propositional knowledge in the subject matter, procedural knowledge including theoretical perspectives of the ways to conduct procedures that will contribute to professional action, such as acquiring information, skilled behavior, deliberation processes that include decision-making (Shulman, 1986; 1987) and practical knowledge in the domain of field experiencing. A curriculum based on this approach is developed with a ‘from theory to practice’ orientation. This perception generates the teaching characteristics and capabilities on which teacher-education has to focus through modeling and reliance on master-teachers. This is the dominant model in Israel and the western world.

Conversely, the perception of teaching as a practical-reflective occupation is based on a shift from “theory to practice” and focuses on the teacher’s reflective activity, which expresses the teacher’s knowledge in the domains of educational actions with reflections on it during and after (Buchmann, 1993; Schon, 1988). According to this approach, the teacher’s professional knowledge is defined as situational knowledge, knowledge of context and knowledge of decision-making (Brown, Collins and Duguid, 1989; Zilberstein, 1998a). The teacher as a central figure in the system does not suffice with imparting knowledge or applying theories that have been developed by others, but rather takes the responsibility for the generation of pedagogical knowledge via reflection and conceptualization so as to reach an action theory (Schon, 1983). This is what Zilberstein
(1988) refers to as reflective teaching, defining it as a personal and unique contextual and experiential activity, which develops into alternative action (Lortie, 1975; Jackson, 1986). Here, the view that the goal and content of teaching originate from the rich, multi-layered context of teaching, where most of the teacher’s decisions are made.

Both approaches reveal a connection between theory and practice, and they both regard the practicum as a central factor in teacher-education (Goodlad, 1990).

The practicum has been considered the most important and powerful component of teacher-education programs (McIntyre, Byrd, & Foxx, 1996; Clark, Smith, Newby, & Cook, 1985; Lemma, 1993). Ziv (1990) defines the practicum as a “clinical experience” and as a time of guided teaching whereby the student-teacher takes increasing responsibility for a given group of learners in a limited time period, where he or she intends to apply educational knowledge, practical activity and reflective thinking. Therefore, it is not possible to train a student-teacher without practicum (Boydell, 1986), which provides the student-teachers with genuine situations whereby they experience and can observe others and learn from them (Stones, 1984). Many studies show that student-teachers state the practicum is the most important part of teacher-education (Franke & Dahlgren, 1996; McNamara, 1995).

The practicum constitutes a critical stage in the training process. The student-teachers’ difficulties in meeting the complex demands of teaching derive from lack of experience, lack of contacts with personnel and administrators, difficulties with pupils and more (Hsu, 2005).

One of the most researched topics is the student-teachers’ stress reactions regarding their practicum. A study (Murray-Harvey et al., 2000), which examined the student-teachers’ concerns regarding the practicum found that the main causes of stress are the student-teacher’s expectations of themselves regarding their teaching performance, coping with the burden of teaching related tasks, their master-teacher’s assessment, finding the balance between the practicum and one’s personal requirements such as family, work,
time management and class management. The above mentioned research revealed a
decrease in pressure from one experience to the next. Nevertheless, teachers in many
studies regard their practicum as the most important aspect of their training, and their
recommendation is that this practicum be expanded even at the expense of theoretical
studies (Hadari, 2003). Darlington-Hammond et. al (1996) also state that teacher-education
in the U.S. has been criticized for being too theoretical and with hardly any connection to
practice (p. 391).

The teacher-education program, then, is responsible for providing the student-teachers
with teaching and learning situations and creating practical knowledge for future use. As
well, Zeichner (1995) attributes broad meaning to the practicum and includes in it all the
observations as well as practice in the framework of teacher-education. The process of
training gets its unique features from the student-teacher’s accumulating experience, the
master-teacher and other teachers involved in the experience, from the training school’s
culture, the training college’s culture and its curriculum. Furthermore, the interpersonal
relationships among all parties involved in the program also affect its nature (Graham,
1997). The practicum has to cater to the needs of the student-teachers at their particular
stage of professional development. The teacher-education process has to consider such
personal factors as the student-teacher’s biography, the student-teacher’s self perception
as a teacher and her/his perception of the shaping of professional identity (Bullough,
1991), as well as the student-teacher’s beliefs about teaching, learning and the subject-
matter (Borko and Mayfield, 1995). Moreover, contextual factors such as expectations,
requirements and the feedback provided by pedagogical instructors, master-teachers and
the training school’s environment (Borko et al, 1992; Eisenhart, et al, 1993). And indeed,
these aspects of the practicum were examined in the current research which examined the
student-teachers’ perceptions of the practicum in school.

Livingston and Borko (1989), as well as Kagan (1992), maintain that the knowledge
exposed to student-teachers is procedural rather than theoretical knowledge, so as to cater
to the student-teachers’ immediate needs. In the process of clarifying their own images
and beliefs about teaching and its aspects and reconstructing them, it is important that student-teachers experience teaching and gain knowledge about the pupils and their characteristics and about the school’s culture.

The encounter with the practicum and actual teaching, on its internal and external pressures, contributes to the development of the professional self-image and influence the teachers’ decisions (Hollingsworth, 1989; Kagan, 1992), which is significant in the creation of the cognitive dissonance and the student-teachers’ coping with the “luggage” they have been carrying pertaining to teachers, pupils, school and teaching. Hence, the encounter with the school, the class and more experienced teachers is of great significance. According to Elliott (1992) and Bereiter (1995), the practicum leads to cognitive and emotional changes in the student-teachers’ cognitive and emotional aspects, which keep developing throughout their teacher-education process in college and in the training school, and the student-teacher develops professionally in both environments. In the current research, the cognitive dissonance is manifested with the Arab student-teachers practicing in the Jewish school.

The practicum provides the opportunity to connect theory and practice (Shulman, 1996). Smith and Snoek (1996) conducted research examining the student-teachers’ perceptions of their practicum and found they had considered it to be the most important part of their training. Lev-Ari and Smith (2005) also found that student-teachers maintained they had shaped their professional attitudes in the course of their field training, which led to a change in their perceptions of the teacher’s role. Baird and Mitchell (1997) found that the personal practicum leads to a change in the student-teacher’s attitudes, perceptions and behavior. Numerous researchers suggest that practice-teaching enhances the understanding of teaching (Baird and Northfield, 1995; Flack et al., 1995; Mitchell and Mitchell, 1997; Minnes Brandes and Erickson, 1998; Loughran et al., 2002).

Hodge, Davis, Woodward & Sherill (2002) found that the practicum has a positive influence on the attitudes of special education student-teachers and on their ability to work with children with learning disabilities. It was also found that knowledge of
teaching - ‘knowledge of pedagogical content’ (Shulman, 1987) is mostly acquired in the course of the practicum (Munby, Russel & Martin, 2001). Therefore, practice teaching does not only serve as a bridge between theory and practice, but also helps develop student-teachers’ personal teaching skills. Handal and Lauvas (1987) call it the teacher’s “practical theory”, which includes a dynamic system of knowledge consisting of theoretical learning, personal experience and personal values, and is applied in different ways in accordance with the teaching context. To develop their “practical theory” student-teachers have to experience active teaching and be guided as to using their experience as grounds for learning about teaching. A great part of the teacher’s knowledge is not cognitive (Van Manen, 1999) and is manifested in three dimensions of the teacher: behavioral, emotional and cognitive.

In his article about the training program in the University of Utrecht in the Netherlands, Korthagen (2001) bases the program on a continuum of teaching experiences, a realistic approach emphasizing teaching and reflection as factors contributing to the student-teacher’s professional development. This is where learning begins. Zilberstein (2005) also believes there is a gap between theory studies and the reality in the field. Learning situations occur within school walls, where the student-teachers also learn the teaching process. In his article about worthy teachers Zilberstein (2005) maintains the practicum is the most influential factor in the process of the student-teachers’ process of training towards becoming worthy teachers.

It has to be noted that despite the great many advocates of the practicum as a significant aspect of teacher-education, there is a good deal of criticism and questions concerning it. Criticism refers, among other things, to the lack of a clear curriculum pertaining to practice teaching (Stones, 1984; Zeichner, 1992) and the lack of integration between the experience and the curriculum of the teacher-education college (Hoy and Woolfolk, 1989; Zeichner, 1992). Lortie (1975) claims that practice teaching does not affect the student-teachers because it cannot change their past experiences which they bring into their teaching. Zeichner (1992) tried to account for the failure of practice teaching in influencing the student-teachers by claiming the student-teacher is placed in one practice
class and works with one training-teacher only. Such an experience distorts reality, as it ignores the context of the school where it takes place. Goodlad (1994b) maintains that such an experience enhances the perception of teaching as an isolated activity based on conventional formal knowledge. These factors suggest that a significant mediation process is also lacking in the experience (Ball, 2000; Ethell, and McMeniman, 2000). Berliner (1987), states that indeed practice teaching is essential in the process of gaining practical knowledge, but experience is not a synonym for expertise. Leinhardt et al. (1995) claim practice teaching does not guarantee acquisition of professional knowledge; hence, mediation is required so as to provide some meaning to the experience.

The contribution of the experience will increase if and when it is properly planned and takes place in an organized framework with experienced training teachers (Giebelhaus, 2002). Joint work done by the teacher-education college and the school improves the nature of the student-teachers’ experience and enhances their perceptions of themselves as professionals. Wang and Odell (2002) believe many of the student-teachers’ problems can be resolved if the experience takes place under the college-school partnership umbrella. Indeed, in recent years, a new experience model in the spirit of school-college partnership, which will be discussed henceforth.

In summary, we can see that most of the practicum-related studies found the practicum to be a crucial factor in the teacher-education process, which was also revealed in the current research.

The following section will review the various practicum models, as the participants of this research experience these models throughout their teacher-education program.
II.4.1. Practicum Models

There are a number of practicum models (Frankel, 1978; Ziv, 1988).

Numerous studies have criticized the traditional practicum models which were so common in the past. Criticism pertained to problematic student-teacher – master-teacher communication, partial internalization of teaching skills and the lack of agreed upon teaching standards (Hascher et,al, 2004).

In Israel there are four major practicum models, which were embraced in the new teacher-education guidelines.

The traditional model – An example of this model is the apprenticeship model whereby the student-teacher becomes the master-teacher’s apprentice and the master-teacher enables the student-teacher to teach parts of lessons or whole ones. The advantage is that of working with a skilled master-teachers and learning from their experience. The main disadvantage is that if the master-teachers believe the student-teacher is not skilled enough to teach, they will not provide enough teaching-learning opportunities, and thus the student-teachers come out with meager experience. In addition, the success of the practicum according to this model largely depends on the master-teacher’s guidance skills. These skills are not abundant. The common phenomenon is that of a great teacher in the field, but a bad trainer. This model is also extremely conservative, and creates student-teachers who imitate the master-teachers, who may not take positively to the student-teachers’ innovative, extraordinary behaviors. An additional difficulty is that the master-teacher is committed to the school and the pupils as well as to the college, and often there are conflicts between the different commitments.

The laboratory class model is an additional practicum model commonly used in Physical Education. An example of this model is where first year student-teachers experience teaching inside the college where classes of pupils are brought to the college. Classes are divided into small groups, which are taught by the student-
teachers. The practice of teaching develops gradually, and only in the second year do they enter the schools and teach whole classes.

**The independent teacher** – This is a relatively new approach, though it has been applied in an Israeli college for the last 20 years (Lahavi, 2009) and is less familiar. This is a collaborative model whereby, for example, the student-teachers are partners to all teaching activities in school as of their second teacher-education year. After one year of preparation, the student-teachers teach two subjects in class without the presence of a master-teacher. They are given total responsibility for the class. They prepare lesson plans, teach, participate in pedagogical meetings, meet parents and assess their pupils’ achievements. Lahavi (2009) maintains this model is based on the approach according to which knowledge of teaching (unlike knowledge about teaching) is acquired and develops through the personal experiences of teaching and a variety of significant pedagogical situations (Loughram & Russell 2007). Student-teachers learn better how to teach if they experience teaching accompanied by reflection, and according to this model, this process is conducted via the pedagogical instructors who guide the student-teachers and provide feedback. The independent teacher model is directed at coping with the feelings expressed by student-teachers regarding the fact that passive teaching does not prepare them for genuine professional life (Nieme, 2002) and the lack of connection between theoretical and practical learning (Smith & Lev-Ari, 2005; Lahavi, 2009). One of the problems surfacing from this model is that the pupils study with inexperienced teachers, which calls for cooperation between the school, the parents and the college. Furthermore, the principal, the parents and the college. Moreover, the principal and the staff are required to provide support to the student-teachers in front of the parents and the pupils.

**The PDS (Professional Development School) model** - An example of the model is the systematic close work of both the teacher-education institution and the school partnership involves pedagogical instructors, master-teachers and student-
teachers in the design of the practicum as well as the student-teachers’ assessment. The school teachers are involved in teaching academic subjects to the student-teachers, and the pedagogical instructors are involved in the teachers’ in-service courses. The PDS (Professional Development Schools) model has developed greatly in recent years and is now considered the most effective practicum model in teacher-education. The following section describes it in more detail. Despite this model’s significance, it is hard to adhere to it in Physical Education teacher programs as will be detailed later on.

II.4.2. Professional Development Schools “PDS”

The PDS seeks to promote the professionalism of student-teachers and practicing teachers at the same time. The idea of cooperation between a training college and the field is also based on extensive educational insights. One such insight pertains to the perception of the teacher as a life-long learner, and the need to enable teachers to constantly develop professionally. The second insight pertains to findings regarding the low effectiveness of teachers’ in-service training, showing a need to find nurturing ways for the professional development of teachers, so that reforms can be implemented in the education system (Datnow et al., 2000). The last significant insight relates to the fact that teachers play the leading role in the advancement of their pupils. These insights have raised the idea of partnership as an option for simultaneously improving teacher-education and teachers’ practice in the system, so as to contribute to the children’s learning.

The PDS as a dominant partnership model is based on this integrative approach. The meaning of the model is that the professional development of student-teachers, teacher educators, master-teachers and other teachers, takes place through intensive interaction within the school, when all partners take part in different learners’ communities and are constantly involved in research and learning processes (Robinson and Darling-Hammond, 1994; Levin and Rock, 2003).
The idea of partnership between the training school and the teacher-education college developed in the USA following a series of studies conducted by John Goodlad and others from the 1970s, following the “earthquake” caused by “A Nation at Risk”, a report presented by the Carnegie Foundation in 1983. Goolad’s findings about what goes on in schools on the one hand, and the feeling of crisis in education on the other, created a momentum of thinking in other frameworks, such as the Holmes Group and the Renaissance Chain attempting to cope with teaching and as a key to the improvement of education. The publication of the term PDS by the Holmes Group (1986) created the conceptual framework of the partnership idea. Today there are more than 1,000 such partnerships, whose standards were developed by the NCATE (National Council of Accreditation of Teacher-Education) (Levine, 2001).

There are different forms of partnerships between the academy and the field in most European countries. In England and Wales, for instance, there has been a legally formalized partnership between teacher-education colleges and schools since 1992. However, the considerations leading to this partnership in England were economic and political rather than a professional approach attempting to get at better preparation for teaching. One important characteristic of this collaborative approach is that the two institutions - the training school and the teacher-education college, would form partnerships with concerted efforts aimed at three main goals:

3. Modeling exemplary practices that will lead to school student achievement of a high order; provide sustained, applied inquiry for both student-teachers and faculty (Holmes Group, 1986;1990; Goodlad, 1994a; Lieberman, 1998).

The PDS partners are: the schools, the master-teachers, the pupils, the pedagogical instructors and the student-teachers.
The school entry into the partnership with an academic teacher-education institution is a whole-system move away from the school’s perspective, and its success depends upon its ability to cope with the intensity of change (Leonard et al., 2004). The school’s motivation to participate in a PDS has to do with the fact that schools need additional teaching staff and professional support so as to cope with their complex needs and cater to the needs of each of their pupils (Ariav and Emanuel, 2004). Korthagen (2004) and Reichel and Mor, (2006a) suggest that in order to help student-teachers to get to know the “environment” relevant to the teacher’s professional development it is important to offer them an appropriate learning environment. For instance, a school where teaching is highly traditional is less suitable for training in new teaching practices.

The master-teachers are the main aspect of the school’s contribution to the partnership. A mentoring teacher differs from a training teacher, as they have greater commitment beyond the individual mentoring of a certain student-teacher. Work and learning relationships are established via this commitment, which cannot usually develop in the framework of training a student-teacher in the traditional training models (Conners and Adamchak, 2003). In Israel, the idea of college-school partnerships has been accepted gradually and accompanied by ‘growing pains’ (Ariav and Kleinard, 2001). Until recently there had been no clear policy regarding the development of field experiencing in the partnership with the schools, but many successful initiatives have been implemented. The PDS chain was established by the MOFET Institute (Intercollegiate Teacher-Education Information Center) for mutual learning and researching the partnerships between nine teacher-education colleges and schools (Zilbershtein, Ben-Peretz, Grinfeld 2006).
The Pedagogical Instructor in the PDS

Following the change in the perception of teaching, the role of pedagogical instructor changed from a person examining the student-teachers’ knowledge in the field to a person helping to impart behaviors and skills that encourage autonomy, which will enable prospective teachers to examine their actions and be responsible for their professional development (Zilberstein, 2005; Zeichner, 2002). According to Milat (2005), the pedagogical instructor is accessible, and her/his communication with the student-teachers is continuous. This presence enables pedagogical instructors to be partners in the training of teachers for their mentoring role. The pedagogical instructor becomes a part of the school staff, getting to know the pupils, the teachers and other school employees.

Student-Teachers in the PDS

Most PDS research focuses on student-teachers, although the declared goals of the partnership are to both train student-teachers and refresh schools and training institutions (Clark and Smith, 1999). The student-teachers are the link between the teacher-education college and tomorrow’s school (Ariav and Smith, 2006).

In summary, it can be stated that the PDS model, as presented above, is a model seeking to get the training school closer to the college, bridge the gaps created in the traditional model and improve the pedagogical instructor’s and the master-teacher’s guidance as well as to bring the theories and the practicum closer together and create new knowledge. This model also brings the student-teachers closer to the school and its staff. Nevertheless, just like any other model, this model also has drawbacks. For instance, the burnout of those who are involved, lack of motivation on the part of the partners: school staff, and student-teachers, and finding a suitable training school and so forth.

The “Ohalo” College has integrated the different models into the three-year teacher-education, so the student-teacher experiences the different models. However, it is not always possible to use the PDS model, despite its obvious advantages, especially in the
domain of Physical Education. Therefore, the following section describes the Physical Education practicum embraced in Israeli teacher-education programs for Physical Education teachers.

II.4.3. Practicum in Teaching Physical Education

The Physical Education Curriculum includes training from pre-school to the end of high school, which means for three years the student-teachers study to teach at all levels before the fourth practical experience year. In the course of training, the student-teachers engage in practicum in primary school for two years (first and second) and in high school during the third year. The practicum takes place once a week in the training school, and twice a year they engage in a full week practice (Yonai, 2003).

Most of the Physical Education colleges in Israel practice the traditional practicum model as most primary schools which serve as training schools only have one Physical Education teacher per school and the number of lessons is limited, so each teacher can only work with one or two student-teachers so as to have an effective practicum. The training schools are chosen based on the quality of their Physical Education teachers, recommendations made by the Physical Education inspectorate and the conditions provided by the schools such as gymnasiums and sports courts. Most master-teachers are veteran teachers willing to coach student-teachers.

The PDS model described above is an innovative and effective practice model, but it does not suit the Physical Education practicum, especially in primary schools where there is only one teacher and the number of hours is limited. In the domain of Physical Education, the experience of teaching physical skills in practice is significant and benefits the process of the Physical Education student-teachers’ practicum.

In the third year – the student-teachers practice in high schools where there are a few Physical Education teachers, so that the practicum model is that of the training school model, and the number of student-teachers is higher - a whole group of student-teachers
attends the same school. Student-teachers are accompanied by 4 - 6 Physical Education teachers (one or two student-teachers per teacher). In some of the colleges, the student-teachers experience a “laboratory class” model during their first teacher-education year – a class of children is brought to the college and the student-teachers practice teaching them under the supervision of the class teacher and the pedagogical instructor. In addition, there is the “peer-teaching” model right before starting the practice at school, usually during the first semester of the first year. According to the Ariav Layout (2006), student-teachers do 15 hours of practical experience in the course of three years.

II.4.4. “Ohalo College” Physical Education and Practicum

Table 1 presents the different approaches of the practicum modes in the curriculum. These models expose the student-teacher to different teaching methods, to events in the field which are later discussed in class while emphasizing “from the field to the class, and from class to the field”. Hence, the student-teacher can benefit from the practical experience at school and for his or her way of teaching during the training process.
Table 4: The Practicum Program in “Ohalo” College

<table>
<thead>
<tr>
<th>Year</th>
<th>Focus</th>
<th>School choice</th>
<th>Number of Practice days</th>
<th>Mentoring types</th>
</tr>
</thead>
</table>
| 1    | 1. Peer teaching – first semester  
      2. Teaching in elementary school | First semester – in the college. Second semester in a school chosen by the pedagogical instructor | 1. One day per week  
2. A full practice week during the year | Traditional model – Peer teaching and observation. The teacher visits training schools in rotation. |
| 2    | Teaching in elementary school | By the pedagogical instructor approved by the inspector of Physical Education considering student’s request | 1. One day per week  
2. Two full practice weeks during the year. A week each time. | 1. Traditional model  
2. The training school – the pedagogical instructor places a group of student-teachers in the same school or spends time with them. |
| 3    | Teaching in Junior high or high School | Chosen by the student, approved by the pedagogical instructor | 1. One day per week  
2. Two full practice weeks during the year. A week each time. | The Training School Model. There are a number of training teachers in each school, and a number of student-teachers |
| 4    | The student-teacher becomes an intern in the school, where he or she is absorbed as a teacher | The student’s choice directed by the inspector or directly by the school principal | According to number of teaching hours. Accompanied by a master-teacher | Student returns to the college for an internship workshop usually coordinated by the pedagogical instructor |

In the first year – the first semester the student-teachers experience peer teaching in the college, where feedback talks and lesson analysis are held with the pedagogical instructors who observe the lessons with all the student-teachers. Only in the second semester do they go out to the field, to the school, entering the system that has been operating for half a year. Since in most cases there is only one Physical Education teacher in the training primary schools, the practice model is the traditional one. Each teacher gets two or three student-teachers whom he or she trains once a week. The pedagogical instructor goes among the schools, visits about once a month and observes lessons given
by the student-teachers, holds a feedback talk with the student-teacher, his or her peers and the master-teacher.

Another model is that of the training school model, like in high schools where there are a few Physical Education teachers and a whole group of student-teachers attends the same school. Student-teachers are accompanied by the Physical Education teachers (one or two student-teachers per teacher).

The pedagogical discourse between the student-teacher and the pedagogical instructor and reflections on the lessons are more frequent. In addition, teaching application lessons are given in the school. The pedagogical approach is from class to the field and from the field to class via reflective, critical discussions, presenting cases and so forth (Korthagen, 2001).

In the fourth year student-teachers who have started to work in the field are required to have an internship year. During the year they are accompanied by a master-teacher from the school, by the school principal and the inspector who assess their work and summarize it at the end of the year and in the internship workshop which they take in their college. This is a case study workshop, where participants support each other and solve problems. After the year ends, the student-teachers will receive their teaching license. In the last two years the college also offers an in-service workshop for novice teachers.

As discussed earlier, the pedagogical instructors are the ones who choose the training schools, and their choice has to be approved by the inspectorate, depending on the master-teacher’s quality, and the learning conditions provided by the school. In most cases the training schools are in the close vicinity of the college or close to the student-teachers’ places of residence so as to make it easier for them to get to the schools. A study about the student-teachers’ expectations of their practicum revealed that one of the most important expectations was for the school to be close to their place of residence (Hadari, 2003). Usually, the pedagogical instructor approaches a teacher, a principal and the inspectorate and asks for permission to enter student-teachers into the school. When
everything has been coordinated, the teacher becomes a master-teacher and gets paid for training the student-teachers. This budget is part of the allocations from the Ministry of education to the college.

Nevertheless, there is still a gap between learning the theories and the practicum on all its stages.

II.5. Gaps between Theory and Practice in Teacher-Education

Feiman-Nemser & Buchmann (1985) point to the dissociation between learning the discipline and the demands of the educational field. They believe the student-teachers experience two distinct worlds – the world of the school and that of the teacher-education college – and they cannot seem to connect the two. This is probably true for most teacher-education programs. The literature review, which relates to both theoretical and practical aspects of teacher-education, raises the concern due to these gaps in teacher-education. The gap is expressed by student-teachers’ difficulties in applying theory in their practicum.

It is hard to expect the average student-teacher to make the desired integration and apply the theoretical studies in practice (Korthagen et al., 2006). Student-teachers soon realize that there is separation between theoretical studies and their practice. They seek the situational and content knowledge they need for learning how to “become a teacher” or how to “think like a teacher” from other sources (Shulman, 1990) rather than in the college’s theoretical courses. Student-teachers form behavior patterns in the course of their experience in the field as suggested by Ethell, and McMeniman (2000): “Practicum experiences result typically in student-teachers being left to intuit the pedagogical principles underlying effective classroom practice” (P.87).

Studies pertaining to the practice of teacher-education programs point to tension between the college culture characterized by a theoretical approach, and the school, characterized by practice and educational activities (Wideen et al., 1998; Richardson and Placier,
This tension is created by the college teachers’ disappointment as their expectations are not fulfilled, and the student-teachers’ frustration as they have not been adequately prepared for teaching in school. Teacher educators believe the schools have to provide the opportunity for student-teachers to apply their theoretical studies, while student-teachers regard the school experience as an opportunity to gain teaching experience and knowledge, so as to be able to make decisions in the course of teaching.

Researchers criticizing the “from theory to practice” approach maintain that a great many of the training programs teach theories without making any attempt to connect them to practice (Barone et al., 1996). Schon (1987) criticizes the approach which he calls “the technical-rational model”, calling for the application of theory in the practice of teaching. Zeichner and Tabachnick (1981) state the concepts learnt in this way “are washed away” in the first stages of practice. Others have pointed to the fact that novice teachers adapt to the school where they teach during their induction year, and they do not connect to scientific insights which they have learnt during their training period. Coropaal (1988) believes this meagre transfer derives from lack of correspondence between “the theory of teacher educators” and “the student-teacher’s theories”. Joyce and Showers (1988) suggest what they call “feed-forward problem” as a possible explanation for their claim that student-teachers are motivated to learn, and they carry this motivation on to their practicum. Other subjects do not arouse the motivation necessary for learning. Coropaal (1988) adds that even when the subject becomes the trainee’s personal goal due to exposure during training, there is a need for an instructor that will connect theory to the concrete situations where the trainee encounters the subject. Clark and Lampert (1986) suggest the “knowledge characteristic relevant to teaching” as an additional explanation for the problem of not transferring theory to the field. They claim that teachers need concrete and fast answers for situations where they have little time to think, what they call “action-guiding knowledge”, which differs from the abstract and systematic knowledge which is usually presented in teacher-education programs (Korthagen and Lagerwerf, 1996; Tom, 1997).
Schwab (1978) offers another explanation for the problem. He maintains that the domains of education and teaching have borrowed theories from a variety of domains such as psychology in the areas of personality and learning, sociological theories, and epistemological theories, and have used them as principles to be implemented in practice. Reliance on these theories and their implementation created spatial difficulties, since many theoretical structures do not suit teaching and learning in practice; theory cannot construct practical guidelines for real life situations because of the variety of these situations and the circumstances that caused them; theories are incomplete and ignore central factors pertaining to the issue, and therefore no uniform theory can be developed from them which will provide answers to all the educational issues with which school has to cope.

Due to all these difficulties, many researchers advocate the “from practice to theory” connection, maintaining that first one has to learn from practice, and only later can one be tested and assessed according to theoretical standards (Hunt, 1987; Stones, 1987; Jones and Vesilind, 1996; Zilberstein, 1998a). Schon (1983) describes the process of acquiring and developing knowledge of teaching according to the “from practice to theory” approach. It is described as a spiral process, whereby the teacher uses his or her senses to absorb what is going on in the classroom, reflects about the situation and interprets it in light of the educational theories which are at the root of his or her educational knowledge.

The teacher might change the perception of the situation and the strategy used in class – his/her practical knowledge (Schon, 1983). Schon’s main contention is that the professional teacher cannot base his/her work on the application of theoretical knowledge unto a specific case in the class. The teacher has to rely on knowledge stemming from practice and the logical thinking underpinning this practice so as to adapt practice to the reality of the class (Brown and McIntyre, 1993). Other researchers also describe the dynamic processes through which professional teachers construct theory from practice (Shulman, 1987; Wilson, Shulman and Richert, 1987). According to Korthagen and Kessels (1999), early resort to theories frustrates the student-teachers, because they cannot translate them into classroom practice. They believe that theory as it is perceived
in the traditional training programs has to constitute but a small part of present-day programs, while knowledge the unique situation, has to constitute the greater bulk of the student-teachers’ relevant knowledge base.

Both types of knowledge, the practical and the theoretical, are needed as they contribute to the teachers’ professional work. Shulman (1988) states that teachers can integrate practical and theoretical knowledge, knowledge of context and universal knowledge, reflective and routine-technical knowledge, in their professional work. Shulman emphasizes the duty that teacher educators have to bring out the tacit knowledge underlying the teachers’ teaching practice, so it reaches a level of consciousness. This can be done through theoretical knowledge and reflection on the experience and their theoretical understanding (Shulman, 1988). Researchers emphasize the significance of both theory and practice as aspects that keep changing in the teacher’s practice (Russell et al., 1988). The question is how to develop teacher-education programs that will combine theoretical studies with the practicum. Different researchers have considered this question and have offered different models for applying this combination.

Leinhardt et al. (1995) suggest that teacher-education programs integrate two sources of knowledge which are relevant to teacher-education: the academy represents research and school represents the field and the experience. These two sources provide different types of knowledge. Genuine integration of the two sources requires the processing of one type of knowledge by using thinking that characterizes another type of knowledge; in other words, changing practical, situational, specific, intuitive knowledge to general, formal knowledge and vice-versa. In this way the student-teacher or the teacher learns from the two sources of knowledge in a way that integrates them. Richardson (1997) and Abdal-Haqq (1998) suggest another way which allows for the connection between theory and practice in teacher-education. She presents the model of the constructivist approach which involves student-teachers in inter-disciplinary investigation - a cooperative activity, providing opportunities for experiencing learning in the field, reflection and self-examination (Kaufman, 1996; Kroll and Laboskey, 1996) so that they can use these
strategies in school at a later stage. Zeichner (2010) describes a number of programs attempting to bridge the gaps between the campus and the field, and between these two and the wider communities in which they operate. These programs express the transition from the perception of academic knowledge as the main authority in the teacher-education process unto an approach whereby different aspects of specialty which exist in the schools and in the community are integrated into the teacher-education programs in addition to the academic studies. This broad view increases the student-teachers’ opportunities to learn, as new synergies are created through the interplay of knowledge from different sources. Research in that domain is limited, but some researchers have begun to document the influence of different teacher-education programs and the practicum on the student-teachers. Researchers believe that existing research of excellent teacher-education programs shows that in places where practicum is carefully coordinated with the courses and mentored, teacher educators are better able to accomplish their goals in preparing teachers to succeed in their future teaching (Darling-Hammond et al., 2005, Zeichner & Conklin, 2005).

In recent years, different teacher-education programs have been created, where the boundaries between the campus and the field are crossed in order to bring academic and practical knowledge together in a more synergistic way in support of student-teacher learning. The new programs are characterized by:

- Bringing outstanding teachers and their knowledge into Campus Courses and Practicum, like in the P.D.S model;
- Creating opportunities to incorporate representations of teachers’ practices in campus courses. This will enable student-teachers to understand the complexities of teaching and provides examples of teachers who learn in the course of teaching and from teaching.
- College instructors hold a methodological course in the school in order to bridge the gap between what is learnt in campus and the practicum;
Hybrid teacher-educators: there are different types of teacher positions, which reflect the boundary crossing. For instance, pedagogical instructors establish partnerships with schools and focus on the student-teacher’s training and sometimes also on the professional development of the entire teacher population. This is where pedagogical instructors make placements for teacher candidates at the school level and supervise their school experiences (Zeichner, 2007).

Incorporating knowledge from the community into teacher-education – some of the teacher-education programs include community-based practicum and focus on tutoring pupils. Another idea is utilizing the expertise that exists in the broader community to educate prospective teachers about how to be successful teachers in their communities (Boyle-Baise & McIntyre, 2008, Sleeter, 2008b, Koerner – Abdul-Tawwab, 2006).

In Physical Education, too, we are aware of the gap between theory and practice. Physical Education is practical by nature, and most lessons are held in the gymnasium or in the yard. The theoretical part of Physical Education student-teachers’ studies focuses on the physiological and anatomic aspects of the subject-matter, and these are studied in college. These theoretical aspects have to be applied in their practicum, so as to prevent bodily harm. At the same time, there are still gaps between ideals and reality with student-teachers when they start teaching in school (Harari and Harari, 1995).

It is clear, then, that making the connection between theory and practice is a significant aspect of the process of training student-teachers, and the pedagogical instructors are the ones who have to bridge between theory and practice.

**Pedagogical Instructors in the Practicum**

Teacher-education colleges impart general knowledge, formal pedagogical knowledge and unique professional behaviors (Lamm, 1988, 2000). The pedagogical instructor is in charge of the pedagogical knowledge and serves as a kind of “teaching guide”.
The pedagogical instructor accompanies his or her group of student-teachers in personal and group sessions. The pedagogical instructor is required to help the student-teacher develop and go through the long journey which involves a good deal of deliberations, questions and dilemmas; to make the transition from a state of studying to a state of being a novice teacher who can take responsibility for a class and integrate into the school’s culture on all its layers (Zilberstein, 2005).

As the person who accompanies the student-teachers’ learning process, the pedagogical instructor creates teaching situations and analyzes them, provides feedback to student-teachers about their teaching and models good teaching (De Jong et. al. 1996). The pedagogical instructor provides personal support and accompanies the student-teachers in the interpersonal domain (Bar-Ziv, 2002). Reichenberg (1997) lists the goals of the practicum according to the literature:

- To develop the student-teacher’s ability to teach based on professional considerations and profound knowledge of didactic-differential aspects;
- To develop the student-teacher’s sense of intellectual responsibility as the person in charge of advancing the pupils.
- To enrich the student-teacher’s professional world with a variety of techniques.
- Teach the student-teachers reflective thinking habits and the ability to use metacognitive processes as an integral part of the teaching process.
- To help the student-teachers shape their personal and educational-pedagogical attitudes in relation to their educational activities. Dvir (2005) emphasizes the need to expose the student-teachers to different pedagogical approaches, compare them and examine the student-teachers’ personal attitudes to these approaches.

Reichenberg believes the practicum takes a considerable place in the construction of the student-teachers’ characters and involves a number of partners: the pedagogical instructor, the master-teacher and the student-teacher. They all cooperate and act toward a joint goal, but each has different roles.

Research has found that the practicum constitutes a significant aspect of teacher-education. Student-teachers appreciate the pedagogical and didactic guidance, and they
also appreciate their pedagogical instructors and didactics teachers (Smith and Lev-Ari, 2004). Reichenberg and Wertheim (2002) point to two knowledge components found to be the most important by pedagogical instructors: knowledge of teaching pedagogy and knowledge of teaching skills.

Rodgers (2002) also believes that pedagogical instruction leads to reflective activity, which provides the teachers with new insights concerning their pupils’ learning capabilities and enables them to be aware of the gaps between what they have learnt and what the children have actually absorbed.

Despite all of everything described above about the pedagogical instructors, researchers and educators have numerous complaints about teacher-education in general and pedagogical instruction in particular. Most complaints focus on the apprenticeship nature of the instruction, which mostly emphasizes technique (Bar-Ziv, 2002). Dissatisfaction is also expressed with regard to the loose ties between the practicum and research and theoretical knowledge (Zilberstein, 1998), and the gaps between the pedagogical instructors’ and master-teachers’ perceptions of good teaching. This gap causes differences in expectations, perspectives and goals (Zilberstain, 2002). Furthermore, pedagogical instruction is currently an occupation which is not clearly anchored in the colleges, and as such, pedagogical instruction does not enjoy any prestige.

Pedagogical instructors have to operate in two spaces of unique cultures: the world of the college, where the student-teachers learn about teaching and about the school where they experience and get to know teaching. The pedagogical instructors have to be the bridge between these worlds (Zilberstain, 2005). They have to be the bridge between the academy culture and the school reality and be able to cope with the tension created by the dichotomy between the two cultures with both trainers and student-teachers. Belonging to only one culture indeed lowers the tension, but denies the opportunity to merge theory and practice and makes it harder to connect the two spaces – that of the college and that of the school (Howsam & Corrigan & Denemark & Nash, 1976; Goodlad, 1990).

Therefore, there is a need for cooperation among the pedagogical instructors and between them and the teacher-educators, while constructing joint programs and taking joint
responsibility for the processes and products of teacher-education. This kind of cooperation will make good use of all personnel and prevent the separation between academic studies and practice. When this bridge compels us to build new and dynamic teacher-education models, emphasizing the practicum in schools and pre-school, and maintain tight cooperation between the teacher-education institution and the educational institutions (Dovrat, 2004), thus creating the movement from theory to practice and back (Unger, 2003).

This teacher-education triangle has another angle, that of the master-teacher, who is a most significant figure in the student-teacher’s professional development (Maskit and Weinstein, 2001). This will be discussed in the following section.

**Master-Teachers in the Practicum**

Numerous studies describe the master-teachers great influence on the attitudes and actions of their student-teachers in class, and therefore, the master-teachers’ centrality in the training process.

The master-teacher influences the student-teacher’s professional development, formation of attitudes to teaching and the shaping of their role as educators (Ziv, 1990; Buchman, 1993). The master-teacher’s influence is even greater than that of the pedagogical instructor (Zeichner, 1980). Hence, it seems that the master-teacher carries the heavy responsibility. They have to be worthy role models, so as to enable the student-teachers to become good teachers who are interested in introducing changes and innovations to their work (Ziv, 1990). The master-teacher plays a central role in the training process: they open the classroom door to the student-teachers, guide them as to how to integrate into the work, help them prepare their activities, monitor their work and analyze their lessons with them. The master-teacher’s work is exposed to the student-teacher and serves as a role model.
Beck & Kosnick (2002) list a number of factors which are vital to a worthy practicum: the master-teacher’s emotional support of the student-teacher, the student-teacher’s collegial relationship with the master-teacher and their cooperation, flexibility in the contents of teaching and teaching approaches and constructive feedbacks. It may be concluded, then, that the master-teacher is of great significance in the success of the student-teacher’s practicum. These were also the findings in the interviews of the student-teachers in the current research.

The pedagogical instruction model is generally presented as a triangle, where one of the angles constitutes the student-teacher, the second angle is the pedagogical instructor and the third angle is the master-teacher (Maskit & Weinstein, 2001). Each component of this model has its unique and most significant contribution to the success of training the student-teacher, and without them, effective guidance cannot exist. The master-teachers are a central factor, as they are in charge of the student-teachers’ practical experiences. They have to power to impart the love of the profession and the sense of responsibility to the student-teachers, and thus influence the nature and quality of future teachers. In her research about the student-teachers’ perceptions of the teacher’s role and the school as reflected in their practicum reports, Yakir (1997) found that the master-teachers have great influence on the advanced student-teachers. This finding was reaffirmed by Maskit and Weinstein (2001) who found the master-teacher has great involvement in the practicum process in terms of what is desired and the reality.

Another research which examined the effectiveness and guidance of master-teachers reveals that giving the student-teacher the opportunity to experience new processes is one of the most effective factors of the teacher-education process (Connor et. al, 1993). Development of the novice teacher’s behavior patterns begins already in the training stage, especially in the practicum stage. The master-teacher’s role is to expose the student-teachers to professional teaching patterns, introduce them to the practical translation of autonomy in teaching on its advantages and disadvantages, provide genuine experiences where the student-teachers can make choices, and to direct, help and guide. The master-teachers constitute role models. The student-teachers are required to learn
from them and act in accordance to master-teacher’s instructions, but their feelings are also expressed in their relationships with the student-teachers. Hastings (2004) examined the perceptions of Australian master-teachers regarding the practicum in high schools, while examining the relationships which develop between the master-teachers and the student-teachers. The research findings reveal that the feelings which were identified have clear repetitive motives in the master-teachers’ work. The master-teachers experience a variety of feelings which can be directly attributed to their role during the process. In the course of their work with the student-teachers, feelings of guilt, responsibility, disappointment, frustration, relief, anxiety, identification, satisfaction and sympathy were identified at different levels. Most of these feelings can be described and classified as social-relational feelings, meaning they are the outcome of the relationships developing between master-teachers and other factors (Leary, 2000).

The dominating feelings among master-teachers can be described as frustration which derives from the gap between their expectations and the time resources available to them. Master-teachers are sensitive to their role, which they have assumed due to great internal responsibility, their conscience is more sensitive than that of other educators, and it is no surprise that they experience guilt feelings and frustration that leave them with a negative sense of failure. They often manage to hide their feelings, but there is no doubt that they find themselves under great emotional stress, which is enhanced by their sense of responsibility for the student-teachers. Their emotional involvement as master-teachers is higher than we tend to think. The emotional stress stems from the gap between their great expectations of themselves and the reality of the school circumstances. It is not easy for them to bridge the gaps, and hence their frustration and guilt feelings. Although they may hide these feelings, in the long-term, they influence their satisfaction with their work. The tendency of schools of education to burden master-teachers with tasks or more responsibility increases their emotional burden and decreases, over time, their effectiveness. Therefore, when planning educational reforms and changes in teacher-education, one must consider the emotional burden which is directly or indirectly placed on master-teachers and acknowledge their emotional struggles and their possible
consequences. Every change in teacher-education has to manifest human consideration, genuine cooperation and constructive educational dialogue between the teacher-education staff and the master-teachers (Hastings, 2000). In the current research as well, the student-teachers related to their relationships with the master-teachers favorably and noted the help the latter provide in the practicum.

In conclusion of the practicum section, in his article about the training program in the University of Utrecht in the Netherlands, Korthagen (2001) bases the program on a continuum of teaching experiences, a realistic approach emphasizing teaching and reflection as factors contributing to the student-teacher’s professional development. This is where learning begins.

In a previous research I conducted in the domain of practicum in Physical Education, I found that student-teachers regard their practicum as the most important aspect of their training, and their recommendation is that this practicum be expanded at the expense of theoretical studies (Hadari, 2003). My experience in the field reveals that student-teachers of all sectors of society relate better to teaching events when they teach at school. We can see that during the week of consecutive practice when they are at school on a daily basis. Nevertheless, the “Ariav guidelines” recommend 9-15 hours of practical experience in each of the three years of training. Despite that, hours of practicum have been cut in favor of theoretical studies (Due to inconsistencies and ambiguities arising from the findings of international research of teacher-education, the committee chose not to set standards for contents and skills for teacher-education – what novice teachers should know and be able to do). Still, the committee based its guidelines on principles recommended in world research literature (Ariav Guidelines, 2006).

The difficulties lie in the application in the field of theories studied in college, especially in Physical Education. The nature of Physical Education is physical and it is usually taught in a different surrounding than the other subjects, thus pushes the applied theoretical aspect aside for the more practical aspects. Therefore, the current research seeks to expose the student-teachers’ perceptions of their practicum, their opinions and
beliefs in an attempt to improve the practicum on all of its perspectives and make it more effective.

The following section will discuss the term “perception” in general and its relevance to the current research, as well as the cognitive dissonance which develops with the Arab student-teachers entering a different couture, as examined in this research.

II.6. Teachers’ Perceptions and Cognitive Dissonance

The current research examined the perceptions of Jewish and Arab student-teachers and the practicum in the Jewish training school. The term “perceptions” refers to their views and understanding of the practicum.

This chapter introduces definitions of the term “perception” as proposed by different researchers and links the term to the current research. I will later discuss the cognitive dissonance, not as a psychological term, but rather as the lack of balance created between the student-teacher’s original culture and the culture of the Jewish training school.

II.6.1. Educational Perceptions

Richardson’s (1996) defined beliefs as “Psychologically held understandings, premises, or propositions about the world that are felt to be true” (p.103).

According to this definition, beliefs have a good deal in common with such concepts as attitudes, values, judgment, opinions, orientation, implicit theories, perceptions, theories and personal perspective (Woolfolk, Hoy, and Murphy, 2001). Pajares (1992) claims we often use these terms in a way that makes them interchangeable and adds that beliefs are developed in practice through a process of enculturation and social interpretation. The process of enculturation is one of random learning which the individual undergoes in the course of his/her life, including accommodation via individual observation, participation and emulation of cultural elements in one’s world.
With the dominance of cognitive aspects in education and psychology, researchers have become interested in teachers’ thinking (Woolfolk, Hoy and Murphy, 2001).

As of the 1980s, researchers have expressed interest in the issue of beliefs and perceptions of both teachers and student-teachers. This interest in teachers’ beliefs is fed by a number of sources: the desire to study effective teaching and dissatisfaction with the outcome of teachers’ behavior led to focusing on teachers’ thinking, its course and goals (Fenstermacher, 1979; Clark and Peterson, 1986).

Student-teachers are not a tabula rasa when they begin student teaching. They often come to teacher-education programs with outspoken pre-conceptions and beliefs about teaching and interacting with pupils, and with explicit ideas about themselves as teachers (Tillema, 2000). This is gained from their own school experience, which can be very influential, and from other personal experiences (Leinhardt, 1988).

Shkedi (2009) also notes that research reveals that the teachers’ insights about teaching are greatly influenced by the assumptions, concepts, beliefs and perceptions which the student-teachers bring with them upon their enrollment in the teacher-education program.

Research suggests that student-teachers have spent thousands of hours in “apprenticeship of observation” (Lortie 1975) which leads to the development of a body of values, commitments, orientations and practices. Student-teachers rely on their memories and experiences of themselves as pupils to help shape their own expectations of their pupils (Grossman 1990). This “apprenticeship of observation” thus supports conservatism in teaching, as teachers replicate the strategies they had experienced as pupils. Since pupils have more access to teachers’ actions than to their goals and intentions, these memories are also unlikely to provoke student-teachers to connect the means of instruction with its potential ends (Grossman 1990). Other researchers (Nespor, 1987; Konarzewski, 1998; Eilam, 2002) explain that people raised on a culturally-based educational ideology adhere to their beliefs, using them as means of explanation and justification. A good deal has been written about the influence of one’s experience as a pupil on one’s beliefs about teaching (Lortie 1975; Calderhead and Robson, 1991). Lortie (1975) described the
intensive internship which takes place during observation and develops profound beliefs about teaching. Kennedy (1997) also maintains that student-teachers bring their perceptions and beliefs with them into teacher-education. It is not clear what the source of those beliefs might be—a product of their upbringing, a reflection of their life experiences, or a result of socialization processes in schools. Nevertheless, teachers and teacher student-teachers have strong beliefs about the role that education can play, about explanations for individual variation in academic performance, about right and wrong in a classroom, and many other areas. Kennedy asserts that these beliefs are used to evaluate the new ideas about teaching that teachers and teacher student-teachers confront in their methods classes. Those teachings that square with their beliefs are recognized and characterized as “what’s new?” Teachings that challenge their beliefs are dismissed as theoretical, unworkable, or even simply wrong. Kennedy went on to say that one belief that student-teachers bring to their professional schooling is “that they already have what it takes to be a good teacher, and that therefore they have little to learn from the formal study of teaching” (p. 14). Another researcher, Bruner (1996), made a similar and related point. He argued that most people have acquired what he calls a “folk pedagogy” which reflects certain “wired-in human tendencies and some deeply ingrained beliefs” (p. 46). This view leads to what Bruner called a new and even revolutionary insight: “[Teacher educators], in theorizing about the practice of education in the classroom, had better take into account the folk theories that those engaged in teaching and learning already have” (p. 46). Also Borko and Putnam (1996) noted “...The knowledge and beliefs that prospective and experienced teachers hold serve as filters through which their learning takes place; It is through these existing conceptions that teachers come to understand recommended new practices” (p. 675). Substantial evidence in the literature supports the importance of beliefs and perceptions as determinants of teacher learning, change, and their instructional practices. The 2005 AERA panel on research and teacher-education also presented a framework for teacher learning, acknowledging the importance of teacher dispositions in the development of visions of practice within learning communities (Hammerness et al., 2005).
These student-teachers’ personal beliefs and images generally remain unchanged by pre-service programs (Guillaume and Rudney, 1993) and follow candidates into classroom practice and student teaching (Kagan, 1992). Student-teachers often utilize the information presented to them during the pre-service courses only to confirm or strengthen existing pre-conceptions, without changing or altering these pre-conception in the light of new information.

It has been contended that student-teachers, in so far as their performance is concerned, rely primarily on their own subjective theories of teaching (Kagan, 1992) or on what they think will work in the classroom, and that these conceptions can be very rigid and originate long in the past (Tillema, 1998). In the construction of beliefs, “model teachers” from the past and recollections of life as pupil are dominant factors (Tillema, 1995)

The dissonance theory maintains that if we engage teacher candidates in activities that arouse dissonance, beliefs might change (Festinger, 1957). One of the sources of dissonance identified by Festinger is “past experience” colliding with new cognitions. Festinger (1957) explains in his cognitive dissonance theory that when the gap between beliefs and reality is too large, a boomerang effect is created. In this effect the dissonance may strengthen the belief while creating a minor change or a negative one. This will be discussed in the following section.

**Cognitive Dissonance**

The practicum is of great significance in the development of the cognitive dissonance with student-teachers (Hollingsworth, 1989; Kagan, 1992). It is significant in the student-teachers’ conflict with the “luggage” they carry, regarding the teacher, the pupils, the school and teaching. Therefore, the encounter with the school, the class and an experienced teacher is important in this regard. According to Elliott (1992), the practicum causes changes in the student-teachers’ cognitive and emotional components, which develop in the course of academic studies and the intensive, well planned practicum, at school and the student-teacher grows professionally in these two environments. Student-
teachers from one culture and its “luggage” entering a different culture, such as the Arab student-teachers who enter their practicum in the Jewish school, are likely to experience a cognitive dissonance. This research seeks to examine this issue, and as mentioned earlier, this research does not seek to research to concept or delve into its psychological aspects, but rather engages in the lack of balance created with the Arab student-teachers between their culture of origin and the perceptions and beliefs generated from it, and the reality of the Jewish school.

The cognitive dissonance is a state where a person’s thinking copes with conflicting and contradicting ideas. Theory maintains that people have a motivational drive to maintain consistency between their beliefs and attitudes and their actions. Sagi (1993) maintains that people are multi-cultural creatures, but they are not aware of it. Often there is a cognitive dissonance between the way people present their cultural essence and who they really are.

The Cognitive Dissonance theory (Latin: dis – apart; sonus – sound) was first introduced by Leon Festinger in the 1950s (Festinger, 1957). The theory maintains that individuals tend to seek consistency among their beliefs. When a person believes one thing and acts in a way that is inconsistent with this belief, that person will experience a dissonance, an unpleasant feeling of lack of harmony. This feeling will make the person feel that something must change to eliminate the dissonance: the person feels the need to change attitudes so as to reduce the dissonance (conflict) between the attitude and the behavior or vice versa, the person will be motivated to change or accommodate the behavior in an attempt to adjust it to the attitude. For instance, a soldier sent on a mission which he does not believe, will reconsider his attitudes, so that the mission will seem vital and just, or he will avoid the mission or even sabotage it so as to adjust his behavior to his attitude. Dissonance is instability (in contrast with consonance, which is harmony). The term is borrowed from the world of music and means an unstable tone combination, which results in tension which requires balance through a different combination of sounds –
consonance. A cognitive dissonance, then, is the inconsistency between attitudes, beliefs and perceptions of the individual.

A rival theory is the self-perception theory introduced by Daryl Bem (1970): people infer their attitudes from their own behavior much as an outside observer might. According to this theory, the attitudes follow the actions. The difference between Festinger’s theory and Bem’s theory is that according to Bem, there is no need for unpleasant feelings for an attitude to change due to the need to be consistent. Both theories were empirically reaffirmed, but neither theory can account for a surprising finding: the modification of attitude to previous behaviors occurs even with people who are not aware of their previous behaviors such as in cases of amnesia.

The cognitive dissonance and self-perception theories are of great significance in the domain of psychology of education. Seriously rewarding or punishing a child so as to promote action, will lead to conditioning the action carried out due to the reward or the punishment, rather than intrinsic motives. Therefore, the behavior will not be internalized. According to the above theories, it is better to promote behavior via a compliment and minor rewards and punishment, such that will not hinder the internal locus of behavior (according to the self-perception theory), or encourage a dissonance after which the behavior will be internalized (the cognitive dissonance theory). The cognitive dissonance theory also maintains that after deciding between two options, the option chosen will seem the better of the two. A dissonance will develop between the knowledge of the other choice and the fact it was not chosen. The outcome will be a changed attitude in the direction of the “road taken”.

The cognitive dissonance theory is also important in the behavior of cults, following the failure of a cult prophecy. Often when the group is tightly connected, and belief is strong, members of the group start spreading the word and make efforts to recruit more members. It seems that in such cases arousal is caused by the dissonance between the reality and the ideal. The result is that people have the need to prove the truth of their faith, and the way to do that is by persuading others. The basic assumption underlying the
cognitive dissonance theory is that the individual is motivated by the need to maintain the balance among cognitive components (attitudes, beliefs and perceptions), as when there is balance, the individual feels calm and stable.

Some factors enhance cognitive dissonance:

- The intensity of the dissonance increases when the beliefs involved in it are more significant;
- The intensity of the dissonance increases when the dissonant cognitive components (attitudes, beliefs and perceptions) outnumber the consonant components;
- The intensity of the dissonance increases when there is no objective reason which could justify the behavior; In such a case the individual knows he or she is acting contrary to personal beliefs, and such behavior increases the dissonance;
- The intensity of the dissonance increases when we have to make a decision. The decision-making process increases the dissonance, as no decision we make is always all positive. The alternatives are never all positive or negative;
- The intensity of the dissonance increases as the investment (of time, efforts and resources) is greater and unjustified;
- The negative effects of a cognitive dissonance can be unstable emotional balance, a need to justify one's behavior even though these come in contradiction with one's beliefs, and a need to invest more time and effort resources.

We can see, then, that cognitive dissonance is an undesired state, as it creates tensions between cognitive components – attitudes, opinions, beliefs and perceptions. This situation may cause endless tensions with student-teachers before the practicum day, which might, in turn, affect their conduct and activities as teachers, just like in the college, where the cognitive dissonance may harm their good integration into a Jewish multi-cultural college.
What can be done to reduce the stress? Can we turn the dissonance into a consonance, meaning, get to a state of balance pertaining to our attitudes, opinions and perceptions?

**Changing Attitudes Following a Cognitive Dissonance**

As mentioned earlier, a cognitive dissonance is an undesired situation, as it creates tension among cognitive components - attitudes, beliefs and perceptions. The cognitive dissonance can be reduced by changing attitudes, or accommodating them towards other attitudes. Festinger (1957) maintained that the cognitive dissonance can be reduced by changing behavior, which is extremely difficult, decreasing the significance of the conflict or adding dissonance calming cognitions.

Numerous studies have been conducted since Festinger presented his theory in 1957. Among them are Baron and Byrne (1994), who found that the more a person acts in a way which contradicts his or her attitudes, that person will be likely to change attitudes as a result of his or her behavior.

This research will present a model for improving the practicum in multicultural teacher-education. The proposed model will attempt to neutralize the factors causing the cognitive dissonance as they were described earlier, or reduce them. Studying the culture into which the prospective teachers are introduced, and understanding the background and culture from whence they come more profoundly may be beneficial in this situation. Further, training schools and master teachers will be chosen where student-teachers from different cultures can be trained in the best way.

**Cognitive Dissonance and Multiculturalism in Education**

Literature presents strong relationships between the cognitive dissonance and education. The pupils’ population is gradually becoming more and more multi-cultural. This calls for teacher educators to train the student-teachers to changed teaching conditions
accordingly. Pupils from different cultures experience a cognitive dissonance, and the teachers have to beat it and act their best to make it easier for them. In the era of rapid globalization, teacher-education institutions construct their curricula based on the importance of cooperation and effective teaching for the members of various cultures. They also have to realize how people operate in the different cultures with regard to conflict and decision-making pertaining to the cognitive dissonance (Wong, 2009). Nonetheless, so far, in the prevailing approaches teacher-education programs pay little attention to the issue of multiculturalism in most colleges, including mine. The following chapter will discuss the concept of multiculturalism in general and in education.

The term “multiculturalism” is a social term originating in the western countries. It includes a variety of different categories: differences between ethnic groups, gender differences, class differences, racial differences and religious differences.

The formal definition of multiculturalism pertains to a state where a given society contains multiple cultures which relate to each other significantly. In other words, multiculturalism is an existing situation. The term and coping with it create a value-related ideological position.

There are two different contexts for using the term “multiculturalism”: the political context and the existential one. In the political context, the cultural group plays a significant role in protecting individual liberties and self realization (Kymicka, 1989, 1995). The existential context stems from the insights of individual understanding human existence as cultural existence. Sagi (1993) maintains that people are multicultural creatures, but they are not aware of it. Often there is a cognitive dissonance between the way in which people refer to their cultural essence and who they really are (Sagi, 2000). The recognition of others is a precondition for the growth of the individual’s identity. The individual’s need for his or her cultural identity to be recognized has to do with the need for recognition of the cultural group to which the individual belongs.
In societies with a number of sub-cultures, pluralism has two meanings: empiric and normative. The former pertains to the notion that each ethnic group maintains its cultural uniqueness, and there is hardly any assimilation of minorities in to the majority. On the normative level, a pluralistic society is an open society which respects the individual’s right to maintain a separate identity or to integrate into the majority (Samocha, 2001). Ethnic identity is a mixture of personal perceptions regarding origin and shared symbols. Ethnic boundaries are now perceived as a process of negotiations of details in the issue of defining the ethnic identity of a certain group compared to the other parts of society. On this level, the various ethnic options which people choose as part of their identity are examined, as well as the extent to which they integrate their ethnic identity into their daily lives.

The Israeli society considers itself multi-cultural. Tadmor (2001) defines multiculturalism as a normative concept expressing an ideational value-related approach regarding multiple cultures positively, as a desired value expressing human diversity and values of freedom, equality, human respect and justice. Human existence involves social partnerships, and every culture includes an education system. The process of socialization guarantees social-cultural continuity. Different definitions of culture assume culture to be a process of socially acquiring and passing knowledge, art, beliefs, and customs; a process whereby people bear the personal consequences of belonging.

In the State of Israel, Jews and Arab’s relationships are based on the principle according to which the Arabs are a non-assimilating minority, and the Jews are not inclined to integrate the Arabs into their communities, although after nearly five decades of inter-cultural encounters, there has been some “moving together”. However, Israeli society still does not have a normative cultural pluralism. There are differences between Jews and Arabs. The state is defined as a Jewish state, and alleviates the Jews’ definition as Israelis and Jews. The issue of identity is much more complex for the Arabs. Religious identity is far more significant for Arabs than for Jews, and also, they are torn between their Israel and Palestinian identities (Samocha, 2001).
Israeli society is characterized by multiple cultures. The differences between the Israeli Jewish and Arab citizens are expressed in religion, language, cultural features, housing and national aspirations (ElHaj, 2004; Peled and Sahfir, 2000). The cultural reality in Israel is the reality of the historical “bookkeeping of wrongs”: the pain and the modern taking over the traditional, the eastern versus the western, the Arab versus the Jew, the Sepharadi versus the Ashkenazi\(^3\), veteran versus newcomer, religious versus secular and local versus foreigner. Within the context of multiculturalism in education, two basic approaches have developed in western education regarding multiculturalism: The Pluralist approach and the Particular approach. The Pluralist approach compels value-related education towards multiculturalism to all pupils, whereas the Particular approach emphasizes the differences between the different groups and the specific values and culture of a specific group (Yogev, 2001). One of the main advocates of the Pluralist approach is James Banks (Banks, 1991, 1995) who maintains that a school’s curriculum ought to consist of a core of common knowledge, as well as emphases on the interests of underprivileged groups. In the Israeli education system, Yogev (2001), much like Banks, believes that the Pluralist approach is the most pertinent. School is the place where one can develop open attitudes. School has the time and the ability to develop a width of opinions, and it can deepen the perspective of historic and cultural contexts showing that not all Arabs are “terrorists” and so forth (Elior, 1998). School is a means of educating for pluralism in lifestyle, beliefs and attitudes. Studies conducted in Israel pertaining to multiculturalism reveal that education regarding the rising multiple cultures is shallow, narrow and focuses mostly on folklore (Shamay and Paul, 2003). Therefore, there is a need to develop educators who will carry the weight and engage in multi-cultural education (Lamm, 1999).

\(^3\) Sepharadi – Generally Jews from north Africa; Ashkenazi – Jews from Europe.
II.7. Multi-Cultural Teacher-Education

The teacher-education frameworks lack a clear and consistent policy as to education for multiculturalism. Most institutions do with isolated courses engaging in specific details, and an overall view of the topic is nowhere to be found. Cuban (2000) and Ladson-Billings (2000) recommend engaging in the issue of multiculturalism at all stages of teacher-education. Generally, the multi-cultural approach focuses on education against racism, religious ethnic and gender discrimination. This is not only about pedagogical skills, but also about a set of values emphasizing acceptance of diversity which arises from differences among the cultures in society.

In the last three decades there have been many initiatives for placing multiculturalism on the agenda of the various teacher-education lessons. In the 1970s, many researchers claimed that teacher-education would become multi-cultural, and American decision-makers have acknowledged the need to provide student-teachers with training pertaining to multiculturalism. At the same time, the accreditation board published its list of standards known as NCATE (Standard for Multicultural Education). The document contained the demand to introduce the issue of multiculturalism into the curriculum.

The same demand was made by the Council for Higher Education in Israel, to introduce multiculturalism courses into the teacher-education program as a condition for the student-teachers’ degrees.

Masses of immigrants arrived in England and Europe in the 1980s, turning local societies in to multi-cultural ones. It was then that new programs developed to provide solutions for coping with racism. The initiatives were those of Education Ministers in the European Union (Woodrow et. al, 1997). In the U.S. there were attempts to apply the multi-cultural perspective in the 1980s. Some emphasized the practicum in different cultural frameworks, while others emphasized recruiting student-teachers from different ethnic cultures (Arora, 1987).

In some of the institutions, the teachers referred to multiculturalism as a fad that would go away and refused to make changes in the teacher-education programs. The initiators of
the multi-cultural approach acknowledged the teacher-education institutions’ difficulties of introducing significant changes in their frameworks (Sleeter and Grant, 1987). Bennet (1988) developed a conceptual model of the multi-cultural approach which included four domains:

- Becoming familiar with the historical perspective of cultural diversity;
- Developing abilities to cope with multi-cultural realities;
- Commitment to decreasing racism, prejudice and discrimination;
- Skills for teaching pupils from different cultural backgrounds.

Gay (1983) emphasizes the student-teachers needs to adjust teaching materials and styles so that they are relevant to all the children’s groups, while Kohut (1980) stated the practicum ought to be extended so the student-teacher will meet different groups of pupils toward coping with multi-cultural teaching in the future.

But acknowledgement of these needs was theoretical and was not expressed in the field. Too many teachers believed in cultural assimilation. In the 1990s, teacher educators started to reflect rather than just suggest recipes for student-teachers. The level of the programs seemed to improve, but little attention was given to the multi-cultural perspectives and their implementation in the schools. Moses (1994) claims that the dictation of the curriculum may hurt academic freedom. There ought to be guidelines according to which the teachers will construct their courses according to their professional understanding. Benjamin (1996) created profiles of ethnic groups and suggested they be used to introduce multiculturalism. Le Belle and Ward (1994) emphasized the significance of varying teaching methods so as to allow each student to get the appropriate learning conditions. Althen (1994) suggested examining the expectation of the different groups in the institution, and creating student-teachers’ activities based on these expectations. He believed the student-teacher’s personal development has to be taken into consideration, and expressed in their social and academic environment. Cochran-Smith (2000) also emphasizes the need to focus on
shedding light on the reality rather than providing solutions for “others” via reflective work.

**Multiculturalism in Teacher-Education Colleges**

Within the teacher-education colleges, it is in the framework of the higher education institutions that student-teachers of the Arab and Jewish sectors meet (Sabirsky, 1990). Research conducted in that domain found that this encounter affects attitudes and values, where student-teachers express more liberal attitudes to social issues and there is a decline in their attitudes to tradition (Astin, 1977).

In Israel there is no overall Ministry of Education policy, and teachers and teachers’ teachers lack knowledge about education in a multi-cultural society. There are no structured academic teacher-education programs in that domain. Each college copes with the issue with the resources it has and according to its understanding with a few courses in one subject, such as Education for democracy or coexistence encounters which have no education for values (Yoge, 2001; Shamay and Paul, 2003). The training of Arab student-teachers in the Arab colleges does not prepare them for teaching in a multi-cultural society either, and they believe this is one of the reasons of holding back when trying to introduce changes to Arab teachers (El-Haj, 1996).

Teacher-education colleges learn from experience, but their commitment to the multi-cultural approach requires a commitment to impart pluralistic values on the personal level and egalitarian values on the community level in addition to professional pedagogical training. A study conducted in Israel examined how the multi-cultural approaches to teacher-education are implemented in the different teacher-education colleges in Israel (Final report, the Gordon Academic College of Education and Mofet, 2004). Three college types were examined:

1. A religious college defined as religious-national-Zionist Jewish college. Here there is no desire to engage in multiculturalism. On the contrary, they seek to reach uniformity as a teacher-education model.
2. A multi-cultural college – the desire to reach multiculturalism is expressed in the staff and student population, in the curricula, in the research activity and the attempts to nurture tolerance despite tensions between the sectors. The emphasis is on relative multiculturalism.

3. An integrative, separate college – defined as a Jewish Zionist college. There is no deliberate multiculturalism, but an atmosphere of coexistence and they have established a multi-cultural center. By definition, the Arab Center for teacher-education is Arab and the teaching language is Arabic. Here they emphasize multiculturalism and equality.

The comparison of all these colleges reveals different patterns of the relationships between Jews and the members of the other sectors. Each college has different approaches to empowerment, reflection, getting to know others – the things required for implementing the multi-cultural approach.

Nonetheless, the new approaches to teacher-education relate to the need to consider the needs of student-teachers from different cultures. The approaches emphasize the pluralist approach as a guiding rule in teacher-education. Advocates of this new trend maintain there is no one teacher-education program that suits all the student-teachers, but rather a variety of programs and teacher-education routes which cater to the changing needs of the multi-cultural student population (Adler, Ariav, Dar and Kfir, 2001). In the college where I teach, a unique route opened for Arabic speakers, considering the level of studies, but not the issues arising from the cultural background of the Arab student-teachers. The following section presents the conceptual framework that underpinned this study.
II.8. Conceptual Framework of This Research

The current research sought to examine Jewish and Arab Physical Education student-teachers who study in a multicultural college and their perceptions of the practicum in Jewish elementary training schools, especially in light of the Arab student-teachers’ different culture of origin and the fact they enter another culture in the training school.

The research relies on, teacher-education theories (Zeichner, 1990, 2010; Korthagen, 2004; Zilberstein, 1998, 2005), their practicum aspect in particular, (Sidentop, 2000), theories of perceptions, attitudes and beliefs (Richardson, 1996; Woolfolk, Hoy and Murphy, 2001) and theories pertaining to multiculturalism and cognitive dissonance which are required for understanding the research topic (Kymicka, 1989, 1995; Samocha, 1996; Cuban, 2000; ElHaj, 2004)

The conceptual framework of this research consists of the following concepts: Physical Education teacher-education, practicum in the teacher-education process, perceptions, multiculturalism and cognitive dissonance.

Since the current research engages in the perceptions of people in education as well as the entire system of the student-teachers’ beliefs, it consists of leading education theories leading to a mixed research such as this one.
The above figure depicts the concepts affecting the Jewish and Arab Physical Education student-teachers’ perceptions of the practicum in the Jewish school and the interaction of the concepts and their contribution to the student-teachers’ perceptions.

**Physical Education Teacher-Education:** The conceptual framework considers the practicum to be of great significance in teacher-education; yet the prevailing approaches in Israel are still that of teaching as an applied science (Shulman, 1986) advocating the teaching of contents and its application in the field, and the second approach of imparting
practical-reflective knowledge, 1988), applied by the student-teachers in their practicum in the training schools. Integrating theoretical and practical knowledge contributes to the quality of teacher-education (Zeichner, 1990; Zilberstein, 1998). These approaches are applied in the Physical Education programs in Israeli schools. The student-teachers study Physical Education and education subjects in the college, and the practical-reflective part is applied on their practicum day in the training schools. Since Physical Education is a practical subject, the practicum is of great significance in the student-teachers’ education.

The prevailing approach in Physical Education teacher-education colleges these days emphasizes the properties of effective teaching at schools and teacher-education colleges. One characteristic of effective teaching is the construction of teaching skills for enhancing teaching and learning processes. Teaching skills are part of the pedagogical abilities that can be acquired in the process of teacher-education, acquiring pedagogical and content knowledge in the course of the practicum. These skills are the teachers’ working tools, and using them helps teachers plan, organize, implement and assess their work (Yariv, 1999; Siedentop & Tannechill, 2000; Hativa, 2003).

The Practicum: The literature presents numerous studies engaging in the significance of the practicum for the student-teachers in the teacher-education process. The day when they enter the Indeed, the practicum constitutes a critical stage in the training process, where they actually experience the real world of teaching. The student-teachers’ difficulties in meeting the complex demands of teaching derive from lack of experience, lack of contacts with personnel and administrators, difficulties with pupils and more (Hsu, 2005). The teacher-education process gets its unique features from the student-teacher’s experience which accumulates step by step, while the training-teacher and other teachers are involved in the experience, from the training school’s culture, the training college’s culture and its curriculum. Moreover, the interpersonal relationships among all parties involved in the program also affect its nature (Graham, 1997).

Perceptions: Student-teachers rely on their memories and experiences of themselves as pupils to help shape their own expectations of their pupils (Grossman 1990); they are not
clean slates when they embark on their teacher-education program. They often have outspoken pre-conceptions and beliefs about teaching and interacting with pupils, and with explicit ideas about themselves as teachers (Tillema, 2000). These ideas and beliefs are gained from their own school experience, which can be very influential, and from other personal experiences (Leinhardt, 1988). Various researchers define the term perceptions as attitudes, opinions and beliefs which develop in the learning process. The present research examined the student-teachers’ perceptions via their attitudes as expressed in the interviews and the questionnaires. The practicum is of great significance in the development of the cognitive dissonance with student-teachers (Hollingsworth, 1989; Kagan, 1992) with the “luggage” of beliefs and attitudes they carry, regarding the teacher, the pupils, the school and teaching. Student-teachers from one culture and its “luggage” entering a different couture, such as the Arab student-teachers who enter their practicum in the Jewish school, are likely to experience a cognitive dissonance.

**Cognitive Dissonance and Multiculturalism:** Theory largely maintains that people have a motivational drive to maintain consistency between their beliefs and attitudes and their actions. A state where a person’s thinking copes with conflicting and contradicting ideas is known as a cognitive dissonance. Sagi (1993) believes people are multi-cultural creatures, but are not aware of it. Often there is a cognitive dissonance between the way people present their cultural beliefs and attitudes and who they really are.

An additional concept in this research is that of multiculturalism, since the research population comes from two sectors: the Jewish sector and the Arab sector. The term “multiculturalism” consists of differences between ethnic groups, gender differences, class differences, racial differences and religious differences. The political context of multiculturalism is where the cultural group plays a significant role in protecting individual liberties and self realization (Kymicka, 1989, 1995). The existential context of multiculturalism stems from the insights of individual understanding human existence as cultural existence. Within the teacher-education colleges, student-teachers of the Arab and Jewish sectors meet in the framework of the higher education institutions (Sabirsky, 1990). Research reveals that this encounter affects attitudes and values, whereby student-
teachers express more liberal attitudes to social issues and there is a decline in their attitudes to tradition (Astin, 1977). Eventually, the research led to better understanding of both Jewish and Arab student-teachers’ perceptions of their practicum in the Jewish training school, and to a better understanding of the issues of moving from one culture to another. This, in turn, may lead to better practicum.

The pedagogical approaches to Physical education in Israel and the world round are the approaches described in this chapter. In the domain of Physical Education, a more practical approach was developed due to nature of the subject-matter, which is essentially practical. The practicum, the master-teachers and training methods in teacher education are practically the same for all subjects. Lately, however, more schools join the school-college partnership model, though in Physical Education they are still using the more traditional models, because most schools only have one or two Physical Education teacher, and the partnership model is hard to apply in high school Physical Education.

Furthermore, the issue of multiculturalism in teacher-education is central in this research. Understanding multiculturalism may lead to significant improvements in teacher education in such multicultural college as the one studied in this research.

The research goals were reached by using the mixed qualitative and quantitative research methods as will be detailed in the following chapter.
CHAPTER III: Methodology

Chapter III introduces a comprehensive account of the research approach that was adopted for this study.

The current research examines Jewish and Arab Physical Education student-teachers’ perceptions of the practicum in Jewish training schools in the course of their teacher-education. These student-teachers study in a multi-cultural college and some of them are from the Arab sector, thus coming from one culture and entering their practicum in another culture – that of the college and that of the Jewish training school. In this context, the researcher is these student-teachers’ pedagogical instructor and accompanies them in the process of entering the practicum in the Jewish training schools. Hence, the researcher is aware of what they are going through in the process. This led the researcher to exploring the issue of the student-teachers’ perceptions of the practicum as members of a different culture. This chapter presents the methods, research tools and analysis of the data and the considerations for choosing them.

Hence, Chapter III introduces the methodology used in this research to reach the study objectives. This is a mixed-methods research, which combined qualitative and quantitative research methods for data gathering.

The first part was a qualitative study in a constructivist approach (Guba & Lincoln, 1994), which describes and clarifies a complex phenomenon being studied through the eyes of the participants, in order to create a theory anchored in the data (Strauss & Corbin, 1994; 1998). That is - to describe the phenomenon and understand reality as it is perceived by those who experience it. The second part of the study used quantitative methods.

Further, the chapter explains the considerations for choosing a mixed-methods approach, with a qualitative mode of inquiry that is integrated with a quantitative part. The research leant on the constructivist-qualitative paradigm, which means interest in specific social events which take place in specific situations. The research did not seek to predict, but
rather to interpret an event or a phenomenon and to examine its significance for the participants and their environment, and for the researcher, while relating to all components of the phenomenon (Shasky and Alpert, 2007). The quantitative paradigm also suits this research as the prominent contemporary attitude is that qualitative research is appropriate for studying issues in teacher education (Sabar Ben-Yehoshua, 2001; Guba & Lincoln, 1998) in terms of considering their perceptions and responses to the practicum, It is particularly suitable for examining student-teachers’ thinking and perceptions.

Chapter III, then, adopts a critical mode, and discusses the main debates in the field of research, in order to present a balanced assembly of the research theories, and thus raise the credibility of my research. Finally, Chapter III serves as a framework for the analysis of the findings in Chapter IV.

**III.1. Problem to Be Investigated**

Teacher training professional literature indicates great importance in the practical experience day at the school as a central component in the training of the student-teacher. However, academic processes in colleges do not grant any significance to this day (Rahimi, 1995). The opposite is true – more and more motions are being made to reduce practical experience hours and to increase education and teaching disciplines classes – meaning more disciplinary knowledge and less practical experience (Dovrat Committee, 2004). The Ariav Report also known as the “Ariav Layout” which draws the instruction guidelines for teacher training in academic institutes (2006) on one hand acknowledges the importance of the practicum and on the other hand reduces the hours given to practical experience in the field.

This is why it is extremely important to examine the treatment of all factors to the practicum and by that to understand the gap between the student teachers’ perceptions, the field’s and the college’s positions and between the Ministry of Education’s official practicum policy as stated in the “Ariav Layout”. This understanding can bring real
consequences to the field of practical teaching experience of the student-teachers in colleges and universities. An additional problem is that of multiculturalism in teacher-education. Student-teachers from the Arab sector enter their practicum in a Jewish training school. This research seeks to examine their perceptions and what happens to them upon entering their practicum.

### III.1.1. Research Objectives

The goal of the research was to improve the practicum, while emphasizing better integration of the Arab student-teachers in a multi-cultural college and in the Jewish training schools, so as to prepare better future teachers taking into consideration their home culture, their perceptions and attitudes.

- To examine the perceptions of Jewish and Arab physical education student-teachers regarding the practicum in a Jewish training school.
- To examine issues connected to the cognitive dissonance with Arab student-teachers training in Jewish schools.
- To examine how the student-teachers’ culture influences their perceptions of their practicum.

### III.1.2. Research Questions

1. What are the perceptions of Jewish and Arab Physical Education students about the practicum in the training Jewish school?
2. What are the main issues of cognitive dissonance in the Arab student-teachers upon entering the practicum in the Jewish school?
3. How does the culture of origin influence the perceptions of these student-teachers of their practicum?

The above research questions served as grounds for the interviews. The practicum in the Jewish training school is part of teacher-education, and the student-teachers’ perceptions
and attitudes to the practicum were revealed via the research tools: the interviews and the questionnaires (as will be detailed later on).

Since the Arab student-teachers come from one culture and enter another both in the Jewish college and the training-school, this may bring about a cognitive dissonance. I sought to study the main issues causing the cognitive dissonance. These issues arose in the interviews, which were conducted in the first stage of the research.

### III.1.3. Research Hypotheses

The current research is a mixed-methods research design, combining qualitative and quantitative research methods. It focused on defining the theoretical hypotheses of the research. These hypotheses provided the research perspective. The hypotheses derived from the components of the research concepts, from which the theoretical perspective of the research derives.

The qualitative researcher does not often come empty-handed to the research, but rather with early hypotheses. The findings are interpreted within certain theoretical frameworks, deriving from the researcher’s personal and professional experience at previous research, reading or even prejudice. The literature which researchers read is also a significant source of theoretical perceptions. Researchers refer to it as “conceptual perspective” rather than “hypotheses” or “theories” (Seidel & Kelle, 1995).

When conducting qualitative-constructivist research one has to be aware of previous conceptual perspectives, and at the same time be open to re-examining and changing them. Hypotheses should never be final, and they need to be constantly revised. Nevertheless, we must not allow our conceptual perspective to distort the evidence. Prior to collecting the data we have to be aware of our early perspectives and their implications on data gathering and analysis.

As mentioned before, in the current research, the researcher has vast experience in pedagogical instruction, in teaching, in working with prospective teachers from both the
Arab and the Jewish sector and in reading relevant studies. The current research was based on a number of Hypotheses:

1. Jewish and Arab Physical Education student-teachers have the same perceptions regarding the practicum in the Jewish training school;
2. Both Jewish and Arab student-teachers perceive the practicum as a major aspect of their teacher-education process;
3. The Arab student-teachers’ original culture creates a cognitive dissonance when practicing in a Jewish training school with a different culture.
4. The Arab student-teachers’ culture of origin does not influence their perceptions of the practicum;

These were the hypotheses which might be adapted due to the analysis of the evidence.

The domains of knowledge on which this research leant pertain to teacher-education in Israel, Jewish and Arab education, multiculturalism, the practicum in teaching, the domain of Physical Education and general theories of education and physical education around the world.

The most suitable paradigm for the research goals seemed to be that of integrated research.

The first stage’s goal was to examine the student-teachers’ perceptions regarding their practicum in the Jewish schools, and therefore the qualitative inductive approach seemed to be the most appropriate. The goal of the second stage was to expand knowledge about the student-teachers’ teachers’ perceptions regarding their practicum in the Jewish schools, and therefore the quantitative approach seemed to be suitable.

As stated earlier, the research leant on the constructivist-qualitative paradigm, which means interest in specific social events which take place in specific situations. The research did not seek to predict, but rather to interpret an event or a phenomenon and to examine its significance for the participants and their environment, and for the researcher, while relating to all components of the phenomenon (Shlasky and Alpert, 2007).
III.2. Procedures

III.2.1. Research Design

This research is a mixed method research and the research design is an exploratory design, namely, the research consists of two stages, whereby the findings of the first, qualitative stage generates the development of the second, quantitative stage (Creswell & Plano Cark, 2007). The research consisted of two Stages:

The first Stage sought to present primary data regarding the research questions, obtained through semi-structured interviews conducted with both Arab and Jewish student-teachers in their second year of teacher-education in a multi-cultural college in the north of Israel. The interviews were conducted in the college. Each interview lasted about an hour and was tape-recorded. Before the interviews, student-teachers were given explanations about the goals of the interviews, and gave their consent to be interviewed and recorded. My being a pedagogical instructor helped me better understand and interpret the data which the interviews yielded. On the other hand, I had quite a few doubts as to whether the student-teachers were really talking about how they felt. Nevertheless, there were data that reappeared in all the interviews, so it seems they did answer honestly. After collecting all the recordings, the interviews were transcribed.

The interviews were divided into categories and qualitatively analyzed to identify patterns of the student-teachers’ teachers’ perceptions regarding their practicum in the Jewish schools. As mentioned earlier, perceptions are a collection of attitudes, opinions and beliefs constituting the participant’s world (Richardson’s 1996; Woolfolk Hoy, and. Murphy, 2001). The attitudes expressed in the interviews in the first research stage revealed the student-teachers’ perceptions.

The summary of the data analyzed in the interview stage served as grounds for the second Stage when close-ended questionnaires were administered to a greater number of student-teachers in order to enhance the data in accordance with the research questions.
Figure 5: Research Design: Stage One

- **Propositions regarding a wider perception of the practicum**
- **Isolating relevant themes**
- **Collecting data from semi-structured interviews**
- **Revealing Jewish and Arab student-teachers’ perceptions of the practicum**
- **Interaction with the researcher’s experience as a pedagogical instructor**
- **Extracting emergent themes**
- **Analysis: Summarizing the categories**
- **Analysis: Looking for patterns and recurrent events, to form categories of focus**
III.2.2. Research Stages

In Quantitative Research – the continuum is linear starting with choosing the topic, going through the research questions, planning the research progress and the research tools until defining confirming or refuting hypotheses.

In Qualitative Research – the continuum is cyclic, starting with the choice of topic, though often the research leads to a re-definition of the research topic and repeating the stages a number of times as detailed below:
In the first year (2008 – 2009) I chose the research topic. My work as a pedagogical instructor for student-teachers from both Jewish and Arab sectors in the college defined as a Jewish college, has motivated me to engage in the connection between the student-teachers’ practicum and the student-teachers from both sectors, mostly the Arab sector’ perceptions of their practicum in the Jewish school in the course of their teacher-education as well as their transition from one culture into another. After choosing the
In the second year (2009 – 2010), I engaged in obtaining data from the research population which was sampled with emphasis on selecting informants who best represent the population from which they were chosen and could teach us about the researched phenomenon (Mason, 1996). Ten student-teachers from the Jewish sector and ten student-teachers from the Arab sector were sampled for this stage of the research. Questions of the first order were phrased, focusing on information which was directly obtained from descriptions and explanations provided by the interviewees (Shkedi, 2003). The interviews were semi-structured and took place in the college, where the goal was explained to the interviewees, while complete confidentiality was guaranteed and their consent granted. The interviews were recorded, so that each word that was uttered reflected the interviewees’ attitudes, and there was no room for twisting any statement (Seidman, 1991). The recording also enhanced research reliability and validity. Once the interviews were recorded, they were transcribed word for word. Content analysis yielded categories representing different issues and provided a conceptual structure and meaning in the texts (Seidel & Kelle, 1995).

Later a questionnaire was devised, whose statements derived from the categories yielded by the content analysis. The questionnaire data were encoded and processed in SPSS software. First, descriptive statistics were presented seeking to depict the profiles of the student-teachers who had taken part in this research. Then distributions of the various research issues (in percentages) were presented, such as the reasons for taking up teaching physical Education, the significance of the various attitudes to the practicum in
the Jewish school, statements engaging in the relationships between the cultures in the college and in the practicum in the Jewish school.

Later, significant differences were examined between the two comparison groups: the Jewish student-teachers and the Arab ones, so as to identify the differences in their attitudes to various issues connected to the practicum in the Jewish school in the course of their studies. The same significant differences were examined by using two statistical tools: $\chi^2$ and t-tests for two independent samples.

**In the third year (2010 – 2011),** findings deriving from the analysis of the first and second part were drawn and reported. In the course of writing, I went back to reading the relevant theories and got more profound insights regarding the conceptual perspective. Then, when I was writing the discussion and conclusions chapter I reviewed the literature review chapter and the description of the conceptual framework of the research.

**Figure 8: the Research Stages According to Teacher Education Years**

<table>
<thead>
<tr>
<th>The Research Stages According to Years</th>
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<tbody>
<tr>
<td><strong>First Year</strong> (2008 – 2009)</td>
</tr>
<tr>
<td>Choosing research topic</td>
</tr>
<tr>
<td>Reading relevant literature</td>
</tr>
<tr>
<td>Planning the research design and tools</td>
</tr>
<tr>
<td><strong>Second Year</strong> (2009 – 2010)</td>
</tr>
<tr>
<td>Data gathering via interviews</td>
</tr>
<tr>
<td>Content analysis and building categories</td>
</tr>
<tr>
<td>Devising questionnaires and administering them</td>
</tr>
<tr>
<td>Statistical analysis of questionnaires</td>
</tr>
<tr>
<td><strong>Third Year</strong> (2010 – 2011)</td>
</tr>
<tr>
<td>Presentation of findings</td>
</tr>
<tr>
<td>Writing discussion and conclusions chapter</td>
</tr>
<tr>
<td>Rewriting the literature chapter</td>
</tr>
<tr>
<td>Description of the conceptual framework of the research</td>
</tr>
</tbody>
</table>
III.3. Combined Qualitative and Quantitative Research

This type of research combined quantitative research and qualitative research in order to provide internal and external research validity. It is characterized by a combination of a closed-ended questionnaire with semi-structured interviews in order to better understand the participants’ answers, as was done in the present research.

The combined type of research simultaneously combines the methods of quantitative research and those of qualitative research. The focus of the integration is on new approaches to data collection, and the research is designed in a way that combines elements of one method (such as structured questionnaires) and elements of the other method (such as semi-structured interviews). This research method seeks to enhance both quantitative and qualitative research. It uses both types’ strong points and minimizes weaknesses. The mixed method approach has a number of advantages, the most prominent being the validation of phenomena via triangulation. The combination of quantitative methods and qualitative research tools such as interviews and document analysis constitutes grounds for reaffirming interpretations and contributes to the research validity and reliability. Additional goals are enrichment of data and information and enhancing the knowledge gathered via the various tools (Alpert, 2010).

According to Creswell & Plano Clark (2007), there are four types of combined research:

- The triangulation design – the researcher uses both methods at the same research stage;
- The embedded design – one dominant approach integrates data gathered via the other approach;
- The explanatory design – two research stages, the first being quantitative followed by qualitative data gathering; the qualitative data are used to account for the quantitative data;
- The exploratory design - two research stages, the first being qualitative research which helps in the development of the second, quantitative part.
The current research suits the last type, as the first stage of the research focused on collecting qualitative data via semi-structured interviews. The data obtained from the interviews served to construct the closed-ended questionnaire used in the second part of the research.

In the description of qualitative research I used the description of reality as proposed by Johnson & Onwuegbuzie (2004), expressed in interviews with the student-teachers, regarding their attitudes and perceptions. On the other hand, I could increase the number of student-teachers who answered the closed-ended questionnaires whose statements were based on the interviews conducted in the first stage of the qualitative research.

Further, in this research, quantitative research accompanied the qualitative one, seeking to contribute to research reliability by enhancing the patterns identified in the first interview stage.

### Table 5: Strengths and Weaknesses of Combined Research

<table>
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<tr>
<th><strong>Strengths</strong></th>
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<tbody>
<tr>
<td>Words, narratives and pictures will help us understand the figures</td>
</tr>
<tr>
<td>The figures can only enhance the words, the stories</td>
</tr>
<tr>
<td>Emphasizes the strengths of both methods</td>
</tr>
<tr>
<td>Combination of methods and research tools enhances interpretation and contributes to research validity and</td>
</tr>
<tr>
<td>The researcher is not limited to one method and can expand and answer questions</td>
</tr>
<tr>
<td>Takes strength and weaknesses into consideration, and both are used. The strengths cover for the weaknesses</td>
</tr>
<tr>
<td>Can provide stronger evidence for a conclusion through convergence and corroboration of findings</td>
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<table>
<thead>
<tr>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>It could be hard for an individual researcher; suits team work.</td>
</tr>
<tr>
<td>A researcher has to learn both methods and the ways in which to best combine them</td>
</tr>
<tr>
<td>The pure methodology maintains that researchers should work with only one method: qualitative or quantitative</td>
</tr>
<tr>
<td>The research is more expensive</td>
</tr>
<tr>
<td>The research takes longer</td>
</tr>
<tr>
<td>There is a problem of how to analyze quantitative data qualitatively and vice versa</td>
</tr>
</tbody>
</table>
This research took into account the advantages and disadvantages of the mixed-method approach. The qualitative part of the research yielded primary information, which was then expanded and confirmed via the quantitative research methods, so that the advantages outweighed the disadvantages and the strong points of the combination were emphasized. Despite being a sole researcher, which prolonged the time frame of the research and somewhat complicated its organization, this mixed method allowed me to increase the number of participants and add questions, which led to obtaining more information.

III.4. Qualitative Research

This research requires an inductive-qualitative approach, which examines perceptions and behaviors when they occur.

The qualitative research paradigm is often described as the opposite of the more traditional quantitative research paradigm, as Strauss & Corbin define (1990) it: “By the term qualitative research we mean any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification” (1990, p.17). Denzin & Lincoln (1994) go into much more detail when they say: “Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials, case study, personal experience, introspective, life story interview, observational, historical, interactional, and visual texts-that describe routine and problematic moments and meaning in individuals’ lives.” (p.2).

Qualitative research is a general title for various research methods. Numerous tools are used such as observations, interviews, document analysis and so forth. The participants vary and include people, pictures and documents.
Denzin and Lincoln (2000) suggested a comprehensive definition of qualitative research. They maintain qualitative research is an activity whereby researchers examine things in their natural environment and try to find meaning or interpret phenomena in terms that are familiar to people (in: Shkedi, p. 3).

Qualitative research has five main characteristics (Bogdan & Bikeln, 1992):

1. Qualitative research draws its data from the natural setting, and the researcher is the research tool. The researcher investigates in different ways. The researcher’s ability to absorb and his or her openness are of the utmost significance. The researcher determines the quality of the research as he or she describes findings over a continuous period of time. The researcher is in the field, because the circumstances, the behavior and the environment where they take place are important.

   **Implications for the current research:** the researcher is in the field, which in this case is the practicum during the teacher-education process, and studies the student-teachers’ behavior.

2. Qualitative research is descriptive. The data are collected in words or pictures. The findings include descriptive quotes which demonstrate the reports, like the transcription of the interviews. Sometimes the research has a narrative nature according to the researcher’s skills.

   **Implications for the current research:** the data were gathered via interviews and quotes have been provided to demonstrate during the first research stage.

3. Qualitative researchers are more interested in the process than in the product. They examine processes as they occur. For instance, in this research – how do student-teachers behave in their practicum; how do they perceive the practicum day? The process contributes to understanding what is happening in the domain of teacher-education and the work of its participants.

4. Researchers analyze their findings inductively. They neither seek to confirm hypotheses they had nor to refute them. The theory is built in a cyclic continuum
rather than a linear one in quantitative research (Spradley, 1980). A qualitative research continuum looks like a cycle starting with the collection of data, transcription, analyzing data, selecting of the research topic, posing questions and going back to data collection. The researcher keeps collecting data, analyzing them and starts collecting again (Sabar Ben-Yehushua, 1988). This was done in the first stage of the current research.

5. The qualitative approach attributes a good deal of significance to the way in which the participants regard the phenomenon. They are interested in knowing what the researched people think, what their beliefs and attitudes are, as well as what they expect. This also accounts for their behavior, as well as the processes in the field. In sum, qualitative research perceives the researched reality as a complex of interactions, observes the phenomenon as a whole, and seeks to interpret it from the participants’ perspectives.

**Implications for the current research:** through the interviews with student-teachers from both Arab and Jewish sectors reflected their perceptions and views regarding the practicum in the training school, difficulties were discussed and advantages and disadvantages were pointed in addition to explanations of the processes of the practicum.

### III.5. Quantitative Research

As mentioned earlier, the research consisted of two stages, the first- qualitative and the second – quantitative, seeking to enrich the data and increase research validity and reliability.

The quantitative research stage used questionnaires, whereby the questions were based on categories derived from the first-stage qualitative analysis.

Quantitative Research derives from hypotheses, arising from defining the research goals. A theory is presented as the opening chapter, from which the definitions stem. Hypotheses have to be either confirmed or refuted. The paradigm is highly structured and
detailed and presents details of action in advance. The data can be measured and statistically analyzed. Quantitative Research claims to be objective by using specific data gathering tools such as standard tests and questionnaires (Maykut & Morehouse, 1994). It is focused and usually deductive. Unlike qualitative researchers, quantitative researchers usually take an objective stand without being involved in the field. Quantitative Research is positivist, meaning it can be predicted (Maykut & Morehouse, 1994). In other words, there is an objective reality, and the goal is to provide an accurate description of this reality. The positivist approach in quantitative research regards knowledge as being hierarchically organized, and details may be presented in one-dimensional flow charts — meaning A caused B: cause and effect. This type of research is best suited to exact sciences.

Quantitative Research describes the researched reality quantitatively. The data collected can be quantified. The quantitative description allows for drawing conclusions and generating general rules. These rules, based on the results, are the focus of quantitative research. The research questions focus on the descriptions of connections between variables such as “To what extent…?” and “What’s the connection between….?”

Quantitative Research stems from a clear, structured theory, and the research design is determined in advance, including the research tools and the measures to be used. The research hypotheses are deductive and based on theories and previous research, and are deductively drawn from them. The number of variables is relatively small, and the sample — large, random and as representative as possible. The researched unit constitutes a part of a greater whole (for instance, achievements, motivation), contrary to a holistic unit investigated in qualitative research (a person, a class, a school etc.). As research based on the scientific method (deriving from natural science), quantitative research seeks to isolate variables and create a “laboratory environment”. The researcher is therefore “neutral”, seeking to avoid direct involvement in the research, so as to have as little influence as possible. This is an approach which is essentially objectivist.

The research tools are structured: questionnaires, tests, observations and structured interviews. Usually, quantitative research studies a large sample, and it is hard to analyze
many results of open tools. Data analysis is done statistically, and leads to conclusions and general rules. This part of the research gathered information from 72 Physical Education student-teachers from both the Arab and the Jewish sectors, via questionnaires whose statements derived from the analysis of the semi-structured interviews of the qualitative research stage. This stage sought to increase the amount of information and add validity to the research.

III.6. Research Population

Table 6: Interviewees’ Sample Stage 1

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of interviewed student-teachers</th>
<th>Percentage</th>
<th>Research Stage</th>
<th>Year of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jewish</td>
<td>10</td>
<td>50</td>
<td>First</td>
<td>Second</td>
</tr>
<tr>
<td>Arab</td>
<td>10</td>
<td>50</td>
<td>First</td>
<td>Second</td>
</tr>
</tbody>
</table>

The research population of the current study consisted of Physical-Education student-teachers. The student-teachers were studying in a teacher education college in the north of Israel. The year the study was conducted was their second year in a four-year college program. The student-teachers came from two sectors of the population: the Arab sector and the Jewish sector. The Student-teachers from the Arab sector included four Moslems, four Christians and two Druze. The Jewish student-teachers’ population consisted of 10 student-teachers in their early 20s. The student-teachers came from different communities – rural, urban and Kibbutz communities. All the student-teachers had their practicum in Jewish primary schools in the North of Israel. The group was chosen randomly according to the student-teachers’ availability and wish to be interviewed.

In the second stage of the research closed-ended questionnaires were administered to 72 second year student-teachers, practicing in the Jewish training school: 38 Arab student-teachers and 34 Jewish student-teachers. The sample is one of convenience.
As mentioned before, 72 student-teachers participated in the current study: 38 Arab student-teachers (52.78%) and 34 Jewish student-teachers (47.22%);
The majority of the Arab student-teachers were women (about 58%), whereas most of the Jewish student-teachers were men (about 53%);
It is important to note that no statistically significant differences were found with regards to the characteristics of the participants in this research.
Questionnaires were administered to the student-teachers in the college during the academic year.

### III.7. Research Methods (Instruments)

This chapter describes the various methods that derived from my research design: the first, qualitative research stage consisted of semi-structured interviews, and the second, quantitative stage consisted of closed-ended questionnaires. The choice of these tools was appropriate to this research as its main goal was to examine the perceptions of Jewish and Arab Physical Education student-teachers regarding their practicum in the Jewish training school. In order to do that, we had to use a qualitative tool such as a semi-structured interview with the participants (Woolfolk, Hoy and Murphy, 2001) so as to expose their attitudes, and thus to reveal their perceptions.
The second, quantitative research stage included a closed-ended questionnaire based on the themes and categories arising from the analysis of the interview findings, so as to extend knowledge about the research questions and goals (Alpert, 2010).

III.7.1. Interviewing in Qualitative Research

Semi-structured interviews were conducted in this research. Research interviews are defined as “...a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, and focused by him on content specified by research objectives of systematic description, prediction, or explanation” (Cannell and Kahn, 1968). The gathering of data is done through a verbal interaction between individuals. It differs from a questionnaire in which the respondents are asked to record their responses to set questions.

The interview is one of the main data collection tools in qualitative research. It is a very good way of accessing people’s perceptions, meanings, definitions of situations and constructions of reality. It is also one of the most powerful ways we have of understanding others (Punch, 1998).

Interviews serve three main purposes. First, they may be used as the major means of gathering data by way of direct accessing the research objectives, or to what is “...inside a person’s head”. According to Tuckman (1972), this way may provide the researcher with information about what a person knows (knowledge or information), what a person likes or dislikes (preferences and values), and what a person thinks (attitudes, positions and beliefs).

Second, interviews may be used to test hypotheses, and third, in conjunction with other means of gathering data, to either follow up unexpected results, to validate other methods, or to go deeper into the motivations of respondents and their reasons for responding the ways they did.
In a semi-structured interview, the researcher prepares a list of questions to be addressed, and gives the interviewee leeway on how to reply. The answers may not follow exactly the way the interviews were designed. Similarly, questions that were not outlined in advance might also be referred to. The interview process is flexible in both cases. A semi-structured interview will be conducted in order to pursue “…what the interviewee views as important in explaining and understanding events, patterns, and forms of behavior” (Bryman, 2001). Contrastively, unstructured interviews are conducted as a conversation, when the interviewer asks a single question and the interviewee is allowed to respond freely. The interviewer simply responds to points that seem worthy of being followed up to serve the purpose of the research.

III.7.2. Semi-Structured Interviews in This Research

The first data collection method for obtaining primary information was the semi-structured interview.

I used semi-structured interviews, having my conceptual framework in mind as a guiding rule, and the dynamics of the student-teachers’ perceptions of their practical teaching experiences at hand. This enabled me to capture real-time data, to clarify ambiguities and to probe for further information. I planned the questions meticulously, including issues that were central to the research goals and questions. I explained at the beginning of each interview that the research concerned the practicum in the Jewish training school and their perceptions about it.

As already mentioned, the interviews consisted of comprehensive descriptive questions, questions asking for examples, and questions about the participants’ culture. There were also comparative questions seeking to get more reference to previously given descriptions or explanations, thus allowing for asking the questions somewhat differently. Questions asking the participants to clarify perceptions or descriptions were also asked (Shkedi, 2003).
The respondents in the current research were Arab and Jewish student-teachers in their second year of teacher-education in an educational college in the north of Israel. The interviews were conducted solely by the researcher, who has been a practicing pedagogical instructor for years. As such, I had gained extensive practical knowledge about pedagogical mentoring, in addition to theoretical knowledge that has been gathered for this research.

Moreover, the interviews were presented as ways of gathering information for research purposes. My former acquaintance with the respondents was used only to obtain their consent to participate in the interview.

The interviews were piloted, and before administering them to they were given to a fellow pedagogical instructor and to another researcher so they could re-examine the questions. The questions were revised according to the comments and then refined to maximize research effectiveness, and provide the research with internal validity.

The interviews consisted of comprehensive descriptive questions such as “Describe your college curriculum and practicum”; focused questions in response to the comprehensive ones such as “How did the pupils respond to your presence at school?” questions asking to provide examples such as “Give me an example of words pupils used” and questions about their culture.

Another type of question was comparative, seeking to get the respondents’ further reference so as to enhance descriptions and explanations, asking the questions in a different way. There were also questions asking the respondents to clarify perceptions or descriptions (Shkedi, 2003).

The questions used in the semi-structured interview in the current research:

- Introduce yourself briefly: name, age, place of residence;
- Why did you choose to study Physical Education?
- How do you feel as a student in a mixed college with Jewish and Arab student-teachers? Please discuss the good points and the disadvantages.
Describe the college curriculum and practicum.

In what school do you practice?

What is your opinion about the practicum?

How do the Jewish school personnel (teachers, student-teachers, principal) react to your presence as a physical education student?

How did the pupils respond to your presence in school?

How do you describe your relationship with the master-teacher?

Does the master-teacher help you with difficulties? How does he help you?

How do you feel about using the Hebrew language in your Jewish training school?

Do you believe there are differences between the Arab school climate and the Jewish one?

If you were the principal of multi-cultured college, how would you improve the Physical Education teaching training and the practicum?

The interviews were conducted within the college, in a closed room with a recording device. The interviews were later transcribed word for word. Later still, the information relevant for this research was transcribed (Pidgeon & Henwood, 1996), and divided into categories and themes (Shkedi, 2003). In the present study the materials were analyzed according to the topical analytic method, dealing with the words and descriptions of the participating student-teachers as reflecting their feelings, beliefs and knowledge. This will be discussed in detail in the following section engaging in the analysis of information yielded by the interviews.
III.7.3. Closed-Ended Questionnaires

In the second stage of the research, the quantitative part, I was able to increase the number of Physical Education student-teachers who answered the closed-ended questionnaires, whose statements were based on the interviews conducted in the first stage of the research.

The quantitative research seeks to expand and reinforce the findings of the qualitative research (Johnson & Onwuegbuzie, 2004), to enhance reliability and credibility and thus to enhance the ability to generalize.

Measurement was needed for this research because a measurement generates results that are not influenced by the context of the research, by its time or by the researcher. Finally, measurement provides a basis for more precise estimates of the degree of relationships between concepts. In this research there was a need to expand and measure the student-teachers’ perceptions of the practicum in the Jewish school, especially those from the Arab sector.

Because no published questionnaire of this topic was found, a five-point Likert-type scale was designed (Appendix 1) including 57 items.

The questionnaire included statements developed from the themes arising from the different categories pertaining to the student-teachers’ perceptions of the practicum on all its aspects as reflected in the first research question, such as: “The practicum day is important” or “Good pupils’ discipline”. Additional statements developed from the themes engaging in the comparison of schools in both sectors such as: “There are differences between Physical Education lessons in the Jewish and in the Arab schools”. The questionnaire also included statements pertaining to the different cultures and their influence on the practicum consistent with the research questions such as: “The Jewish school culture resembles that of the Arab school” “My culture interrupts me in the practicum in the Jewish school”. The complete questionnaire is in Appendix 1.
The research literature introduces Likert scales as an approach to attitude measurement (Bryman, 2001). One advantage of using closed-ended questionnaires is that they can be easily pre-coded, thus making the processing of data for computer analysis a fairly simple task. A Likert scale is known as a way of measuring a cluster of attitudes. An odd-number scale comprises of ten statements, each one ranging over five or seven levels of agreement or disagreement, from “Yes, I strongly agree” to “No, I strongly disagree”, with a middle point that allowed for a neutral response. A rating scale is a useful device for the researcher, because it enables a degree of sensitivity and differentiation of response whilst still generating numbers (Cohen, Manion, and Morrison, 2000). Criticism made on the Likert scale denotes that whilst it is effective in measuring attitudes, one respondent’s “strongly agree” could be another one’s “agree”. Therefore, the scale should be measuring one item at a time, it should be subtle – “to what extent”, “how far”- rather than dichotomous – “have you”, “can you”, and so on. Rating scales are extensively used in research because they “…combine the opportunity for a flexible response with the ability to determine frequencies, correlations and other forms of quantitative analysis” (Cohen, Manion, and Morrison, 2000). Additionally, they enable the researcher to “…fuse measurement with opinion, quantity and quality” (Cohen, Manion, and Morrison, 2000).

III.7.4. Limitations of Rating Scale

Cautionary factors have to be considered while using rating scales. Illegitimate inferences might be made because there are no equal intervals between the categories. Another problem refers to the researcher’s indication of whether or not the respondents are telling the truth. Similarly, most people do not wish to be considered extremists, therefore they will opt for the medium responses, without the researcher’s knowing, again, what they really think. A scale of five or seven enables people not to be decisive in their response. However, a scale of four or six categories will force them to make up their minds.
Finally, researchers using rating scales can allow respondents to add something that to them seems salient by adding a category, which says: “other (please state)”.

The instruments were initially developed with a separate pilot group of ten student-teachers. The pre-test was used to develop, revise and refine the items to ensure their suitability to the goals of this research. Thus, the conceptual framework, my reading, and my professional experience as a pedagogical instructor of student teachers embodied the guiding assumption according to which this research was designed. Since the closed-ended questionnaire used findings from the qualitative research, the questionnaire is highly valid and reliable (Cohen, Manion, and Morrison, 2003).

Furthermore, internal validity (Alpha Cronbach of the significance of the practicum is 0.71. The internal validity of the relationships between different cultures in the Jewish school during the practicum is 0.87. Hence, internal validity is high enough to maintain that the items constituting each of the measures (the significance of the practicum and the relationships between the cultures) indeed measure the world of contents, and validity is expert based.

III.7.5. Inductive Data Collection and Analysis

The approach of this research was inductive in creating new understandings of existing and emerging issues. The inductive approach was based on collection of data from the field without a pre-existing theory and/or hypotheses. This method is employed in qualitative research, where the researcher goes into the field, collects as much data as possible, analyzes it, and then attempts to make sense of it through a process of interpretation. (Shkedi 2003)

This approach was used in the present study as it was deemed to be most appropriate for research in this field, where the context and the specific participants vary greatly, thus making an inductive approach to data collection and analysis more fruitful than the theory-based deductive approach.
Data in qualitative research are raw materials which serve as grounds for analysis, such as interviews conducted by the researcher and are transcribed or tape-recorded. Data can also be diaries, pictures, documents and articles.

In this research, the data derived from semi-structured interviews, and questionnaires. The data were gathered systematically, connecting the researcher to the empiric world.

The data are divided into three parts according to Goetz & LeCompte (1984).

- **Basic data** – social, psychological, cultural, demographic and physical background of the research environment or context. These data were gathered in such a way that certain treatment could be assessed or in order to create parameters that would allow for generalization of the research onto other populations.

- **Process data** – information showing what happens while introducing a program or some innovation – how the participants perceive it. These are data that may reflect the influence of the innovation and evaluate it.

- **Value-related data** – data concerning the values of the participants, of those who run the program, and their implications for what is being researched. Values supported by the program or abandoned by it affect its implementation. This research is based on value-related data based on the views and attitudes of student-teachers from both the Jewish and the Arab sectors regarding the practicum.

**III.7.6. Data Collection**

Creswell (1998) describes data collection as a series of interdependent actions seeking to collect valuable information so as to answer evolving research questions. An important stage in the process is finding places and participants for the research, getting access and developing trust so that the participants will provide good data (p. 110).
In qualitative research, the person is the research tool (Lincoln and Guba, 1985). Lincoln and Guba coined the term “the human tool”. Contrary to such research tools as photographs, notes, recordings, protocols and diaries, the “human research tool” has the ability to respond, has sensitivities and the ability to address all personal and environmental clues provided. The “human tool” can understand concepts and ideas, and has the ability to function in both overt and covert knowledge domains. The researcher’s goal is to turn covert knowledge into overt knowledge, which is usually rather hard. Arksey & Knight (1999) claim that interviews are considerable means of helping people turn things which have thus far been covert into overt statements expressing their thoughts and innermost understandings. This research used interviews in order to attempt to express the participants’ perceptions and thoughts.

Data collection via interviews is done in the research field. The researcher is well acquainted with the fieldwork, and some of the information is obtained by direct contact with the informants through semi-structured interviews. The data collected has narratives and interactive properties (Dey, 1993). Data collection is conducted by using information preserving tolls such as recording devices, notes and computers. The process of collecting and analyzing the data is an open, inductive process (Creswell, 1989; Gettermann, 1989). Great effort is required of the qualitative-constructivist researcher. The researcher is required to listen carefully to details arising while collecting the data, and needs to be flexible later on (Yin, 1984; Marshall & Roseman, 1989 in Shkedi, 2003).

A phenomenon cannot be understood outside its cultural context (Shkedi, 2003). The researched phenomena derive their meanings from the culture in which they develop. As seen in this research, there is constant tension between the informants’ world and their broad cultural context. Hence, in the current research it was important to understand the data in their cultural context, mainly when it came to the interviews with the Arab student-teachers. Strauss and Corbin (1990) discuss circles of cultural contexts:

- The outer circle – the global cultural arena
- The second circle – the national cultural arena
The third circle – the community cultural arena
The fourth circle – the organization and institutions arena
The fifth circle – the family or the intimate friends’ circle

The inner circle includes the interpersonal interactions, of people working together or in the same context, such as in this research – the student-teachers in interaction with their master-teachers and so forth. Thus, during data collection the researcher has to determine which cycle is relevant to understanding the researched phenomenon. In the current research the family and community circles as well as the national circle were of the utmost relevance, as was expressed in the interviews.

III.8. Qualitative Data Analysis

Data analysis in qualitative research is an analytical process with intuitive characteristics, whose objective is to provide meaning, interpretation and generalization to the examined phenomena. The researcher directs the study according to the findings being collected and ties them to a theory and to other researchers’ findings, in order to create generalization and widen the credibility of his/her conclusions; Strauss & Corbin (1990) suggest three approaches to qualitative data analysis, differing from each other in their level of analysis and interpretation. In the first approach the researcher presents the data with very little analysis, in order to report the examined phenomenon, like a journalist reporting an event. In the second approach the researcher presents a detailed, exact and focused description, whose aim is the selected focus. In the third approach the researcher offers new theory and concepts that have grown from the findings collected and analyzed.

Shkedi (2003) offers an analytic approach based on a process of accumulative steps. The making of a new theory is not necessarily the only final product of the analytic process, and it is possible to see in the description the analysis products without the construction of a theory. In any case theory construction is based on the description and it is impossible to reach that stage without it (Shkedi, 2003).
In the present study materials were analyzed according to the topical analytic method, dealing with the words and descriptions of the participating student-teachers as reflecting their perceptions and attitudes. The analysis focused on text excerpts in context (Lincoln & Guba, 1985).

Analysis Stages:

1. The First Stage: The initial analysis was relatively open. Strauss & Corbin (1990) call this stage “open coding”. I read all the materials collected carefully, in order to assess their potential (Maykut & Morehouse, 1994) and prepare the ground for the “official” analysis. Then, I divided the data into meaningful chunks relating to themes by identifying chunks that deal with the same topic and are related to a common conceptual perspective, while asking questions and comparing the cases and giving names to similar phenomena (Strauss & Corbin, 1990). At this stage they are not yet category names, which will be determined in the next stages (Pidgeon & Henwood, 1996).

2. The Mapping Analysis Stage: During this stage I looked for and found connections between the topical excerpts created in the initial stage, so as to create categories. This is called the “axial coding stage” (Strauss, 1987). This is when super-categories began to form, relating to the student-teachers’ perceptions of the practicum, Cognitive dissonance regarding culture, and multiculturalism. Sub-categories whose topics were similar were put together. It is important to mention that at this stage the categories still changed from time to time according to new ways of looking at the data and new insights arrived at, of which I was not been previously aware. At the end of the mapping stage I created a “category tree” which was divided into six main categories: Perception of Physical Education, Perception of the Practicum, Interpersonal Dimension of Physical Education Student-Teacher-Master-teacher Relationship, The Cognitive Dissonance, Multiculturalism the College and Jewish and Arab School Climate. These categories answer the research questions.
It is important to note that qualitative research emphasizes the unveiling of the phenomenon and the attempts to interpret it in context. Regarding the present study, the data collected from the participating student-teachers regarding their perceptions of the practicum in the Jewish school, formed the basis for my theoretical interpretation regarding their perceptions of the practicum in the Jewish training school.

### III.9. Statistical Analysis of Quantitative Data

The quantitative research seeks to expand and reinforce the findings of the qualitative research (Johnson & Onwuegbuzie, 2004), to enhance reliability and credibility and thus to enhance the ability to generalize. The data were gathered in the “Ohalo” multicultural college via questionnaires distributed to the Physical Education student-teachers. The sample is one of convenience. This survey included about 53% Arab Physical Education student-teachers (N=38) and about 47% Jewish student-teachers (N=34).

The following table presents the sample description.
Table 8: Description of Interviewees Characteristics – the Entire Sample and According to Nationality (absolute numbers and percentages)

<table>
<thead>
<tr>
<th></th>
<th>Entire Sample</th>
<th>Arab Student-Teachers</th>
<th>Jewish Student-teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>N%</td>
<td>N%</td>
</tr>
<tr>
<td>Nationality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab Student-teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewish Student-teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>N=34</td>
<td>47.22%</td>
<td>N=16</td>
</tr>
<tr>
<td>Female</td>
<td>N=38</td>
<td>52.78%</td>
<td>N=22</td>
</tr>
<tr>
<td>Total</td>
<td>N=72</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>Year in college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>N=1</td>
<td>1.47%</td>
<td>N=1</td>
</tr>
<tr>
<td>B</td>
<td>N=33</td>
<td>48.53%</td>
<td>N=14</td>
</tr>
<tr>
<td>C</td>
<td>N=19</td>
<td>27.94%</td>
<td>N=12</td>
</tr>
<tr>
<td>D</td>
<td>N=15</td>
<td>22.06%</td>
<td>N=8</td>
</tr>
<tr>
<td>Total</td>
<td>N=68</td>
<td>100%</td>
<td>N=35</td>
</tr>
<tr>
<td>Father’s Education</td>
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<tr>
<td>Primary</td>
<td>N=9</td>
<td>12.86%</td>
<td>N=8</td>
</tr>
<tr>
<td>Partial Secondary</td>
<td>N=12</td>
<td>17.14%</td>
<td>N=5</td>
</tr>
<tr>
<td>Full Secondary</td>
<td>N=16</td>
<td>22.86%</td>
<td>N=7</td>
</tr>
<tr>
<td>Post secondary no degree</td>
<td>N=15</td>
<td>21.43%</td>
<td>N=7</td>
</tr>
<tr>
<td>Academic</td>
<td>N=18</td>
<td>25.71%</td>
<td>N=9</td>
</tr>
<tr>
<td>Total</td>
<td>N=70</td>
<td>100%</td>
<td>N=36</td>
</tr>
<tr>
<td>Mother’s Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>N=9</td>
<td>12.86%</td>
<td>N=8</td>
</tr>
<tr>
<td>Partial Secondary</td>
<td>N=6</td>
<td>8.57%</td>
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<tr>
<td>Full secondary</td>
<td>N=23</td>
<td>32.86%</td>
<td>N=9</td>
</tr>
<tr>
<td>Post secondary no degree</td>
<td>N=15</td>
<td>21.43%</td>
<td>N=9</td>
</tr>
<tr>
<td>Academic</td>
<td>N=17</td>
<td>24.29%</td>
<td>N=6</td>
</tr>
<tr>
<td>Total</td>
<td>N=70</td>
<td>100%</td>
<td>N=36</td>
</tr>
</tbody>
</table>

72 Physical Education student-teachers participated in the current research: 38 Arabs (52.78%) and 34 Jews (47.22%). Most Arab Physical Education student-teachers were women (about 58%), while most Jewish Physical Education student-teachers were men (about 53%); Most Physical Education student-teachers both Arabs and Jewish were in their second college year (40% and about 58% respectively); About a quarter of the Arab Physical Education student-teachers reported their fathers’ education to be academic. Nevertheless, Jewish Physical Education student-teachers reported their fathers’ education to be academic (26.5%) or full secondary (about 26.5%); Most Arab Physical Education student-teachers reported their mothers’ education to be full secondary or
over-secondary without a degree (25% and 25% respectively for each category). Conversely, most Jewish Physical Education student-teachers reported their mothers’ education to be full secondary (about 41%); it is important to note that no significant statistical differences were found regarding the characteristics of the participants.

III.9.2. Data Analysis

The questionnaire data were encoded and processed in the SPSS software. First, the internal reliability of all measures was examined, to ensure Alpha Cronbach levels were indeed high enough (min. 0.6) to make sure the items constituting the questionnaires and measuring the world of contents relevant to this research.

Following is an explanation of the statistical analysis presented in this section.

First the chapter presents descriptive statistics describing the profile of the Physical Education student-teachers who participated in this research (the entire sample as well as that of the Arab Physical Education student-teachers and the Jewish ones separately). This section describes the distributions of the various characteristics in absolute numbers as well as in percentages.

Then the distributions of the various research issues was presented, such as the reasons for taking up Physical Education, the significance of the different characteristics with regards to the practicum, statements pertaining to the relationships between the different cultures in the college and in the Jewish school, statements pertaining to the differences between the practicum in the Jewish school and in the Arab school and statements pertaining to the relationships between Physical Education student-teachers and master-teachers in the Jewish school.

It is important to note that statements evaluating the reasons for taking up Physical Education, the significance of the various characteristics pertaining to the practicum in the Jewish school move on a scale from 1= not at all and 5 = to a great extent. Categories
1 and 2 were joined for the purpose of presenting the data, and appear as a new category “to a small extent”. Category 3 is “to a medium extent” and categories 4 and 5 were joined to a new category “to a great extent”. The presentation also includes means and Standard deviations.

This was followed by the examination of significant differences between the two comparison groups: the Jewish Physical Education student-teachers and the Arab ones, so as to identify the differences in their attitudes to the different issues of the practicum in the Jewish school. These significant differences were examined via two statistical tests: $\chi^2$ and t-tests for two independent samples.

**III.10. Triangulation**

As this research employed a variety of data collection tools, triangulation was created in order to enhance the validity of the findings. Triangulation is an approach in which “multiple observers, theoretical perspectives, sources of data, and methodologies” are combined (Denzin, 1970). Additionally, it is “… the collecting of information from a diverse range of individuals and settings, using a variety of methods” (Maxwell, 1996, p. 75). Triangulation, then, involves the use of two or more methods of data collection in the study of a specific aspect of human behavior. Triangulation attempts to explain in detail the complexity of human behavior by examining it from different perspectives (Cohen et al., 2001). This multiple approach results in “greater confidence in the findings” (Bryman, 2001, p. 274). According to Roberts and Taylor (2002), qualitative research uses triangulation to enhance of validity of the findings. The objective of triangulation, then, is to overcome validity problems of qualitative research, and to cross reference findings derived from quantitative and qualitative research.

Cohen et. al. (2001) contend that whilst a single observation in Chemistry, Medicine and Physics yields sufficient and unambiguous information on a particular phenomenon, it provides only a limited view of the complexity of human behavior and of situations
within which humans interact. Reliance on one method, then, for presenting the social world may bias or distort the picture that the researcher is trying to capture. For the information to be as genuine as possible, researchers must employ a variety of methods that yield substantially the same results. Furthermore, the more the methods contrast, the greater the validity of the results. The results of a closed-ended questionnaire must be the same as those obtained through interviews. Triangulation is criticized due to the fact that it is essentially positivist, because positivistic approaches tend to rely on several sources of data for validity purposes. The literature describes five main ways to employ triangulation. Some studies use only one method, while others use two or more types of triangulation. The five types of triangulation are data source, investigator, methodological, theoretical, and analysis triangulation (Janesick, 1994; Thurmond, 2001).

III.10.1. Triangulation in This Research

According to Maxwell (1996), in considering the objectives of triangulation, this research was concerned with the student-teachers-teachers’ perceptions in general, and the multicultural influence on the practicum in teacher-education, in particular. Therefore, data were obtained from different sources by way of cross referencing different data sets since one set of data influenced my understanding of another set of data. As a result, I gained a deeper understanding of my evidence through my reading, analyzing, and then rereading the different sets of data. Thus, the data gathered through the semi-structured interviews focused on student-teachers-teachers’ perceptions. Additionally, in order to analyze this dimension in greater depth, closed-ended questionnaires were used.

Finally, corroborating the data gathered through all the methods mentioned yielded data that strengthened the findings of previous stages. Furthermore, it can be concluded that the different methods, yielded an accurate, even multi-faceted picture, thus enhancing the validity and reliability of this research (Mason 1996). The current research employed: methodological, data source, and theoretical triangulation.
As stated, the first type of triangulation in this research was Methodological Triangulation. Roberts and Taylor (2002) depicted methodological triangulation as using more than one research method within one study. It may be within either the qualitative or quantitative perspective, or between methodologies, using both a qualitative and quantitative method in one study. Terms used to portray methodological triangulation include “multi-method” (Tolson et al., 1999) and “mixed method”. It is believed that methodological triangulation provides richer data by the possibility of revealing information that may have remained undiscovered if one method had been employed (Tolson et. al, 1999).

The overall multi-strategy research design incorporated the use of quantitative research to confirm qualitative research findings (Hammersley, 1996), or the Embedded Design (Kasan, Krumer-Nevo, 2010) - one dominant approach, combining data from another approach. Hence, in the current research, the first stage consisted of the collection of evidence regarding the existing perceptions of both Arab and Jewish student-teachers in their second year of teacher-education in a multi-cultural college from two different sources: the literature and the student-teachers, by collecting data from semi-structured interviews. Then the evidence gathered from the interviews was divided into categories...
and qualitatively analyzed to identify patterns of the student-teachers’ perceptions regarding their practicum in the Jewish schools. The summary of the data analyzed in the interview stage served as grounds for the second stage, where close-ended questionnaires were administered to a greater number of student-teachers in order to enhance the data.

The second Triangulation type in this research was Data Triangulation. According to Begley (1996), data can be enhanced by a variety of data collection methods from the same source. The current research used a variety of data sources to create triangulation and enrich the data: data collection started with semi-structured interviews, and continued with closed questionnaires in the second stage of this research. The information was gathered from the same source: second year Physical Education student-teachers.

The third triangulation type was Theoretical Triangulation. Theoretical triangulation relates to the use of different theories within the theoretical or conceptual framework (Roberts and Taylor, 2002), which may be used to either test a theory or to develop one. The current study used multiple perspectives to interpret a single set of data: education theories, physical education theories, teacher-education theories, and multi-culture theories.

Finally, as triangulation avoids reliance on a limited perspective, and strengthens research design by cross-referencing, it provides external validity to this research and allows for generalizations.

In summary, triangulation in this research was created of several sources of information:

- A literature survey involving existing theories of the practicum in teacher education;
- Semi-structured interviews conducted with Arab and Jewish student-teachers in order to gain access to their perceptions of their practicum in the Jewish schools;
- Closed-ended questionnaires administered to a greater number of student-teachers in order to enhance the data;
- The researcher’s professional pedagogy mentoring experience.
III.11. Validity, Reliability, and Generalizability of This Research

Quantitative researchers employ a variety of methods to establish reliability and validity of a study. While qualitative methods address different research questions and methodology, rigor must also be established. Guba and Lincoln (1994) suggest four criteria to establish rigor, or trustworthiness, of a qualitative study. Each of these four criteria parallels a necessary component in a quantitative study. Since qualitative studies rest upon a different philosophical foundation and collect different types of data, rigor must be established with methods consistent with a qualitative design.

Reliability and validity are important criteria for establishing and assessing the quality of quantitative research. Reliability relates to a stance in which if the methods of collecting and analyzing data are repeated, then the claims and the conclusions would be the same. Moreover, the information provided by the researcher regarding the ways the evidence was gathered and analysed enables another researcher to follow these procedures, and believe it to be true. Bryman (2001) defines reliability as the degree to which a measure of a concept is stable.

Validity refers to a concern with the integrity of the conclusions that are generated from a piece of research. In quantitative research validity may be achieved through careful sampling, appropriate instrumentation, and appropriate statistical treatments of the data. Because in qualitative data the subjectivity of the participants, their opinions, positions and attitudes together contribute to a degree of bias, then validity should be seen as a degree rather than as an absolute state (Gronlund, 1981). The qualitative researcher, then, is concerned with minimizing invalidity and maximizing validity.

Mason (1996) reports some of the debate among researches regarding validity and contends that “… validity, reliability, and generalizability are different kinds of measures of the quality, rigor, and wider potential of research, which are achieved according to certain methodological and disciplinary conventions and principles” (p. 21). Validity, according to the writer, refers to whether the researchers are observing, identifying, or “measuring” what they say they are.
Internal validity shows that the explanation provided for a particular event derives from the data collected. External validity relates to the degree to which the results can be generalized to the wider population, and other cases or situations. Generalizability in qualitative research is controversial (LeCompte and Goetz, 1982; Denzin, 1983; Schofield, 1993; Bryman, 2001; Cohen, Manion, and Morrison, 2001). Content validity demonstrates that the instrument covers the domain or issues as comprehensively as possible in this research. The interviews in the first stage were piloted, and before administering then to they were given to a fellow pedagogical instructor and to another researcher so they could re-examine the questions. The questions were revised according to the comments and then the questions were refined to maximize research effectiveness, and provide the research with internal validity. Internal validity (Alpha Cronbach of the significance of the practicum is 0.71. The internal validity of the relationships between different cultures in the Jewish school during the practicum is 0.87. Hence, internal validity is high enough to maintain that the items constituting each of the measures (the significance of the practicum and the relationships between the cultures) indeed measure the world of contents, and validity is expert based.

External validity refers to the degree to which a study can be replicated. The nature of qualitative research makes this criterion hard to achieve, as, according to LeCompte and Goetz (1982), social settings cannot be replicable. The authors suggest a few strategies that can help meeting the requirements of external reliability. For example, the researcher adopting an ethnographic research approach can replicate the social role that is similar to the one adopted by the original researcher.

This research was a mixed methods research using qualitative research in its first stage and quantitative research in the second stage in order to provide internal and external research validity. Furthermore, it can be concluded that the different methods, yielded an accurate, even multi-faceted picture, thus enhancing the validity and reliability of this research (Mason 1996).
**Generalization.** According to the literature, qualitative research does not always allow for generalization. Certain qualitative research characteristics do not suit the issue of external validity, as contrary to quantitative research, the former seeks to shed light on a human phenomenon or a specific situation (Shkedi, 2003). There are researchers who believe that it is very hard to generalize qualitative findings, and consider it a limitation (Firestone, 1993). Stake (1995) claimed the qualitative researcher can organize the research so as to get to as many generalization opportunities as possible. Firestone (1993) claims that qualitative research includes three types of generalizations: generalization from one case to another, analytic generalization and a generalization regarding the population.

Therefore, in this research, which examined the perceptions of Jewish and Arab student-teachers in a multi-cultural college regarding their practicum in general and the encounter with a different culture in particular, generalization was limited due to the small sample in the interviews (10 Jewish student-teachers and 10 Arab student-teachers). However, the quantitative part of the research was based on a larger number of participants (74 Jewish and Arab student-teachers), and thus it created a triangulation which allowed for an increased level of generalization.

According to Firestone, this is the third type of generalization from a sample to the population. The quantitative research seeks to expand and reinforce the findings of the qualitative research (Johnson & Onwuegbuzie, 2004), to enhance reliability and credibility and thus to enhance the ability to generalize.

Finally, it can be said that the research was a mixed qualitative and quantitative research – using semi-structured interviews, and questionnaires for a larger sample in order to analyze the data in depth, and hence data analysis yielded solid findings supported by different aspects, thus enhancing the research validity and reliability (Mason, 1996). The triangulation in this research resulted in rich, profound data which enhanced the research’s generalizability.
**Credibility** – Guba and Lincoln (1994) describe credibility as being parallel to internal validity. It ensures that the study presents a credible picture of the research site and participants. Credibility can be ensured by prolonged engagement, persistent observation, triangulation, peer debriefing, and member checking. I conducted interviews and administered questionnaires. To ensure member checking (Creswell, 1998; Guba & Lincoln, 1994), two researchers read my interviews and interpretations in order to check for accuracy.

**Transferability** – Transferability is generally used as being parallel to external validity or generalizability. Its aim is to ensure that the results of the study can be transferred to other situations. One way of ensuring transferability is through the use of a “thick” description. The researcher provides as complete a database as possible in order to facilitate this aspect of judging quality. In the present study, transferability was provided by using a thick description that others can use to determine whether the results are transferable. In this research, transferability was provided by using a thick description which others can use to determine whether the results are transferable.

**III.12. Ethical Considerations**

Ethics and ethical considerations lie at the basis of qualitative research which takes pride in being based on firm moral ground (Sabar-Ben-Yehoshua, 1995). Qualitative researchers often encounter ethical concerns in the course of their work. They face these concerns and deal with them to the best of their abilities, recording them as part of the research process, thus making them transparent to the reader. Miles and Huberman (1994) list several issues that researchers should consider when analyzing data. They caution researchers to be aware of these and other issues before, during, and after the research process.

Ethical principles revolve around four areas of concern: avoiding harm done to participants, ensuring informed consent, avoiding invasion of privacy, and deception.
Harm to participants involves physical harm, stress, loss of self-esteem, and “inducing participants to perform reprehensible acts” (Bryman, 2001).

In this research, harm to participants was avoided by maintaining confidentiality of all of the records obtained for this research. To avoid identification of the individuals involved in this research, all names were erased or changed. As Bryman (2001) said, in qualitative research it is difficult to anonymize the participants; however, in this case pseudonyms are used as a common resource to eliminate the possibility of identifying any of the participants. As the analysis was done only by the primary researcher, no risk exists to the anonymity of the participants.

In the interviews, not all the information was given to participants, because, as Bryman (2001) says: “It is extremely difficult to present prospective participants with absolutely all the information that might be required to make an informed decision about their involvement... for fear of contaminating people’s answers to questions” (p. 481). In other words, giving all the information about the concern and the focus of the research may either influence the participants’ behavior, or lead and bias their answers. Instead, the participants were presented with the overall area of concern of the research, as well as its importance to the teacher-education system, in order to increase their involvement (Bryman, 2001).

Regarding invasion of privacy, preserving people’s privacy is a value in every democratic society. Violating people’s privacy in the name of science is not acceptable. It is connected to informed consent on the basis of an understanding what the participants’ involvement in the research entails. However, since all the closed-ended questionnaires and interviews were anonymous, it can be established that the privacy of the participants was not invaded.

Great care, professional and personal, was taken to enable the participants to expose their thoughts and feelings without being hurt. Harm to participants was avoided and their privacy was maintained by ensuring their confidentiality and anonymity. Furthermore, the participants’ consent was obtained in every step of the research. Consent was
obtained by contacting the participants and asking for their consent to participating in my research. Finally, consent was provided by way of conversation.

Finally, this chapter engaged in the description of the research methodology. As defined in this chapter, the research goals were to assess the perceptions of Arab and Jewish student-teachers regarding the practicum in the Jewish school. I realized that the paradigm that is most suitable for this purpose is that of the combined qualitative and quantitative research. To conduct this research I chose, in the first, primary research stage, the qualitative approach and in the second stage the quantitative approach.

This research examined an educational phenomenon in the teacher-education process of student-teachers – their practicum. This phenomenon is within the educational framework, and it served as grounds for research in the domain of multi-cultural teacher-education. The most suitable research tools were the interviews. Interviews were conducted with student-teachers from both Arab and Jewish sectors in order to access their perceptions and beliefs regarding the practicum in a Jewish training school (Punch, 1998). The interviews were semi-structured and sought to collect primary data. In the second research stage, as explained in this chapter, the research was expanded into its quantitative part expanding the primary knowledge yielded in the interviews. This was done by using focused closed-ended questionnaires, which were administered to a greater number of student-teachers. The following chapter presents the findings arising from the analysis of the information obtained via both research stages as detailed above.
CHAPTER IV: Findings: Research Data and Data Analysis

IV.1. Qualitative Analysis of Research Data

The current research focuses on Jewish and Arab Physical Education student-teachers’ perceptions of their practicum in Jewish elementary training schools.

These perceptions are of the utmost significance to the improvement of teacher-education of student-teachers from one culture, entering their practicum in another culture. Examination of the student-teachers’ perceptions and attitudes is important for teacher-education, as there is no clear Ministry of Education policy as to multi-cultural education and training. The research paradigm is mixed, mostly qualitative, with quantitative tests to enrich the gathered knowledge.

The conceptual framework of this research relies on teacher-education theories in general (Shon 1987; Schulman, 1986; Zeichner, 1990), their practicum aspect in particular, (Korthagen, 2004; Zilberstein, 1998, 2005) and their influence on the student-teachers. A student-teacher arrives at the college from one culture, and enters a new school culture.

The Jewish student-teachers are familiar with the school culture as they remember it from their school days, and yet, when they enter the school as prospective teachers, things are different. The Arab student-teachers come from a different culture, which may shatter their beliefs and cause a cognitive dissonance (Friedman, 2002).

This research addresses three main questions:

1. What are the perceptions of Jewish and Arab Physical Education student-teachers about the practicum in the training Jewish school?
2. What are the main issues of cognitive dissonance in the Arab student-teachers upon entering the practicum in the Jewish school?
3. How does the culture of origin influence the student-teachers’ perceptions of their practicum?
It has to be noted that each question pertains to a different issue investigated in this research. Each question leads to the research objectives seeking to assess both Jewish and Arab student-teachers’ perceptions of their practicum in the Jewish school.

The current research was based on a number of Hypotheses:

1. Jewish and Arab Physical Education student-teachers have the same perceptions regarding the practicum in the Jewish training school
2. Both Jewish and Arab student-teachers perceive the practicum as a major aspect of their teacher-education process;
3. The Arab student-teachers’ original culture creates a cognitive dissonance when practicing in a Jewish training school with a different culture.
4. The Arab student-teachers’ culture of origin does not influence on their perception on the practicum;

These were the hypotheses which developed due to the analysis of the evidence.

The data in the first, qualitative part of the research were gathered via semi-structured interviews. The interviews consisted of comprehensive descriptive questions such as “Describe your college study program”; focused questions in response to the comprehensive ones such as “How did the pupils respond to your presence at school?” questions asking to provide examples such as “Give me an example of words pupils used” and questions about the description of their culture.

Another type of question was comparative, seeking to get the respondents’ further reference so as to enhance descriptions and explanations, asking the questions in a different way. There were also questions asking the respondents to clarify concepts or descriptions (Shkedi, 2003). The respondents’ interviews were recorded and transcribed, and divided into categories and themes (Shkedi, 2003).

In the present study the materials were analyzed according to the topical analytic method, dealing with the words and descriptions of the participating student-teachers as reflecting their feelings, beliefs and knowledge.
The findings in this chapter are divided into two main parts according to the research stages.

1. The qualitative research stage – the findings in this first part arose from the content analysis of the interviews and in accordance with the research questions presented to the student-teachers from both the Jewish and the Arab sectors. This part is structured according to the categories arising from the content analysis. The categories and the themes are presented in a general table, followed by the presentation of each category separately.

2. The quantitative research stage - the findings in this part arose from the statistic quantitative analysis of the questionnaires administered to Jewish and the Arab student-teachers. This part seeks to expand on the data obtained from the first part of the research and add validity and reliability to the research (Kasan, Krummer, Nevo, 2010). Inside this section, the data will be divided into findings arising from the Jewish population and those arising from the Arab population of Physical Education student-teachers. The last part of this section will integrate all the findings according to the research questions.

IV. 2. Qualitative Content Analysis of the Research Data

IV.2.1. Findings Arising from the Arab Physical Education Student-Teachers’ Interviews

These findings derive from the analysis used in this research. The research design is mixed-methods combining qualitative and quantitative methods.

This type of research examined perceptions and goings on in the field (Glaser & Strauss, 1967; Sabar Ben-Yehoshua, 2001).

The content analysis was done on the data gathered via the interviews and yielded six categories representing different issues and provided a conceptual structure and meaning in the texts – these categories are presented in Table 6.
Table 9: Categories Arising from the Arab Physical Education Student-Teachers’ Interviews in Accordance with the Research Questions

<table>
<thead>
<tr>
<th>Perception of physical education: Reasons for choosing the domain of Physical Education</th>
<th>Love of sports, active sportsperson, family encouragement/pressure, demand in the sector.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicum Perception</td>
<td>Central and, extremely important to training, the school’s attitude, the school’s technical aspects, relationship with the master-teacher’ culture.</td>
</tr>
<tr>
<td>Interpersonal dimension of Physical Education student-teacher-master-teacher relationship</td>
<td>Empathy, trust, interpersonal skills, support, help, love, motherly relationship.</td>
</tr>
<tr>
<td>Cognitive dissonance regarding culture</td>
<td>Language, insult, school culture, customs.</td>
</tr>
<tr>
<td>Multiculturalism in school and in the college</td>
<td>Equality, friendship, cultures, racism.</td>
</tr>
<tr>
<td>Jewish and Arab school climate</td>
<td>Relationships in school, responsibility, discipline, conditions, learning.</td>
</tr>
</tbody>
</table>

The student-teachers were first asked why they chose Physical Education so as to understand the reasons and the background from which they arrived at their studies in the college. This will help clarify their perceptions and beliefs as expressed in the interviews and the questionnaires.
Most Physical Education student-teachers speak of their love of Physical Education. They are not necessarily active sports figures, but rather have engaged in neighborhood sports, football games or aerobics, but not professionally. When they thought about getting a profession, they thought about it, they chose to study Physical Education. M’ says, “Mostly because I love sports. I have never played professionally, but I have played football in the neighborhood. I applied to the college, was interviewed, took tests and was accepted.”

Others started studying a different discipline, quit and took up Physical Education. For instance, J’, “I started with Arabic and Education and could not connect to it. I have always loved sports and have always been interested, so I wanted to try. I am pleased I chose it.”

Among the Physical Education student-teachers there are also active sportspersons who represent the college in competitive sports events and took up Physical Education because of that. N’ is one of them, “This is my favorite discipline. I have played in the league since I was 10. All members of my family are sportsmen. My father established the village’s sports team.” A says, “I have loved sports since I was very young. I have been active in volleyball and football, and decided to study Physical Education.”

In the past, Physical education was not popular in Arab schools and general teachers taught it. Today things are different, and there are many Physical Education student-
teachers in all colleges. However, female Physical Education teachers are still a minority and that is also a reason for choosing it, as said by I’, “We do not have female Arab Physical education teachers, so I said I would study and get a job at the school. Now there is only one teacher in the elementary school”.

Choice of the profession also involves family influence, both positive and negative. Most Physical Education student-teachers talk about consulting their parents when choosing a profession, for instance, “I consulted my father and he advised me to continue with sports.”

T’s father also encouraged him, “My father said, ‘You are on a sports track, so study Physical Education’.”

Some come from sport families and the family provides the first motivation, as in the case of M, “In our family everyone loves sports. My father is a Physical Education teacher and he also played football. I always took part in all kinds of sports activities such as basketball and jogging.”

On the other hand, there is the negative family influence, as in the case of O. He did not want to take Physical Education, but his family pressured him, “Physical education is a good profession. I did not know much about it. They pressured me. I did not want it. I wanted to go to Jordan to study with my brother. We are twins. I wanted to study pharmacology with him. I did not want Physical Education, but they pressured me, and I agreed.”

This evidence is in line with studies of motivation for selecting the teaching profession.

Schorr and Levy (2003) found that love of children, interest in the subject matter and intellectual reasons are the most common with Physical Education student-teachers (Sliman, Zeidan and Toren, 2007).

In summary, it can be understood that most Arab Physical Education student-teachers have chosen to study Physical Education because of their love of sports. Some mentioned that the fact they have been active in sports motivated them, while others were influenced
by the families. This category reveals the Arab student-teachers’ motives, and since they constitute the research population, it is important to be aware of them.

IV.2.2. Findings Arising from Research Question No. 1 Related to Hypothesis No. 1 and 2

The following are the findings according to categories and according to the first research question regarding the Arab student-teachers’ perceptions of the practicum in the Jewish school.

Category 2: Figure 11: Perception of the Practicum

In general, the Arab student-teachers’ tendency is to regard the practicum as most important. Many believe that another day has to be added, as stated by N’.
“Whoever thought of it is a genius. One day is not enough. This is how the Physical Education student-teachers learn and gain experience. Even if one goes to college for 10 years, one cannot experience what it is like to be a teacher. This is the most important.”

This approach is consistent with research conducted in this field (Zilberstein, 1998; Krothagen, 2001; Zeichner, 2010) referring to practical reflective teaching in teacher-education and the significance of the practicum.

The Physical Education student-teachers expressed their fears of the practicum day, entering the Jewish school, the encounter with a culture that is different from the one they are familiar with. They expressed fear of the reaction of the school’s population, especially that of the teachers and the pupils, as expressed by a second-year Physical Education student-teacher, M’.

“I came in on the first day and so an Arab world experiencing the Jewish school. It was hard for me. It took me a month to get used to it. It was hard with the pupils, not because I am Arab. I did not think it would be easy.”

Furthermore, from the point of view of equipment and learning conditions, the Physical Education student-teachers are impressed and compare it to the Arab sector, where equipment is lacking and the conditions make them wish not to practicum in their own surroundings. I’ states,

“The school has courts and a gymnasium as well as grass, good equipment and good organization. It is a good school.”

The Physical Education student-teachers regard the school as a good place in which to practice in contrast to the Arab school. M’ says, “We don’t have so much and it hurts inside.”

She even expresses her pain in light of the Arab sector’s lack of equipment. This lack runs throughout the interviews, which shows the Physical Education student-teachers find it significant as A’ states, “We in the Arab sector don’t have good Physical Education
lessons. No.” She means that there is no equipment, not even in high schools, which are thought to be at a higher level. All this leads the Arab Physical Education student-teachers to want to experience in the Jewish school. Some of them actually emphasize the point and A’ says, “The experience in the Jewish school will help me a great deal in the Arab school.” She says they will use things they learnt in the Jewish school in the Arab school.

An additional finding pertains to the relationship with the master-teachers. The Physical Education student-teachers express satisfaction with the help and trust they get, as well as guidance with preparing for teaching, going over their lesson plans and providing feedback, “The relationship with the master-teacher is very good. I really love teaching there. There is something to learn from every lesson. I am making progress. She encourages me, we sit together, she comments and talks to me about things like safety during the lesson, and I apply in the next lesson…” “You turn to the master-teacher in case of discipline or language problems.”

The master-teacher appears to be someone close to them, like a family member. N: “My relationship with the master-teacher is beautiful. She treats me like her son.”

M: “The master-teacher was motherly.”

A: “The greatest teacher I have ever had. I love her very much. She would help us and encourage us. I succeeded because of her.”

Again, we see that the evidence is in line with the findings of studies revealing that the master-teacher is closer to the Physical Education student-teacher than any other person involved in teacher-education (Ziv, 1990).

The school environment’s attitude to the practicum also arises from the interviews. The environment means the school’s climate and population – teachers, pupils and principal. The Arab student-teachers have made both positive and negative statements. First they state that the beginning of the practicum in the Jewish school was accompanied by fears and sometimes insults on the part of the children. According to J’, “Last year I went to
school wearing a cross, and a pupil asked me why I don’t take it off. Another child said ‘She is Christian’, and I was hurt.” She goes on and says, “Children repeat things they hear in their environment. I practiced in the Jewish school…and it does not matter if I am a Jew or an Arab.” She came to the practicum and was hurt that she was religiously categorized. She said, “In school they don’t know I am an Arab. The pupils don’t know. Some of the teachers know. I taught the second grade and one of the pupils asked said, ‘J, he said I am an Arab!’ I did not know how to respond, was it a bad word?” – A painful point. The others, too, try to relate to the children’s use of such words, by saying they are children and do not understand that we are all humans.

M’ says, “Some of them relate to us as Arabs, and some do not mind. They ask ‘Are you Arab?’ And say some words in Arabic. Some want to learn Arabic, others don’t. Some feel I am an Arab and should not be here. Some do not want to listen to me because I am Arab. Normally I don’t get angry, because they are children. They say it but they don’t understand. They hear what their parents say. It is not from the heart. Some of them may say it, but they don’t understand that we are all the same human beings. They may say ‘Arab’, but they don’t know what Arab means, and who is the Arab? A human being.”

The pupils’ lack of discipline is often excused by different reasons such as the Physical Education student-teacher being an Arab.

On the positive end of the scale, the Physical Education student-teachers mention the positive attitude of teachers, the principal who treats them nicely, free access to the teachers’ room and a good feeling of being part of the staff. H’ said, “We could always sit in the teachers’ room and felt part of the staff.” “On Purim Day we sang and danced with them, and they had fun. I enjoyed the fact that the children knew me by name. They said, ‘Good morning, Habir’”

Nevertheless, the content analysis revealed a cognitive dissonance in almost every Physical Education student-teacher’s statement. Their desire to integrate into the prevailing culture is great. The greater the ambition, the greater the intensity of the
dissonance, and according to Cohen and Friedman (2002), the dissonance level raises as the intensity of beliefs involved is higher.

The dissonance appears nearly in every sentence uttered in the interviews, for instance, J’ says, “I don’t like saying ‘Jewish school’ and ‘Arab school’ – the Arab school means my mother tongue. If I had a choice I would still choose the Jewish school because you practice there for two years. I have experience with the Jewish school; Why not go on in a good place? In general I don’t care where I will practice next year.”

There is a dissonance in this statement, between what she prefers to do and what she feels, between her culture of origin and what is happening in the practicum. The same is true for M’, who discusses the dissonance between the reality of poor mastery of Hebrew, and his thinking that he learnt a lot and so he wants to teach in a Jewish school.

“Often, when I make a mistake they start laughing, and it bothers me. I make a mistake in front of the class and they laugh, and I am hurt. I tell them I am a human being, too, and I also make mistakes. I improved my Hebrew here, and started teaching in a society that is different from Arab society, so now I know better how to teach. In the Jewish school where I teach in Hebrew, it is easier for me to explain things in Hebrew.”

Language difficulties are expressed in the cognitive dissonance. The different culture to which they are exposed causes them to feel embarrassed due to their difficulties. O’ speaks about it openly, “I speak; I sometimes hesitate for 4-5 seconds and go on. It’s hard. If you prepare a good lesson plan, things go better, if not – you should. The children know I am an Arab. If I don’t say a word, they do. The child is 5, I am 20. The child knows the word. It is not easy.” As a grown-up he needs the children to translate to him.

Their being Israeli Arabs is expressed in their coming to the school and the children immediately asking questions, sometimes to mock, at other times out of curiosity. The nationalist problem prevails in a mixed country like ours (El-Haj, 1996). Security issues and the Israeli-Arab conflict serve as significant factors in the children’s attitude to Israeli
Arabs. The Physical Education student-teachers relate to it by saying, “Some of the pupils relate to us as Arabs, and others are not interested. They ask ‘Are you Arab?’ And say some words in Arabic. Some want to learn Arabic, others don’t. Some feel I am an Arab and should not be here. Some do not want to listen to me because I am Arab. Normally I don’t get angry, because they are children. They say it but they don’t understand. They hear what their parents say. It is not from the heart. Some of them may say it, but they don’t understand that we are all the same human beings. They may say ‘Arab’, but they don’t know what Arab means, and who is the Arab? A human being. There are always difficulties. Sometimes there are difficulties managing the class or adjusting the lesson plan. Sometimes I make a language mistake and they start laughing, which disrupts the lesson. Sometimes I am insulted. I tell them I am a human being and sometimes make mistakes.”

The Physical Education student-teachers are aware of operating in another culture and expressed their fears, “Here I improved my Hebrew and started teaching in a different society.”

The Druze Arab Physical Education student-teachers, on the other hand, have fewer concerns, N’ presents himself as part of the Israeli culture and says he is closer to the Jews than to the Arabs, which creates a problem with the Arabs, so much so that they feel he is a traitor, “This year I met a child who called me an Arab. I was hurt. We do not define ourselves as Arabs, but as Israeli Druze. The Moslems think we are traitors. This does not bother me too much. The children welcomed me and I ignored that child. Even Orna does not know about it.”

The Christian Arab Physical Education student-teacher also mentions being hurt by being called “Christian” as she came to school to teach regardless of her religious affiliation or social cultural sector. “Last year I went to school wearing a cross, and a pupil asked me why I don’t take it off. Another child said ‘She is Christian’, and I was hurt…I practiced in the Jewish school…and it does not matter if I am a Jew or an Arab.”
Their choices, which most of them explain in terms of their love of sports, their being active sports persons, family encouragement or pressure and a few mentioned the fact it is in great demand in the Arab sector. A’ says, “We do not have female Arab Physical education teachers, so I said I would study and get a job at the school. Now there is only one teacher in the elementary school.” This is consistent with the conclusions drawn by Sliman, Zeidan and Toren (2007), about choosing teaching as a mission and a tool for improving society, are motives that influence the student-teachers’ choice more than social or economic status.

In summary, it can be understood that the Arab Physical Education student-teachers perceive the practicum as a highly significant aspect of their training. The Jewish training school is perceived as the best place to engage in their practicum although they came from one culture and practiced in another. They are happy with the school’s climate, the staff’s attitude, the equipment and their working conditions in the Jewish training school. Nevertheless, there is a cognitive dissonance expressed in language and culture issues.
Category 3: Figure 12: Interpersonal Dimension of Physical Education Student-Teacher-Master-teacher Relationship

These findings also pertain to the first research question, as the master-teachers constitute a significant part of the student-teachers’ practicum, and their relationship with the student-teachers affect the latter’s perception of their practicum in the Jewish school.

The Physical Education student-teacher’s relationship with the master-teacher is positive with all participants. All of them note the help, the support and the professionalism, “Helps me with many things”. M’ states “Helps us a lot. I can feel the difference, how I improved during the year.” M’ adds, “If I need any help with my lesson plan, I call him and talk to him.” The Physical Education student-teachers attribute their success to the master-teachers, as stated by A’. “She helped us with her attitude. She encouraged us. If I did well it was because of her.”

Beyond the roles of the master-teacher, the Physical Education student-teachers also mention professionalism: “My master-teacher is amazing. She is a professional and helps us get into things at school.” The master-teacher mediates between the Physical Education student-teachers and the school’s culture.

The interpersonal skills which develop between the master-teacher and the Physical Education student-teachers also contribute to the great esteem the Physical Education
student-teachers have for their master-teachers. H’ says, “We sit together and talk.” M’ makes a very strong statement: “We sit and laugh a little. I don’t because he is not my master-teacher and I am not used to talking and laughing with him.” M’ is not used to master-teachers sitting with him like friends. This is not common in the culture from which he comes. They also mention the feeling the master-teacher gives them so as they will feel confident: “She gives us a good feeling and tries to make things easier for us so we will not be afraid.” says M’.

The participants also use family images to express their relationships with their master-teacher, as does A’: “The greatest teacher I have had. I love her very much.” Or “We have a great relationship. She treats me like her son.” “He is always available, even on weekends.”

The Physical Education student-teachers expect the master-teachers to support and help them. This also arises from studies pertaining to Physical Education student-teachers’ expectations of their master-teachers (Hadari, 2003). The Physical Education student-teachers expect the master-teacher to provide them with a variety of ideas and teaching methods, to guide them in organization and class management, and provide positive or negative feedback through constructive comments (Bullough, Hall, Draper, Smith and Robert, 2008).

In conclusion, it can be said the relationship between the Arab Physical Education student-teachers and the master-teachers is one of help and trust. The master-teacher mediates between the Physical Education student-teachers and the school in every way. They appreciate the master-teacher and rely on him/her. Some even related to the master-teacher as a loved figure, or a family member, as also seen in Maskit and Dikman’s (2001) research. These relationships testify to the Physical Education student-teachers’ positive perception of the practicum, which answers the research first question.
IV.2.3. Findings Arising from Research Question No. 2 Related to Hypothesis No. 3

Category 4: Figure 13: The Cognitive Dissonance – Arab Student-Teachers

This category pertains to the second research question: What are the main issues of cognitive dissonance in the Arab student-teachers upon entering the practical experience?

The student teachers make statements as to the cultural cognitive dissonance. They have to cope with contradiction and conflict. Theory claims that people have a latent desire to maintain consistence between their perceptions and attitudes and their actual behavior. Here they have to behave in accordance with the school’s and the college’s culture.

M’ says, “I entered on my first day and saw an Arab world experiencing in a Jewish world.”
J’ also says, “The Arab school means my mother tongue. If I had a choice I would still choose the Jewish school”, contrary to her culture.

They experience new things in the Jewish school, compared to what they have experienced in the Arab School – the climate and culture differs and they make comparisons, “Jewish children have more knowledge than Arab children, so it is fun to work with them. I also want to work in the Arab sector so as to change them and provide them with knowledge, and not play ball all the time. They don’t have volleyball, they have no idea what a somersault is, unfortunately.”

They believe there are many advantages to the Jewish school compared to the Arab one, which arouses the cognitive dissonance:

“There is no equipment in the Arab school. There are many pupils in the class. Here there are 22 – 24 pupils, which is easier. In the Arab school there is discipline. They are afraid of the teacher. If the teacher raises his voice they clam down and listen. In the Jewish school, I don’t see much discipline. We don’t call the teacher by name, and in the Jewish school they do. It’s not good. They have to know the teacher is not their friend and there are limits. When I call someone by his name he is my friend.”

H’ makes the comparison, “Advantages: I don’t have to worry about the language. The words will come out. I will be more in control (in the Arab school).” The disadvantages discussed are that in the Arab school they do not take physical education seriously, they do not think it is important, and hence the teachers are not taken too seriously. The culture of the Arab school plays an important role in the cognitive dissonance. Most student-teachers talked about lack of equipment, insufficient facilities and the attitude to the subject matter, compared to all these in the Jewish schools.

M’ discusses the differences in atmosphere between the Jewish and the Arab school. “There is something that I love here. They give a lot of responsibility to the pupils. I would take it with a lot of love to the Arab sector, and place some responsibility on the children, to be responsible for what they feel. We don’t have that. We don’t express our
feelings. With us, the children sit quietly. We are not allowed to talk. Now they have started to let the children talk a little, say how they feel. In the end you burst.”

Responsibility and listening constitute powerful factors in the Jewish school culture in contrast to the Arab school. The teachers in the former have a more positive approach to the children, while in the latter things are bordering “tyranny”,

“In the Jewish school the approach is positive and every child is treated as an understanding, mature person, while in the Arab school things are not like that. It’s a dictatorship.”

M’ says, “I feel like the (Jewish) school is like a home.”

Despite the fact the Physical Education student-teachers feel they are welcome in the Jewish school, there are also situations in which they are hurt, “Some of the children feel that if you are an Arab, they can treat you, let’s say, not so nicely. Each person makes mistakes. They look, they laugh. I don’t have a problem with that. One of us who teaches there does have a problem. Everyone sees these things and feels them.”

N’, who is a Druze, also says contradicting things, “I met a problematic child who called me ‘an Arab’, I was hurt, because we do not define ourselves as Arabs, but as Israeli Druze. The Moslems think we are traitors. This does not bother me too much”.

M’ is more sensitive and expressed his insult clearly “They laugh…it insults me.”

The Physical Education student-teachers sometimes try to justify their feelings, like A’, “Normally I don’t get angry, because they are children. They say it but they don’t understand. They hear what their parents say. It is not from the heart. Some of them may say it, but they don’t understand that we are all the same human beings. They may say ‘Arab’, but they don’t know what Arab means, and who is the Arab.”

Physical Education student-teachers’ mother tongue is Arabic, and they have to study, prepare lesson plans, teach and think in Hebrew. The terms used are in Hebrew, and they cannot translate them into Arabic.
The problem arises when facing a class. As M’ says, “Often, when I made a mistake they would start laughing, and it would bother me. I made a mistake in front of the class and they would laugh, and I would be hurt. I told them I am a human being, too, and I also make mistakes.” The language problem involves being hurt. On the other hand, O’ admits that the language problem is very serious for him, “I come to school one day a week. I prepare my lesson plan, and a day before I read it and it is hard for me, because I teach the Jews, and my language is Arabic. I do not speak Hebrew well, but I am trying. I read the lesson plan thoroughly, I make sure I understand it and then I teach it to the children.”

T’ also mentions this difficulty, “I would like to teach in the Jewish sector, because you practice the lesson plan in Hebrew and then teach in Hebrew. In the Arab sector you have to translate and it is hard.”

The Arabic language lacks the Physical Education terms, which poses great difficulties to Arabic speakers. M’ mentions it, “I learnt the terms in Hebrew and it is hard to express them in Arabic. Arab children will not understand the Hebrew terms. We do not learn any sports terms in Arabic lessons. We mostly study literature, as because I am going to be a teacher I have to know literary Arabic. Although in some of the lower grades in primary school they don’t know the Hebrew terms, they do learn them in the upper grades, though in the beginning they don’t understand them. I have to say them in Hebrew and then translate them.”

M’ also discusses the language dissonance, “I will go to the Arab school, sit on the side and not teach. I don’t know how to say hoop, I don’t know these terms in Arabic. If I teach in an Arab school, I will say the terms in Hebrew.”

This issue repeats in every interview. The difficulty in translating professional terms from Hebrew, the language of study, into Arabic, the mother tongue, used in the Arab school.

The cognitive dissonance is also expressed in the issue of holidays. In college and in the Jewish school they mark the holidays and memorial days of Israel in ceremonies, singing the national anthem and more. On Arab holidays, the student-teachers get the days off,
but neither the college nor the Jewish school takes note of these holidays. This creates a conflict with the Arab Physical Education student-teachers. Should they participate in the ceremonies? Should they sing the national anthem?

M’ says, “Last week was Holocaust Memorial Day and we had a ceremony in the college. Most Arab student-teachers did not attend, but as an act of respect I attended, and I felt cold. I saw neither Arabs nor Jews. I saw human beings, and how they suffered. My relatives also suffered in 1948, so since I understand that and have a heart, I stood the two moments of silence with them. Physical Education student-teachers participate in the holiday celebrations, as Physical Education teachers usually help prepare the shows for the holiday, as H’ says, “I am involved in a lot of things. On Purim Day we sang and danced with them, and they had fun. I enjoyed the fact that the children knew me by name.”

“The holidays include Passover, which is Easter time for Christians, there is Christmas and Ramadan. Let’s all participate and share. We can have a holiday atmosphere in Christmas, although the Christians are a minority in the college. Let’s do something, why not? We are in college. College is like school, school is like home. Let’s be like a family, like a home.”

In this view we can see that the Arab Physical Education student-teachers wish to integrate into the prevailing culture is great. The greater the ambition, the greater the intensity of the dissonance, and according to Cohen and Friedman (2002), the dissonance level raises as the intensity of beliefs involved is higher.

The Arab Physical Education student-teachers experience a cognitive dissonance (the second research question and the third hypothesis) expressed in all of the above statements. Their work in a culture which differs from theirs brings about this dissonance with their encounter with the markers of the prevailing culture such as holidays and ceremonies and the different language. The Jewish school pupils’ attitudes also contribute to this dissonance.
IV.2.4. Findings Arising from Research Question No.3 Related to Hypothesis No. 4

Category 5: Figure 14: Perceptions of the Arab Physical Education Student-Teachers Regarding Multiculturalism

This category pertains to the third research question: How does the culture of origin influence the perceptions of these student-teachers of their practicum in the Jewish school?

This category expresses the multicultural approach in Israeli society (El-Haj, 1998). In this case the society is that of the student-teachers in the college and in the training school.

Regarding equality in college and in school, the Physical Education student-teachers do not feel there is a problem. On the contrary, they emphasize the fact there is no discrimination.

J’ says, “I do not feel that I am an Arab. I get the same treatment as everyone, so why feel different? I am in class with everyone. The teachers treat everyone the same, and so do the Jewish student-teachers. I do not feel any discrimination.” M’ talks about blending with different sectors, “No problem. Jews and Arabs are the same; in college, outside college – the same. At first it was hard. One graduates from high school and goes to university or to college – that’s different. One sees Jews, Arabs, all sectors.” Higher education provides that encounter of all sectors of the population.
In school, equality is expressed in the Physical Education student-teachers’ relationship with the master-teacher – this pertains to guidance regardless of culture or sector. “I am treated just like the Jews. The master-teacher, whose name is Yair, treats us like regular human beings. Both Jews and Arabs are human beings.” I’ emphasizes the issue of equality and says, “I don’t feel there is anything special about me being an Arab. There is no racism. Everything is good. I am happy in the Jewish college with Jewish teachers and student-teachers. I learn things from the Jews that we don’t have in the Arab sector”

M’ adds, “It is a small college, and everyone knows everyone, and I have many friends there. I study with friends. At work I have Jewish friends. I work in a hotel. I have many Jewish friends. I don’t feel there is a difference. We all study the same thing.”

Nevertheless, equality in college is not perfect. We see that in M’s statement, “First I would change the classes. No separate Arabic speaking and regular classes.” (There is an Arabic speaking class, and a regular class which includes Arabic speakers whose psychometric level is higher). There are differences between the classes. M’ offers to change that: “They could have mixed them all, and assess them according to the levels.” She is rather hurt by the situation.

The different Arab culture is expressed in a number of issues: first. The Druze student feels he is different in culture despite the difficulties of his “being a traitor” in the eyes of the student-teachers from the Arab sector.

N’ says, “We do not define ourselves as Arabs, but as Israeli Druze. The Moslems think we are traitors. This does not bother me too much.”

On the other hand, According to I’ the cultures are getting closer: “we are more developed now. There are no differences in the way we dress. My fiancé worries that others may look at me. My parents let me wear what I want. The Jews bring healthy food from home and we buy food in the cafeteria. In the Jewish school, girls go out more than the Arab girls. I went out more to the beach and to bowl. It all depends on the family. I have no problem with Jews and Arabs mixing.”
Arab student-teachers compare the two cultures for better or worse. “Jewish kids at my age are really independent. The Arabs have to be reminded what to do all the time. The Jews are really organized.”

They appreciate the personal independence, unlike in Arab culture, where the youngsters are always told what to do, and they learn from another culture, as M’ says, “They relate to things differently. I feel the Jews are stronger, as if there is something...I don’t know...the main thing is to study. There is nothing else. No family, no friends...Arabs have a family, and they are not ashamed of friends. This is a good thing. I have learnt something important – not to be ashamed to say I am busy and have to study. It’s a good thing I have learnt.”

A’ says he learnt to get along with the different culture. He says, “Sometimes things happen. I don’t hate anyone, though. We are all the same. My culture at home taught me to respect and give respect to others’ rights.”

However, there are also negative aspects of Jewish culture which they discuss, “the lack of respect and discipline on the part of the children, compared to Arab children.”

In summary, this category presents the perceptions of the Arab Physical Education student-teachers’ regarding multiculturalism. Along with friendships with members of the Jewish section in the college, and the equality they experience in college, they also see the discrimination in the mere existence of an Arabic speaking class. In the training school they compare the Jewish school culture to that of the Arabic one, and claim there are many positive aspects of the Jewish school, which Arab schools do not have, and they would like to introduce them. Again we see that the culture which they bring to school is regarded more negative than the one they enter the practicum. This provides an answer to the research question pertaining to multiculturalism and how the culture of origin influences the perceptions of these student-teachers of their practicum in the Jewish school.
More Findings Arising from the Third Research Question

Category 6

During the interviews, Arab student-teachers made many comparisons between the climate of the Arab school and the Jewish school. The climate of the training school characterizes the culture to which it belongs. This comparison influenced the Arab student-teachers’ perceptions of their practicum in the Jewish school, their cognitive dissonance during the experience and the influence of their original culture on the Jewish school’s culture. It can be said, then, that this category pertains to all of the research questions, mostly to the third one.

Figure 15: Jewish and Arab School Climate

When the Arab Physical Education student-teachers were asked about the Arab school climate compared to the Jewish one, the first thing which all participants noted was the learning conditions at school. They talk of equipment and good working conditions in the Jewish school, in contrast to work in the Arab school. A’ says, “There is no equipment in the Arab school. There are many pupils in the class. In the Jewish school there is a lot of equipment and it is organized. In the Arab school, equipment is lacking and it is disorganized.”
M adds, “In the Jewish school, there is a plenty of equipment. There is none in the Arab school. We have sponge, not rubber balls. The Jewish school has a gymnasium, and we have a courtyard.”

Another issue arising in this category is learning, or attitudes to Physical Education. Normally in the Jewish school the attitude to Physical Education is more positive and serious than in the Arab school.

A’ says, “The Arab school does not pay any significance to sports. They do not think it is important, and so the teachers are not being treated well. In the Jewish school, the focus is on the child, and the children are encouraged, not like in the Arab school.”

M’ adds, “In the Arab schools they do not have the right approach to sports. The Jews have sports twice a week from a young age. In the Arab schools, the girls sit on the side and the boys play football or another ball game.”

In other words, the subject of Physical Education is not considered important in the Arab sector. The lessons are free, and there is no organized learning. In contrast, in the Jewish school they take it as seriously as any other subject taught in school.

G’ says, “The children in the Jewish school are more serious. A Physical Education lesson is a lesson like any other, while in the Arab school they do not pay attention to Physical Education. This is a free lesson: No teaching and no learning.” “With the Jews it is like any other subject.”

Regarding the issue of discipline, some of the Physical Education student-teachers claim discipline is better in the Jewish school, while others believe it is actually better in the Arab school. A’ says, “In the Jewish school some of the children are insolent. The children have too much freedom and this allows them to be rude. There are no such things in the Arab school.”

On the other hand, discipline problems in the Jewish school are resolved quickly. The attitude is positive and the children are treated as mature human beings, while in the Arab
sector, where no one listens to the children, as expressed by A’, “The atmosphere is one of learning and activities in the breaks. Every child is taken very seriously, and problems are treated immediately. The attitude is positive. A child is considered a mature, understanding person. In the Arab schools things are different. They have a dictatorship.”

The issue of respecting the teachers and listening to them is of the utmost significance to the Arab Physical Education student-teachers, who come from a culture where respect is an essential value. N’ keeps emphasizing this point, “In our sector there is more respect for teachers than in the Jewish sector, because here they let pupils say what they are feeling, but it has to do with the culture at home, and it is not necessarily insolence, but lack of respect. In Arab schools, when the teacher wants quiet, the pupils are quiet. No pupil dares to talk. They respect the teacher and listen. But everything has advantages and disadvantages. The pupils ought to be able to voice their opinions, but there are limits. In the Jewish school the children do not give respect to the teachers.”

“In the Arab school there is discipline. They are afraid of the teacher. If the teacher raises his voice they clam down and listen. In the Jewish school, I don’t see much discipline. We don’t call the teacher by name, and in the Jewish school they do. It’s not good. They have to know the teacher is not their friend and there are limits. When I call someone by his name he is my friend.”

This quote expresses criticism of the alleged “too much freedom” that children in the Jewish schools have. It pertains to the issue of respect that is so prominent in Arab culture.

An additional issue is that of school and personal responsibility in the Jewish school, which is lacking in the Arab school. This aspect contributes to the pleasant school climate. In the Jewish school the children have active breaks for which they are responsible: they are responsible for the equipment and the activities. They are also responsible for cleaning and maintaining the school. On the other hand, the Arab school does not encourage the children to take responsibility.
H’ notes this, “I have noticed they have an active break here. We don’t have anything like that. Pupils take equipment, manage games and activities and take responsibility. Organization and responsibility are very important for their future.”

As for cleaning, R’ says, “The pupils here, as well as the principal and the teachers behave as if the school is their home, and they do everything to maintain it and guard it. They all cooperate: the teachers with the pupils; the teachers with the principal. They keep the school clean.”

J’ says what she would take from the Jewish sector, “They give a lot of responsibility to the pupils. I would take it with a lot of love to the Arab sector, and place some responsibility on the children, to be responsible for what they feel. We don’t have that. We don’t express our feelings. With us, the children sit quietly. We are not allowed to talk. Now they have started to let the children talk a little, say how they feel. In the end you burst.”

Finally, regarding the relationships in the school, the Physical Education student-teachers feel that the Jewish school is freer, while the Arab school is more of a tyranny. They talk of their culture, which emphasizes the status of the pupil’s family.

M’ says, “Like a home. The teacher sits in the middle and the pupils sit around her, as if they are her children. In the Arab sector, the relationships do not always develop. Sometimes a pupil comes from a certain family, which affects the way he is treated. Pupils might not want to play with them.” “The approach is positive and every child is treated as an understanding, mature person while in the Arab school things are not like that. It’s a dictatorship.”

In the Arab school there are no conversations with pupils, as R’ notes, “I have never seen a teacher sit with a pupil. You have to encourage pupils who experience difficulties.”

In summary, it can be understood that statements regarding the school climate in the Jewish and the Arab schools reveal that Arab Physical Education student-teachers perceive the climate of the Jewish school as positive, serious and more proper for
learning. Nevertheless, some of them criticize the discipline, due to what they are used to in their culture, such as respect—a most significant aspect of Arab culture.

It can be stated that this category yields understanding of the Arab student-teachers’ perceptions of their practicum in the Jewish school. They relate rather positively to the Jewish school climate on all its components, and this, in turn, contributes to their positive attitude to the practicum in the Jewish training school (the first research question and the first hypothesis) despite the cognitive dissonance they experience (the second research question and the third hypothesis). They integrate into the school’s positive atmosphere, and so we see that their original culture does not influence their perception of the culture of their Jewish training school (the third research question and the forth hypothesis).

IV.3. Qualitative Content Analysis – Findings Arising from the Jewish Physical Education Student-Teachers’ Interviews

Content analysis was done on the data gathered via the interviews’ with the Jewish student-teachers and yielded five categories representing different issues and provided a conceptual structure and meaning in the texts. These categories are presented in the following table.
Table 10: Categories

| Perception of Physical Education Reasons for Choosing the Domain of Physical Education | Love of Sports  
| Active sportsperson  
| Encouragement/ pressure in the family |
| Jewish Physical Education Student-teachers’ Perception of the Practicum | Difficulties; Significance of teacher training  
| Relationship with master-teacher; School climate |
| Interpersonal Dimension of Physical Education Student-Teacher-Master-teacher Relationship | Empathy; Equal treatment; Professional help, feedback, freedom to try different subjects, Friendship; Good treatment; Mutual help |
| The Arab student-teacher’s cognitive dissonance as seen by the Jewish student-teachers | Customs; Language; School Culture |
| Multiculturalism in School and in the college | In the training school; In the college |

IV.3.1. Jewish Physical Education Student-Teachers’ Perceptions of Physical Education

Just like their Arab fellow student-teachers, the Jewish student-teachers were first asked why they chose Physical Education. This was done to understand the reasons and the background causing them to choose their studies, which would, in turn, clarify their attitudes and beliefs as expressed in the interviews and in the questionnaires.

Category 1:  
Figure 16: Perception of Physical Education
Like their Arab colleagues, the Jewish Physical Education student-teachers take Physical Education because of their love of the domain, and their interest in it, “to do something I love”.

Some of them are active in sports and integrate sports with teaching. L’ says, “Sport is my life. It has been like that since I was born. I was not sure I wanted to be a teacher. I wanted to do something in the domain of sport and anatomy.” Others chose Physical Education upon encouragement from their families. For instance, R’, “I came from a Physical Education background. Mt mother is a Physical Education teacher. In the army I was a Physical Education trainer in the navy.” Here, too, the reasons resemble those of the Arab Physical Education student-teachers and in line with studies pertaining to motives for choosing a profession. Schorr and Levy (2003) found that love of children, interest in the subject matter and intellectual reasons are the most common with Physical Education student-teachers (Sliman, Zeidan and Toren, 2007).

Some of the Physical Education student-teachers are active in competitive sports, such as K’ who plays football, “because I love sport. I come from the field of football and I engage in sport.” Others engage in other sports such as Karate, Aerobics, Volleyball and more.

Others arrived at the domain of sports differently. A’ says, “I used to weigh 120 kilograms and they told me I could not join the army. Then I met someone who suggested I go on a diet. I started doing sports instead of eating all the time. A year before the army I started doing sports and lost a lot of weight.”

In summary, most Physical Education student-teachers have chosen to study Physical Education because of their love of sports. Some mentioned that the fact they have been active in sports motivated them, while others were influenced by the families. This is consistent with the findings of Feigin, Mashiach and Vaully (1991) who note that all student-teachers in their study emphasized the intrinsic motives (the essence of the domain) than the extrinsic ones (income and working hours). In another study, which investigated 81 Mathematics Physical Education student-teachers (Becker and
Levenberg, 2003) the participants noted that the love of the domain and interest in it, as well as the challenge of teaching Mathematics were the main considerations for choosing to teach it.

**IV.3.2. Findings Arising from the Research Question No. 1 Related to Hypothesis No. 1 and 2**

**Category 2: Figure 17: Perception of the Practicum in the Jewish School**

Like their Arab colleagues, the Jewish Physical Education student-teachers regard the practicum as most important. Many believe that another day has to be added, as stated by L’, “We need more field and less theory. They have to add another practicum”, and as K’ says, “The practicum is the main thing. Everything you have studied is applied in the field. You can be the greatest student, but if you don’t know how to give a lesson, stand in front of a class and teach, you cannot be a teacher.” – Applying theoretical knowledge into practicum (Shulman, 1986).

The Physical Education student-teachers regard the practicum as the most meaningful part of teacher –education, “This is what we have to focus on. We are going to be teachers and we have to emphasize the practicum. We need at least two days of
practicum per week. This gives you the basics, like driving lessons. Only on the road do you acquire experience. The same is true for school. Only class will you gain experience and know the children.”

K’ says. “It is very important to stand in front of the class, teach contents’ experience all the theories we studied through the practicum. I see different behaviors, reflect and use my judgment.”

This corresponds with Zeichner’s conclusions (1995), maintaining the real world is in the field, where the Physical Education student-teachers actually observe and experience different models of educational activities.

Despite all of the above, like their Arab colleagues, the Jewish Physical Education student-teachers have experienced some hard times in their first experiences. They also entered a world where the culture was indeed unfamiliar, as A’ says, “The master-teacher believes in pushing you into the water on the first day” – he got into the world of teaching immediately. The Jewish Physical Education student-teachers connect to the school climate fast. Everything looks familiar and they have no integration problems, although it is not easy. As said by J’, “The beginning was not easy. A great deal depends on your master-teacher. She is the one that pushes you.”

They also do not see difference in the way they are treated and the way their Arab colleagues are treated. A’ says, “There are no differences in the way the Arab Physical Education student-teachers and we are treated. I see no differences in the way the children behave to them.” In other words, all Physical Education student-teachers are treated equally.

In all interviews, Physical Education student-teachers express their attitudes to the master-teacher positively, and say the latter helps them in all school domains.

In summary, it can be understood that the Jewish Physical Education student-teachers perceive the practicum as a highly positive and significant aspect of their training. The Jewish Physical Education student-teachers believe the practicum is most important and
should come even at the expense of theory. The school climate is not unfamiliar to them, as they remember if since their school days, but it is important to be in the training school. This sheds light on the research question and provides a clear answer to it.

Category 3:

Figure 18: Interpersonal Dimension of Physical Education Student-Teacher-Master-teacher Relationship

We see that just like with the Arab Physical Education student-teachers, the Jewish ones appreciate the master-teacher, and she is role model. The Physical Education student-teachers have to learn from them and act upon their instructions. This is in line with research conducted about the role of the master-teachers (Yakir, 1997). This is also seen in Maskit and Winestein’s research (2001). The master-teacher provides professional answers as well as feedback about the Physical Education student-teacher’s performance as stated by A’: “The relationship is great. He gives me tools and helps me.” Y’ states, “The relationship is very good. She made some order in our heads. She is a professional.”

Providing the opportunity for the Physical Education student-teacher to experience new processes is one of the most effective factors that contribute to the training process (Connor et. al, 1993). We learn that from R’, “The relationship with the master-teacher is excellent. He gives me the freedom to do things, and works on technical comments more than on discipline.”
According to the Physical Education student-teachers, the master-teacher treats the Arab Physical Education student-teachers equally, unless they need more help, “She is clear cut with the Arabs when she sees they are doing OK. She helps them because they need more help.”

The Jewish Physical Education student-teachers believe the Arab’s difficulties stem from language problems, as also stated by the Arab Physical Education student-teachers.

During the field-experience, an atmosphere of friendship and mutual fertilization was created with the master-teacher, and this relationship goes on after the experience is over. K’ says, “I am still in touch with her, I borrow equipment and she still helps me.” And A’ says, “We helped each other. I gave her materials.”

In this view we can see that the relationship between the Arab Physical Education student-teachers and their master-teachers is one of help and empathy on the part of the master-teacher, as well as the freedom to experiment, and good friendship. Some even mention they will keep in touch with their master-teacher after the practicum period. These relationships testify to the Physical Education student-teachers’ positive perception of the practicum, which answers the research question.
IV.3.3. Findings Arising from Research Question No. 2 Related to Hypothesis No. 3

Category 4:

Figure 19: The Cognitive Dissonance as Perceived by the Jewish Student-Teachers

This category refers to the Arab student-teachers’ cognitive dissonance as perceived by the Jewish student-teachers.

This category derived from the interviews with the Jewish Physical Education student-teachers, and reveals how they regard the cognitive dissonance with their Arab colleagues. Spending time with them in the training school, they experience things that arouse the cognitive dissonance, and they find it is important to understand it.

According to the Jewish Physical Education student-teachers, they recognize the cognitive dissonance with many of their Arab colleagues. “They want to be the same as us, and make great efforts in language and explanations, so as not to appear different. They don’t want to be different.” The Jews also see the members of the other culture as wishing to integrate into the prevailing culture.

A’ explains, “The children would ask me, ‘Are you an Arab?’ that is an insult, because they do try to be our equals, and such a question divides us.” A’ thinks the desire to integrate is so great, that even such a naïve child’s question about his origin leads to an insult. Another difficulty which leads to a dissonance is that of a different language and culture, as stated by A’: “There is some difficulty in learning another language. There is a gap. I think most difficulties arise from language and culture differences.”
The Jewish Physical Education student-teachers also try to explain the dissonance of their Arab colleagues, as stated by Y’, “Their fear of the children’s responses is what causes the Arab student’s difficulties. They come to the school with no confidence. I believe it would happen to the Jewish Physical Education student-teacher in an Arab school – the language difficulties and the need to adapt to another culture…it is hard for them to approach Jewish kids…they don’t know what they will get.” In other words, they have problems adjusting to the Jewish culture.

In this view we can see that the Jewish Physical Education student-teachers notice the cognitive dissonance their Arab colleagues experience in the practicum in the Jewish school. They note the language difficulties and their difficulties in coping with the language in the lessons. They notice the dissonance in the Arab Physical Education student-teachers’ desire for equality, and their sensitivity, when they are called “Arabs”. This answers the research question research question and the hypothesis pertaining to the cognitive dissonance.

**IV.3.4. Findings Arising from Research Question No.3**

The third research question asks, “How does the culture of origin influence the perceptions of these student-teachers of their practicum in the Jewish school?” and indeed pertains to the Arab student-teachers. The Jewish student-teachers’ answers reveal many references to the issue of their fellow Student-teachers’ original culture and its influence or lack thereof on the culture which they enter both in the training school and in the college.
IV.3.5. Multiculturalism in the College

The college has Physical Education student-teachers from different ethnic origins: Jews, Druze, Circassians, Moslems and Christians. Student-teachers are normally enrolled in the college after their army service. Some of the Moslems and Christians and Druze, serve in the army as well. This leads to some kind of a status quo in the college. G’ states, “There is no political discourse. Even during the Second Lebanon War there were no discussions. Each student minded their own problems. I am interested in the Islam issues, and tried to see what is going on in other colleges. There were more conflicts there. We have to remember that we have a few ethnicities here that serve in the army: Druze and Circassians. The issues were repressed, and never got to be arguments. Student-teachers tried to take interest in the issues from the social perspective, not from the ethnic one.”
The Physical Education student-teachers are consciously, as stated by K’: “We know them, we meet them every day, we talk to them about things, and there is a discourse up to a certain point. There is co-existence. There have been no cases of violence or insult in the college.”

Nevertheless, when it comes to the issue of racism, the Jewish Physical Education student-teachers maintain that on the one hand it is a bad idea to separate the Arabic speaking student-teachers from the Hebrew speaking ones, but on the other hand, they claim the Arab student-teachers’ level is much lower, and that affects the level of their studies. V’ says, “The more Arab student-teachers come, the fewer Jewish ones do. This is not my belief, but that is what is going to happen.” He immediately apologizes for what he said. However, this is the majority’s attitude, as stated by A’: “It is a Jewish Israeli college, and that is why the language ought to be Hebrew. If they did not know Hebrew, it would be another issue, but they do, so they should speak it.”

The Arabic discourse also bothers the Jewish student-teachers, “I am often annoyed by the conversations in Arabic around me. I know it is hard for them to express their thoughts in Hebrew. There are some exceptions who abuse it. It disrupts the lessons, but with most of them it derives from language difficulties. Sometimes, when I am around they switch to Hebrew, so as to involve me in the conversation.”

K’ also is not bothered by the language issue, “I have no problem. It’s OK with me. I even know a few words in Arabic.” On the one hand, the Jewish Physical Education student-teachers want a common language to all, and on the other hand, they accept the language differences.

The issue of culture also arises. According to the Jewish Physical Education student-teachers, sharing their studies with the members of another sector makes them understand the Arab’s culture better, as G’ states, “Exposure to another sector makes them step out of their fixations and prejudice.” A’, too changed his mind following his studies in a multicultural college, “At first it bothered me, and then it stopped, or I just got used to it. Both sides feel awkward, and I see that here they get along just fine, and I even
connected to them. It changed my attitudes. It does not bother you once you get tom know the people.”

K’ says other things and even compares the sectors, “There is some tension where there are both Jews and Arabs. When you open up and get to know them, it does not really matter who’s a Jew and who’s an Arab. We went to Cyprus on a cruise, and I went out with them, not with the Jews. They have this integrity and respect. A Jew will gossip and say ad things about you. An Arab won’t...They also help me with games. They will not set me up.” The emphasis is on the Arab sector’s culture of honesty and respect.

The Physical Education student-teachers are aware of the others’ different culture and respect it. “The atmosphere in the college is cozy in general. You don’t see any differences. It is supposed to be different, people do come from different cultures, but here the model is that everyone is equal, regardless of their sector in the population. You see that in the way people help each other. They help me a great deal.”

L says, “They bring all kinds of holiday things to the college, and it is nice that you bring in your culture.”

This category also reveals friendship and good relationships between the two sectors in the college. One would expect tension, mostly political ones, but it is quite the opposite, as stated by A’, “Sometimes I feel that I hang out with Arabic speakers more than with Hebrew ones. There is no political discourse. Even during the Second Lebanon War there were no discussions. Each student minded their own problems.”

The college seeks to teach as well as to create friendships “The Arab student-teachers in our class are our friends, and behave just like us.”

The Physical Education student-teachers’ statements reveal they have no problem connecting with the Arab ones, especially in the mixed class. L’ says, “The friends are for life. I know that when I need help I will get it. He helps me and I help him. For instance, A’ is Druze. And he is my friend. N’, too is a good friend. All the Arab student-teachers behave nicely, and I give them a good feeling, too.”
IV.3.6. Multiculturalism in the Training School

Both Jewish and Arab Physical Education student-teachers enter the Jewish training school. From their point of view, the Jewish Physical Education student-teachers discuss the teachers’ and pupils’ treat their Arab colleagues. Normally, the teachers and the principal treat all Physical Education student-teachers equally.

“N did not feel different. She felt like us. She is half Jewish. Her mother is Jewish, but she considers herself a Druze. No differences were felt. We are totally equal. She got along great with the children.” The same goes for K’, “There are many South Lebanese children there and there was no problem with his presence. For us, too, we regarded him just like one of us. The teachers hardly came into the teachers’ room.” Early acquaintance with the other sector contributed to the environment’s acceptance of the student-teachers from the other sector.

Contrary to the teachers, the Jewish Physical Education student-teachers maintain the children did not always receive the Arab ones well. They often did not understand them, as K states, “Sometimes the children don’t understand what they say and ridicule them, though the master-teacher does not let them. They have a problem with p’s which they pronounce as b’s”

Fear of the children’s responses also causes difficulties for the Arab Physical Education student-teachers, as defined by Y’, “Their fear of the children’s responses is what causes the Arab student’s difficulties. They come to the school with no confidence. I believe it would happen to the Jewish Physical Education student-teacher in an Arab school – the language difficulties and the need to adapt to another culture...it is hard for them to approach Jewish kids...they don’t know what they will get. I don’t think it has anything to do with politics.”

The main reason Jewish Physical Education student-teachers list for the differences in absorption in the Jewish school is that of language difficulties, just as the Arabs noted. They maintain the Arab Physical Education student-teachers find it hard to manage,
especially in front of the children, which leads to lack of confidence. R’ says, “At first, the difficulties were mostly expressed in language. The children corrected them and they were hurt.” According to the Jewish Physical Education student-teachers, there are no racist expressions, but there is a cognitive dissonance (as stated in the appropriate category).

In summary, it can be said there is a status quo regarding the relationships between the Arab and the Jewish Physical Education student-teachers in the college. Most student-teachers prefer proper, friendly relationships with mutual help. While most Arab Physical Education student-teachers are willing to continue their friendship with the Jews outside the college, the latter prefer to narrow the relationships to college grounds only, though there are other friendships as well as the Jewish tolerance of the Arab culture, but there is no doubt the friction with another culture leads to greater and better understanding. According to the Jewish Physical Education student-teachers, there is complete equality in the training school and the attitudes to the Arab student-teachers. The Jews show understanding of their language difficulties and adjustment to the school’s culture. There are sometimes racist remarks on the part of the children.

**IV.4. Summary of the Qualitative Findings**

The findings integrating the three research questions as presented in the beginning of this work reflect the perceptions of student-teachers from both the Arab and the Jewish sector, regarding their practicum in the Jewish training school. These perceptions form through the practicum in the Jewish school, where they are exposed to the school’s climate and culture on all their components: the pupils, the teachers, the principal, learning atmosphere and mostly, to the master-teachers with whom they develop good, warm relationships which help them develop professionally at teaching Physical Education.

Although the Arab student-teachers experience a cognitive dissonance upon their entry to the Jewish school, and since they come from one culture and enter another, they feel
satisfied with the practicum and integrate well into the Jewish school environment. They state the Jewish school contributed to their professional development more than the Arab school, so their perception of the practicum in the Jewish school is most positive, just like the Jewish student-teachers who regard the practicum as the most significant component of their teacher-education.

The first finding arising from the analysis of the interviews pertained to their choice to take up Physical Education.

In both sectors, the profession of Physical Education was chosen due to the Physical Education student-teachers’ love and interest. Some of the Physical Education student-teachers are active in sports, which led them to their studies.

The main categories arising from the Physical Education student-teachers’ interview pertaining to the first research question, regarding the Arab and the Jewish student-teachers’ perceptions of the practicum in the Jewish school are similar for both sectors. All Physical Education student-teachers perceive the practicum as a highly significant aspect of their training. They express wishes to spend more time in the training school so as to gain practical knowledge and teaching experience. This is where they actually become teachers (Zeichner, 1995). The Arab Physical Education student-teachers emphasize the issues of equipment and gymnasiums in the Jewish school as a significant aspect of their positive perception of the Jewish training school, whereas the Jewish Physical Education student-teachers take it for granted.

The issue of learning or attitude to the domain of Physical education also arose. Generally the Jewish school’s attitude to Physical Education is good and more serious than that of the Arab school. Personal responsibility and school responsibility of the Jewish school does not exist in the Arab school. This adds to a pleasant school climate. That is why the Arab Physical Education student-teachers want to practice in the Jewish school because they believe it will help them when they teach in the Arab sector, where they will introduce what they have learnt in the Jewish school.
Another issue in the finding is the Physical Education student-teachers’ relationship with the master-teachers. Normally, this relationship is good. The master-teachers are portrayed as supportive, encouraging and helpful. They are the ones that create the bridge between the Physical Education student-teachers and the learning environment. This reaffirms previous studies attributing many different features to the master-teachers as crutches to lean on, as counselors and supporting teaching figures (Hawkey, 1997), as role models (Koerner & Baumgartner, 2002), as coaches or guides (Stanulis & Russel, 1999). In addition, effective master-teachers may become sources for good advice, and echoes for the fears of teaching, and challengers of thinking about the act of teaching (Fairbanks et. al, 2000). The training school is more than a place to teach, as the master-teacher has far more responsibilities and roles than just teaching. The difference between Jewish and Arab Physical Education student-teachers is that the Jews feel more comfortable with the master-teachers and develop friendships with them, while the Arab Physical Education student-teachers get close to some extent, and get more help from them. This contributes to student-teachers from both sectors to perceive their stay at school positively.

The climate and the learning environment are also perceived positively. Most Physical Education student-teachers from both sectors feel welcome by the master-teachers, the staff and the pupils, though there were some cases where pupils insulted Arab Physical Education student-teachers. Physical Education student-teachers from both sectors experienced difficulties in the beginning, but the Arabs note some additional problems such as language difficulties and adjusting to the school. They also experience a cognitive dissonance regarding school culture and learning habits in the Jewish school, which is different in this respect from their own culture. The Jewish Physical Education student-teachers are also aware of this dissonance with their fellow Arab student-teachers. Nonetheless, the climate of the Jewish training school is perceived as positive, which also contributes to the student-teachers’ positive perception of their practicum.

Findings pertaining to the second research question, “What are the main issues of cognitive dissonance in the Arab student-teachers upon entering the practical experience
in the Jewish school?” reveal that the Arab student-teachers, indeed, experience a cognitive dissonance, created by the fact they come from a different culture and experience different customs and a different language. They have to behave in accordance with the school’s and the college’s culture. They believe there are many advantages to the Jewish school compared to the Arab one, which arouses the cognitive dissonance: When it comes to language, there are problems. The Arab Physical Education student-teachers’ mother tongue is Arabic, and they have to study, prepare lesson plans, teach and think in Hebrew. The terms used are in Hebrew, and they cannot translate them into Arabic. The problem arises when facing a class.

However, although they experience a cognitive dissonance, it does not affect their positive perceptions of the practicum in the Jewish training school, and they state their wishes to practice there. The Jewish student-teachers also notice the cognitive dissonance their Arab colleagues experience in the practicum in the Jewish school. They note the language difficulties and their difficulties in coping with the language in the lessons. They notice the dissonance in the Arab Physical Education student-teachers’ desire for equality, and their sensitivity, when they are called “Arabs”. This answers the research question pertaining to the cognitive dissonance.

Findings pertaining to the third research question, “How does the culture of origin influence the concepts of these student-teachers of their practicum?”

The issue of multiculturalism in school and in the college is quite intense. In college, the status quo between sectors is maintained and there are no political frictions. There are friendships between sectors. Generally, the Arab student-teachers are more willing to connect to the prevailing culture than the Jews to the Arab culture (El-Haj, 2996). Physical Education student-teachers from both sectors do not relate positively to the idea of having a separate Arabic speaking class. The Arabs regard it as a kind of discrimination, while the Jews regard it as lowering college standards by accepting student-teachers that are less worthy and putting them in a different class.
Physical Education student-teachers from both sectors emphasize the fact that they are treated equally by all factors in the college. They also note the cultures getting closer, even when it comes to the way they dress and in respecting Jewish ceremonies held in the college. The Jewish Physical Education student-teachers note respect in the Arab culture.

Finally, most of the evidence from the categories with both Arab and Jewish Physical Education student-teachers reveals:

- Identical perceptions of the practicum in the Jewish school on the practicum;
- The practicum is a central component of teacher-education, which is consistent with studies in the field;
- The master-teacher is perceived as a positive central figure bridging between cultures;
- There is a cognitive dissonance among the Arab student-teachers coming to teach in the Jewish school;
- The climate in the Jewish school is perceived as good and educational – much better than the climate in the Arab school;
- One culture (usually the Jewish culture) influences the other (the Arab)

All these points provide answers to the research questions and shed light on the research goals.

**IV.5. Quantitative Research Findings**

The qualitative research describes the reality as it is expressed in the interviews with the Physical Education student-teachers and their expressions of their views and attitudes. In the quantitative research I was able to increase the number of Physical Education student-teachers who answered the closed-ended questionnaires, whose statements were based on the interviews conducted in the first stage of the research.
Quantitative research seeks to expand and reinforce the findings of the qualitative research (Johnson & Onwuegbuzie, 2004), to enhance reliability and credibility and thus to enhance the ability to generalize.

This part of the research, the quantitative part, did not refer to the second research question about the Arab student-teachers’ cognitive dissonance, as many data were obtained in the qualitative part of the research and were analyzed and broadly discussed, so there was no need to expand on this issue.

The research focused on Jewish and Arab student-teachers’ perceptions of the practicum in Jewish elementary training schools. The data were gathered in the “Ohalo” multicultural college via questionnaires distributed to the Physical Education student-teachers. The sample is one of convenience. This survey included about 53% Arab Physical Education student-teachers (N=38) and about 47% Jewish student-teachers (N=34).

The questionnaires included statements evolving from the themes arising from the various categories, and pertaining to the student-teachers’ perceptions of the practicum on all of its aspects corresponding to the first research question; for instance, “The practicum day is important” or “good pupils’ discipline”. Other statements were developed from the themes engaging in the comparison between schools in the different sectors, such as: “There are differences between Physical Education lessons in the Jewish and in the Arab schools” “My culture interrupts me in my practicum in the Jewish school”, in accordance with the research questions (the complete questionnaire is in Appendix 1).

First the internal reliability of all research items was examined, to ensure Alpha Cronbach levels were indeed high enough (min. 0.6) to make sure the items constituting the questionnaires and measuring the world of contents relevant to this research. Internal validity (Alpha Cronbach of the significance of the practicum is 0.71. The internal reliability of the relationships between different cultures in the Jewish school during the practicum is 0.87. Hence, internal reliability is high enough to maintain that the items
constituting each of the measures (the significance of the practicum and the relationships between the cultures) indeed measure the world of contents, and validity is expert based.

IV.5.1. Reasons for Studying Physical Education

Student-teachers from both Jewish and Arab sectors were asked to list the reasons which caused them to take up Physical Education. This question sought to understand their backgrounds and their reasons for wanting to teach Physical Education, which would, in turn, clarify their perceptions and beliefs as expressed in the interviews and in the questionnaires.

Table 8 presents the distributions (in percentages) of the reasons for studying Physical Education for the entire sample and for Arab and Jewish student-teachers separately.

Table 11: Reasons for Studying Physical Education – The Entire Sample and According to Nationality (Means, S.D.)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Entire Sample(N=71)</th>
<th>Arab Student-teachers (N=38)</th>
<th>Jewish Student-teachers (N=33)</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>I love sport</td>
<td>4.85 .44</td>
<td>4.89 .31</td>
<td>4.79 .55</td>
<td>.99</td>
<td>49.24</td>
</tr>
<tr>
<td>I am active in sport</td>
<td>4.06 .92</td>
<td>3.92 .91</td>
<td>4.21 .93</td>
<td>-1.33</td>
<td>69</td>
</tr>
<tr>
<td>Family encouragement</td>
<td>3.73 1.32</td>
<td>4.13 .96</td>
<td>3.27 1.53</td>
<td>2.79**</td>
<td>52.54</td>
</tr>
<tr>
<td>Sports teacher are required in our sector</td>
<td>3.05 1.41</td>
<td>3.71 1.14</td>
<td>2.14 1.24</td>
<td>5.33**</td>
<td>64</td>
</tr>
</tbody>
</table>

**p<0.01

The following figure presents the comparison between the answers given by the Arab student-teachers and those of the Jewish student-teachers.
The highest mean score among all the participants was found regarding the statement “I love sport” as the main reason why they chose to study Physical Education (Mean 4.85), and so about 97% of all the participants gave the highest score to this statement (values 4 and 5); This was also found in the qualitative analysis and constitutes the main reason for enrolling in Physical Education studies.

On the other hand, the lowest score was found regarding the statement “Sports teacher are required in our sector” (3.05) and so only about 41% of all the participants gave the highest score to this statement; Here there were significant differences between the Arab student-teachers and the Jewish ones (3.71 compared to 2.14 respectively, t=5.33, p<0.01). Furthermore, there was a significant difference between Arab and Jewish student-teachers’ answers regarding the statement “Encouragement on the part of the family” – in the Arab sector the grade was higher than in the Jewish one (4.13 compared to 3.27 respectively, t=2.79, p<0.01)
IV.5.2. Findings Arising from the First Research Question

IV.5.2.1. Practicum in the Jewish School

According to the first research question regarding the Arab and Jewish student-teachers’ perceptions of their practicum in the Jewish training school, their attitudes to the practicum were examined. A comparison was made between Arab and Jewish student-teachers regarding the different parameters on the ratio scale. A T-Test was conducted to find significant differences between two groups (with no connection between them) pertaining to a dependent variable measured on a consecutive ratio scale. Table 9 presents the distributions.

Table 12: The Significance of the Practicum in the Jewish School - The Entire Sample and According to Nationality (Means, S.D.)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Entire Sample (N=71)</th>
<th>Arab Student-teachers (N=38)</th>
<th>Jewish Student-teachers (N=33)</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>The practicum is important</td>
<td>4.72</td>
<td>.56</td>
<td>4.76</td>
<td>.54</td>
<td>4.68</td>
</tr>
<tr>
<td>Physical Education is important in the Jewish school</td>
<td>4.56</td>
<td>.67</td>
<td>4.55</td>
<td>.60</td>
<td>4.56</td>
</tr>
<tr>
<td>God School Atmosphere</td>
<td>4.29</td>
<td>.66</td>
<td>4.24</td>
<td>.63</td>
<td>4.35</td>
</tr>
<tr>
<td>Pupils are responsible for activities in the breaks</td>
<td>3.48</td>
<td>1.03</td>
<td>3.58</td>
<td>1.13</td>
<td>3.36</td>
</tr>
<tr>
<td>Teachers listen to the pupils</td>
<td>3.86</td>
<td>.88</td>
<td>3.87</td>
<td>.88</td>
<td>3.85</td>
</tr>
<tr>
<td>Good pupils’ discipline</td>
<td>3.92</td>
<td>.91</td>
<td>3.78</td>
<td>.95</td>
<td>4.06</td>
</tr>
<tr>
<td>Proper conditions and equipment for Physical Education</td>
<td>4.28</td>
<td>.80</td>
<td>4.34</td>
<td>.78</td>
<td>4.21</td>
</tr>
<tr>
<td>Professional Master-teacher</td>
<td>4.46</td>
<td>.69</td>
<td>4.58</td>
<td>.60</td>
<td>4.32</td>
</tr>
</tbody>
</table>
Figure 22 presents the comparison between the Jewish and the Arab student-teachers regarding the significance of the practicum in the Jewish school.

**Figure 22: Practicum in the Jewish School**

<table>
<thead>
<tr>
<th>Level of Mean Significance of Statement Regarding the Practicum in the Jewish School - Comparing Jewish and Arab Student-Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student-Teachers</strong></td>
</tr>
<tr>
<td>Master teacher</td>
</tr>
<tr>
<td>Conditions and equipment</td>
</tr>
<tr>
<td>Good discipline</td>
</tr>
<tr>
<td>Teachers listen to the pupils</td>
</tr>
<tr>
<td>Pupils are responsible for the breaks</td>
</tr>
<tr>
<td>Good atmosphere</td>
</tr>
<tr>
<td>Physical Education Profession</td>
</tr>
<tr>
<td>Practicum</td>
</tr>
</tbody>
</table>

The highest mean significance within the entire sample was found with regards to the statement “the practicum is important”. About 94% of all the participants gave the highest score to this statement (values 4 and 5); it is important to note that no significant statistical differences were found regarding the level of importance of the statements examined in this research.

Here, too, the findings confirm the qualitative findings regarding the significance of the practicum to student-teachers from both sectors, and their positive perceptions of the practicum. All statements in this table received high grades and testify to this significance.
IV.5.2.2. Physical Education Student-Teacher and Master-teacher Relationship in the Jewish School

These findings also pertain to the first research question, since the master-teachers constitute a significant part of the practicum, and their relationships with the student-teachers affect the way the student-teachers perceive the practicum in the Jewish school.

Table 10 presents the perceptions of the student-teachers’ relationships with the master-teachers for the entire sample and for each sector separately.

Table 13: Student-teachers – master-teachers’ relationships in the Jewish School - The Entire Sample and According to Nationality (Means, S.D.)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Entire Sample (N=71)</th>
<th>Arab Student-teachers (N=38)</th>
<th>Jewish Student-teachers (N=33)</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>The master-teacher helps me prepare my lesson plans**</td>
<td>2.79</td>
<td>1.39</td>
<td>3.18</td>
<td>1.31</td>
<td>2.33</td>
</tr>
<tr>
<td>The master-teacher always provides feedback on my lessons</td>
<td>3.93</td>
<td>1.14</td>
<td>4.08</td>
<td>.91</td>
<td>3.76</td>
</tr>
<tr>
<td>The master-teacher advances me in teaching</td>
<td>4.08</td>
<td>.87</td>
<td>4.26</td>
<td>.76</td>
<td>3.88</td>
</tr>
<tr>
<td>I feel the master-teacher guides me properly**</td>
<td>4.06</td>
<td>1.00</td>
<td>4.37</td>
<td>.75</td>
<td>3.70</td>
</tr>
<tr>
<td>The master-teacher is always available*</td>
<td>3.94</td>
<td>1.04</td>
<td>4.18</td>
<td>.90</td>
<td>3.67</td>
</tr>
<tr>
<td>The master-teacher treats me like all the other Physical Education student-teachers</td>
<td>4.24</td>
<td>.98</td>
<td>4.32</td>
<td>.87</td>
<td>4.15</td>
</tr>
<tr>
<td>The master-teacher understands my difficulties</td>
<td>4.11</td>
<td>.98</td>
<td>4.16</td>
<td>.89</td>
<td>4.06</td>
</tr>
<tr>
<td>The master-teacher treats me well</td>
<td>4.48</td>
<td>.67</td>
<td>4.61</td>
<td>.55</td>
<td>4.33</td>
</tr>
<tr>
<td>The master-teacher is my role model*</td>
<td>3.86</td>
<td>1.19</td>
<td>4.18</td>
<td>.80</td>
<td>3.48</td>
</tr>
</tbody>
</table>

**p<0.01 *p<0.05
Figure 23 presents the level of agreement with statements regarding relationships with the master-teachers according to sectors: Jewish and Arab.

**Figure 23: Relationship with the Master-Teacher**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Arab Physical Education Student-Teachers</th>
<th>Jewish Physical Education Student-Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>The master teacher helps me plan my lesson plans</td>
<td>3.18</td>
<td>2.33</td>
</tr>
<tr>
<td>The master teacher always provides feedback on my lessons</td>
<td>4.08</td>
<td>3.76</td>
</tr>
<tr>
<td>The master teacher advances me in teaching</td>
<td>4.26</td>
<td>3.88</td>
</tr>
<tr>
<td>I feel the master teacher guides me properly</td>
<td>4.37</td>
<td>3.70</td>
</tr>
<tr>
<td>The master teacher is always available</td>
<td>4.18</td>
<td>3.67</td>
</tr>
<tr>
<td>The master teacher treats me like all other students</td>
<td>4.32</td>
<td>4.15</td>
</tr>
<tr>
<td>The master teacher understands my difficulties</td>
<td>4.16</td>
<td>4.06</td>
</tr>
<tr>
<td>The master teacher treats me well</td>
<td>4.61</td>
<td>4.33</td>
</tr>
<tr>
<td>The master teacher always provides feedback on my lessons</td>
<td>4.18</td>
<td>3.48</td>
</tr>
</tbody>
</table>

Regarding this issue, findings pertaining to statements regarding student-teachers’ relationships with their master-teachers reveal that the highest rate of agreement among all the Physical Education student-teachers who participated in the research concerned the statement “**The master-teacher treats me well**” (4.48); In this way about 93% of all the participants gave the highest score to this statement (values 4 and 5); On the other hand, the lowest rate of agreement concerned the statement “**The master-teacher helps me prepare my lesson plans**”, and so only about 31% of the participants gave the highest score to this statement;
In addition, both Arab and Jewish Physical Education student-teachers gave the highest scores to the statement “The master-teacher treats me well” (4.61 and 4.33 respectively). On the other hand, “The master-teacher helps me prepare my lesson plans” was found to be the least important factor in both sectors (3.18 and 2.33 respectively);

The research findings reveal significant differences between Arab Physical Education student-teachers and Jewish ones with regards to their agreement with the different statements pertaining to the relationships between Physical Education student-teachers and training teachers in the Jewish school,

- So the Arab Physical Education student-teachers’ agreement with the statement “The master-teacher helps me prepare my lesson plans” was scored significantly higher than among the Jewish Physical Education student-teachers (3.18 compared to 2.33 respectively, t=2.68, p<0.01);
- So the Arab Physical Education student-teachers’ agreement with the statement “I feel the master-teacher guides me properly” was scored significantly higher than among the Jewish Physical Education student-teachers (4.37 compared to 3.70 respectively, t=2.90, p<0.01);
- In addition, the Arab Physical Education student-teachers’ agreement with the statement “The master-teacher is always available” was scored significantly higher than among the Jewish Physical Education student-teachers (4.18 compared to 3.67 respectively, t=2.14, p<0.05);
- Finally, the Arab Physical Education student-teachers’ agreement with the statement “The master-teacher is my role model” was scored significantly higher than among the Jewish Physical Education student-teachers (4.18 compared to 3.48 respectively, t=2.48, p<0.05);

In summary, we can see that most statements in this question received higher scores with the Arab student-teachers than with the Jewish ones, a fact which reaffirms the qualitative research findings. Furthermore, the master-teachers’ good relationships with all the
student-teachers also constitute a significant factor in their perception of the practicum in the Jewish training school.

### IV.5.2.3. Differences between the Practicum in the Jewish School and in the Arab School

These findings are presented in Table 5 and Figure 4 and reveal the differences between the Jewish training school and the Arab training school as perceived by the student-teachers, as they have practiced in both types of schools. These differences contribute to the Arab student-teachers’ perceptions of the practicum in the Jewish school (the first research question).

A $\chi^2$ test was conducted so as to find significant differences between Arab student-teachers and their agreement / disagreement with statements pertaining to the practicum in the Jewish school and the Arab school.

#### Table 14: Differences between the practicum in the Jewish School and in the Arab School – Arab Physical Education student-teachers only (Percentage)

<table>
<thead>
<tr>
<th>Arab Physical Education student-teachers only</th>
<th>Agree</th>
<th>Disagree</th>
<th>total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>My mother tongue helps me teach in the Jewish School</td>
<td>30.56%</td>
<td>69.44%</td>
<td>100%</td>
<td>N=36</td>
</tr>
<tr>
<td>I know sports terms in Hebrew</td>
<td>94.74%</td>
<td>5.26%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>I know sports terms in Arabic</td>
<td>52.63%</td>
<td>47.37%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>In the Jewish school they behave differently from the Arab school</td>
<td>60.53%</td>
<td>39.47%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>I participate in the Jewish ceremonies in the college</td>
<td>84.21%</td>
<td>15.79%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>I participate in the Jewish ceremonies in the school</td>
<td>68.24%</td>
<td>31.58%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>I am hurt if children at school call me ‘An Arab’</td>
<td>50.00%</td>
<td>50.00%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>My original culture is different from the one at school Discipline in the Jewish school suits my views</td>
<td>57.89%</td>
<td>42.11%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>Discipline in the Jewish school suits my views</td>
<td>48.65%</td>
<td>51.35%</td>
<td>100%</td>
<td>N=38</td>
</tr>
<tr>
<td>There are differences between Physical Education lessons in the Jewish sector and in the Arab one</td>
<td>78.95%</td>
<td>21.5%</td>
<td>100%</td>
<td>N=37</td>
</tr>
</tbody>
</table>
The findings reveal that the Arab student-teachers are well acquainted with sports terms in Hebrew (94.74%), and they participate in the school and college life (84.21%). According to the Arab student-teachers there are differences in the Physical Education lessons behavior between the Jewish school and in the Arab school. Their mother tongue does not help them in the Jewish school (31%), and there are differences in the behavior of the pupils in the Jewish school compared to the Arab school (60.58%). They are often hurt when pupils refer to them as “Arabs” (50%).

Figure 25 presents the findings pertaining to differences in the school climate in the Jewish and the Arab schools. The findings answer the first research question and also relate to the school’s culture.
Findings regarding the school climate reveal that the highest rate of agreement among Arab Physical Education student-teachers concerned the following statements:

- “In the Jewish School they have a Physical Education culture” (about 84%);  
- “It is important to feel at home in school” (about 82%);  
- “In the Jewish School they give responsibility to pupils” (about 82%)
On the other hand, the lowest rate of agreement concerned the statement “In the Arab School they have a Physical Education Culture” (about 47%); Discipline in the Arab school is stricter (60.53%) and respect for teachers (55.26%).

These findings shed a positive light on the Arab student-teachers’ perceptions of the Jewish training school and answer the first research question.

**IV.6. Findings Arising from the Third Research Question**

The findings relate to the third research question asking “How does the culture of origin influence the concepts of these student-teachers of their practicum?”

**IV.6.1. Relationships between the Different Cultures in the Practicum in the Jewish Training School**

Significant differences between the two sectors were examined regarding statements engaging in the relationships between the different cultures in the practicum in the training school. The differences were examined via a $\chi^2$ test.
Table 15: Relationships between the different cultures - the practicum in the training school - The Entire Sample and According to Nationality (Percentage)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Entire Sample</th>
<th>Arab Student-teachers</th>
<th>Jewish Student-teachers</th>
</tr>
</thead>
</table>
| The school teachers treat the Jewish and Arab Physical Education student-teachers equally | Agrees        | 82.46%                | 85.71%                  | 77.27%                  | .67  
|                                                                           | Disagree      | 17.54%                | 14.29%                  | 22.73%                  |  
| The pupils treat the Jewish and Arab Physical Education student-teachers equally | Agrees        | 56.60%                | 52.94%                  | 63.16%                  | .52  
|                                                                           | Disagree      | 43.40%                | 47.06%                  | 36.84%                  |  
| The master-teacher treats the Jewish and Arab Physical Education student-teachers equally | Agrees        | 81.48%                | 84.85%                  | 76.19%                  | .64  
|                                                                           | Disagree      | 18.52%                | 15.15%                  | 23.81%                  |  
| There are racist expressions on the part of the pupils                    | Agrees        | 46.15%                | 60.00%                  | 17.65%                  | 8.26**  
|                                                                           | Disagree      | 53.85%                | 40.00%                  | 82.35%                  |  
| The pupils do not cooperate with Arab Physical Education student-teachers | Agrees        | 20.00%                | 19.35%                  | 21.05%                  | .02  
|                                                                           | Disagree      | 80.00%                | 80.65%                  | 78.95%                  |  
| The Jewish school culture resembles the one of the Arab school            | Agrees        | 17.78%                | 15.63%                  | 23.08%                  | .35  
|                                                                           | Disagree      | 82.22%                | 84.38%                  | 76.92%                  |  
| My original culture bothers my practicum in the Jewish school             | Agrees        | 16.67%                | 18.75%                  | 10.00%                  | .42  
|                                                                           | Disagree      | 83.33%                | 81.25%                  | 90.00%                  |  

**p<0.01
The highest rate of agreement concerned the statement “The school teachers treat the Jewish and Arab Physical Education student-teachers equally” (about 82.5%). And “The master-teacher teachers treats the Jewish and Arab Physical Education student-teachers equally” (about 81.5%);
On the other hand, the findings reveal that according to student-teachers from both sectors, pupils treat Arab student-teachers worse than they treat other teachers.

As for the school culture, the lowest rate of agreement with the statements “The Jewish school-culture resembles that of the Arab school” (about 18%) and “My original culture bothers my practicum in the Jewish school” (about 17%). In other words, according to the Arab student-teachers, the Jewish school’s culture does not resemble that of the Arab school, and their original culture does not hinder their entry into the Jewish culture nor does it affect the culture of the training school. This information answers the third research question.

Furthermore, the findings reveal significant statistical differences regarding the Arab and Jewish Physical Education student-teachers’ agreement with the following statement: “There are racist expressions on the part of the pupils”. The rate of Jewish student-teachers who agree with the statement was found to be significantly lower than the of the Arab student-teachers (about 18% compared to about 60% respectively; p<0.01; \( \chi^2 = 8.26 \));

IV.6.2. Relationships between the Different Cultures in the College

These findings also pertain to the research question regarding the original culture in comparison with the culture to which the student-teachers enter in their studies.

Significant differences between the two sectors were examined regarding statements engaging in the relationships between the different cultures in the practicum in the training school. The differences were examined via a \( \chi^2 \) test.
**Table 16: Relationships between the different cultures in college - The Entire Sample and According to Nationality (Percentages)**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Entire Sample</th>
<th>Arab Student-teachers</th>
<th>Jewish Student-teachers</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teachers treat the Jewish Physical Education student-teachers and the Arab ones equally.</td>
<td>Agree 70.77% 46 66.67% 75.86%</td>
<td>Disagree 29.23% 19 33.33% 24.14%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have Jewish /Arab friends in the college</td>
<td>Agree 100.00% 68 100.00% 100.00%</td>
<td>Disagree 33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendship with Arab /Jewish Student-teachers is limited to college grounds only</td>
<td>Agree 50.77% 32 38.24% 64.52%</td>
<td>Disagree 49.23% 7 61.76% 35.48%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am not interested in social ties with Arab /Jewish Physical Education student-teachers</td>
<td>Agree 12.50% 49 8.82% 18.18%</td>
<td>Disagree 87.50% 52 91.18% 81.82%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am interested in learning about the Arabs /Jews culture and customs</td>
<td>Agree 89.66% 6 96.97% 80.00%</td>
<td>Disagree 10.34% 37 3.03% 20.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am willing to live with an Arab /Jewish partner in the dorms</td>
<td>Agree 69.81% 16 91.18% 31.58%</td>
<td>Disagree 30.19% 56 8.82% 68.42%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I need help with materials I do not hesitate to turn to an Arab /Jewish Physical Education student-teacher</td>
<td>Agree 84.85% 10 80.56% 90.00%</td>
<td>Disagree 15.15% 31 19.44% 10.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It bothers me that Jewish / Arab Physical Education student-teachers get together in groups</td>
<td>Agree 52.54% 28 55.88% 48.00%</td>
<td>Disagree 47.46% 15 44.12% 52.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It bothers me that Arab / Jewish Physical Education student-teachers use their language in class</td>
<td>Agree 32.61% 31 16.00% 52.38%</td>
<td>Disagree 67.39% 46 84.00% 47.62%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<0.01  *p<0.05**
Figure 27: Relationship between the Cultures in the College

The highest agreement rate concerned the statement “I have Jewish / Arab friends in the college” (100%). In other words, all participants agree with this statement.

On the other hand, the lowest rate of agreement concerned the statement “I am not interested in social ties with Arab / Jewish student-teachers” (12.5%);
In addition, both Arab and Jewish Physical Education student-teachers have agreed with the statement “I have Jewish /Arab friends in the college”. On the other hand, “I am not interested in social ties with Arab / Jewish student-teach” was found to be the lowest in both sectors (about 9% and 18% respectively); this reveals that the cultures in the college mix.

Furthermore, the findings reveal significant statistical differences regarding the Arab and Jewish Physical Education student-teachers’ agreement with the following statements:

- The rate of Jewish student-teachers who agree with the statement “Friendship with Arab /Jewish student-teachers is limited to college grounds only” was found to be significantly higher than the of the Arab student-teachers (about 64.5% compared to about 38% respectively; p<0.05; $\chi^2=4.48$);
- The rate of Arab student-teachers who agree with the statement “I am interested in learning about the Arabs /Jews culture and customs” was found to be significantly higher than the of the Jewish student-teachers (about 97% compared to about 80% respectively; p<0.05; $\chi^2=4.42$);
- The rate of Arab student-teachers who agree with the statement “I am willing to live with an Arab / Jewish partner in the dorms” was found to be significantly higher than the of the Jewish student-teachers (about 91% compared to about 32% respectively; p<0.01; $\chi^2=20.54$);
- The rate of Jewish student-teachers who agree with the statement “It bothers me that Arab / Jewish Physical Education student-teachers use their language in class” was found to be significantly higher than the of the Arab student-teachers (about 52% compared to about 16% respectively; p<0.01; $\chi^2=6.87$);

These findings reveal that the minority culture, the Arab student-teachers, is more interested in learning about the majority culture. Despite declarations about friendships, there are still differences on the personal level between the two cultures.
IV.7. Summary of the Quantitative Research

The quantitative research seeks to expand the knowledge presented in the qualitative research. 72 questionnaires which were filled by Physical Education student-teachers from both Jewish and Arab sectors were analyzed. The findings reaffirmed those of the qualitative research.

According to the Physical Education student-teachers’ perceptions of the practicum, the central question in this research, the first research question, 94% of all participants attributed great significance to the practicum, meaning nearly all participants perceive this day as essential to their training.

84% of the Arab Physical Education student-teachers claimed that there is a Physical Education learning culture in the Jewish school (compared to the learning culture in the Arab school). The pupils get more responsibility.

Furthermore, mastery of sports concepts in Hebrew makes the Arab Physical Education student-teachers feel more comfortable in the Jewish school despite cultural differences. Both Arab and Jewish Physical Education student-teachers have good relationships with their master-teachers. About 81.5% of the Physical Education student-teachers revealed that the master-teachers treat the Jewish and Arab Physical Education student-teachers equally. Arab Physical Education student-teachers gave higher grades to the master-teachers in most statements than did the Jewish Physical Education student-teachers.

As for racism in school, the research findings reveal that there are significant differences regarding the Arab and the Jewish Physical Education student-teachers’ agreement about racist expressions in school. So the rate of Jewish student-teachers who agree with this claim was found to be significantly lower than that of the Arab Physical Education student-teachers (about 18% compared to 60%), and hence it can be said that the Jewish Physical Education student-teachers do not see racist expressions in their time in the Jewish school with their Arab peers, while the Arabs feel the racism.
Regarding culture, the third research question, the research sought to find whether the Arab student-teachers’ original culture influences the prevailing culture. It was found that the Jewish student-teachers were less inclined to be interested in the Arab student-teachers’ culture, whereas the latter are more interested in learning about the Jewish culture. 57% of the Arab student-teachers noted their culture was different from that of the school’s. They enter their practicum in the prevailing majority culture and accept it (which is one of the causes of the cognitive dissonance which they experience, as found in the qualitative research).

In summary, most of the findings deriving from the different statements reveal:

- Common perceptions of the issues of practicum in the Jewish school on the practicum.
- These perceptions place the practicum as the main aspect of the teachers’ training, which is in line with other studies about the issue as well as the findings of the qualitative research here.
- The master-teacher is perceived as a positive central figure that serves as a bridge between the cultures.
- The climate of the Jewish school is perceived as a better learning and educational climate than that of the Arab school.
- One culture, mostly the Jewish one, influences the other culture (the Arab).

All these points answer the research questions and shed light on the research goals, just like in the qualitative research. Furthermore, the research hypotheses as presented in the beginning of this chapter have been reaffirmed.
IV.8. Integration of Findings Arising from the Qualitative and the Quantitative Parts of the Research

The findings of both parts of the research complement each other. The respondents of the quantitative research supported the findings arising from the qualitative research and expanded them. Based on the three research questions, the integrated research findings reveal regarding the first research question, “What are the perceptions of Jewish and Arab Physical Education student-teachers about the practicum in the training Jewish school?” the findings reveal:

1. A positive perception of the practicum. Both Jewish and Arab Physical Education student-teachers note that the practicum is of the utmost significance to their training and even recommend that they get two practicum days;
2. The master-teacher’s attitude to the Physical Education student-teachers contributes to the perception of the practicum’s significance and both qualitative and quantitative findings reveal that both Arab and Jewish Physical Education student-teachers appreciate the master-teacher who helps them at school.
3. The master-teacher is perceived as a positive central figure that serves as a bridge between the cultures during the practicum in the Jewish school.
4. The Arab Physical Education student-teachers perceive the Jewish school climate to be better than that of the Arab school, and the same goes for the equipment and teaching conditions – these, too, contribute to the perception of the practicum in the Jewish school as more beneficial to their training.

These findings also reaffirm the research hypothesis maintaining that Jewish and Arab Physical Education student-teachers have the same perceptions regarding the practicum in the Jewish training school; Both Jewish and Arab student-teachers perceive the practicum as a major aspect of their teacher-education process.
Findings pertaining to the second research question, “What are the main issues of cognitive dissonance in the Arab student-teachers upon entering the practical experience in the Jewish school?” reveal:

5. The Arab Physical Education student-teachers seek to assimilate in the Jewish society and be “equal”, which they get from the school staff and their master-teachers, although aspects of this culture, such as language, customs and ceremonies, cause a cognitive dissonance;

6. Pupils sometime utter racist expressions which bother the Arab Physical Education student-teachers, which causes a cognitive dissonance;

7. Cognitive dissonance is experienced by the Arab student-teachers as they come from the culture of the Arab school and practice in that of the Jewish school, where they have to teach and experience lack of respect and discipline problems on the part of the pupils.

These findings pertaining to the second research question reaffirm the research hypothesis maintaining that the original culture of the Arab student-teachers creates a cognitive dissonance when practicing in a Jewish training school with a different culture.

Findings pertaining to the third research question, “How does the culture of origin influence the concepts of these student-teachers of their practicum?” reveal:

8. Jewish Physical Education student-teachers are less interested in the Arab Physical Education student-teachers’ culture, while the latter are more willing to learn about the Jewish culture.

9. Seldom does the Arab Physical Education student-teachers’ original culture help them teach in the Jewish school, and more often it bothers them (discipline and respect issues).

10. Mastering sports terms in Hebrew makes them feel more comfortable in the Jewish school despite cultural differences.
The findings pertaining to the third research question also reaffirm the research hypothesis maintaining that the Arab student-teachers’ culture of origin does not influence on their perception on the practicum.

In summary of the findings chapter, analysis of the qualitative and quantitative parts of the research yielded similar categories and findings, answering the research questions. The main finding reveals that Physical Education student-teachers from both sectors perceive the practicum in the Jewish school positively and emphasize its significance in the course of their teacher education. The master-teachers’ attitudes and the school’s culture and climate contribute to this perception.

The findings also reveal the cognitive dissonance experienced by the Arab student-teachers upon entering their practicum in the Jewish school. Coming from one culture and practicing in another constitutes one of the causes of this dissonance. Nevertheless, the findings reveal that despite this dissonance, the Arab student-teachers prefer to practice in the Jewish school because of the staff’s positive and encouraging attitude to them and the serious attitude to Physical Education.

Additionally, the findings reveal that the Arab student-teachers’ culture of origin hardly influences their perceptions of the practicum, and that they seek to integrate into the majority culture both in the college and in the training school.

The following chapter will discuss the findings in more depth.

**IV.9. Discussion of the Findings**

The research focused on Jewish and Arab Physical Education student-teachers perceptions of the practicum in Jewish training schools.

The practicum is part of the teacher education program. It is my belief that student-teachers’ perceptions regarding the processes of their training have to be exposed, so as to be able to develop effective teacher education programs, which, in turn, will result in
better training for the student-teachers. Korthagen (2004) suggests that student-teachers have to spend time in roper surroundings so as to help them become familiar with it, and this will develop them professionally. It is also important to expose the perceptions of student-teachers from one sector training in a different sector’s school. **This is a gap in knowledge, and therefore, this research is unique and innovative.**

The conceptual framework of this research relies on teaching theories in education in general and in Physical Education in particular (Kagan, 1993; Zeichner, Sidentop Sindrop, 2000), as well as on theories pertaining to teacher education (Kagan, 1993; Zeichner, 1990; Zilberstein, 2005). Since the research population consisted of Physical Education student-teachers from both the Jewish and the Arab sectors, the research was also based on theories regarding **multiculturalism** (El-Haj, 1996, 2004; Samocha, 2001) where the emphasis was on the practicum in teacher education (Zeichner, 2010; Korthagen, 2001, 2004) and the entry of a student-teacher from one sector into a school from the other sector, resulting in a **cognitive dissonance.**

The main findings arising from this research reveal the perceptions of Physical Education student-teachers from both sectors regarding their practicum, the difficulties experienced by Arab student-teachers compared to the Jewish ones, who practice in their own sector, and the cognitive dissonance arising from these difficulties. Furthermore, the findings reveal the influence of the student-teachers’ original culture on their perceptions as Arab students in a multi-cultural Jewish college.

The main findings will be introduced according to the three research questions, and then each question will be discussed separately.
IV.10. Discussion of Findings according to Research Questions and Hypotheses

IV.10.1. Perceptions of the Practicum

The first research question and the first and second hypothesis pertain to the perceptions of Arab and Jewish Physical Education student-teachers regarding the practicum in the Jewish training school.

The findings reveal that both Jewish and Arab student-teachers related to the practicum equally (about 94% of all student-teachers), as being of the utmost significance in the course of their training.

This can be explained in the wider context of the practicum. The practicum means applying theoretical knowledge into practice, and it is reality, where the student-teachers’ are assessed whether they are suitable for teaching children. That is where the student-teachers cope with practical teaching on all its components, but this coping provides the real picture rather than the utopian image they get from their theoretical studies in college.

The student-teachers study in a fruitful manner, while engaging in professional encounters with experienced teachers, in a way of activity and experience. According to the Arab and Jewish student-teachers, the connection to the practicum, is the most important, and has to exist even at the expense of theory, as only this coping in the field will teach them how to be teachers. Hence the significance of spending time in the training school is great, though far from being easy, as stated in the following quote:

“The beginning was not easy. A great deal depends on your master-teacher. She is the one that pushes you.”

In other words, even the Jewish student-teachers, who are familiar with the school surroundings since the time they were pupils, do not find it easy, what with the Arab
student-teachers, who come from another culture. Nonetheless, they all regard the practicum, as very important.

It seems, then, that the major factor in the positive perception of the practicum, is the mere need for practical experience in class with the pupils and coping with the reality of the school on all its domains (master-teachers, school culture and organization, pupils, parents and staff), rather than theoretical studies in college.

In Physical Education, then, the responsibility of teacher education programs ought to be responsible for providing the student-teachers with opportunities whereby they can experience teaching and learning situations and construct knowledge for future use. The goals of teaching Physical Education seek to provide contents and skills in the motor, emotional and cognitive domains’ to practice bodily skills and preserve them throughout life, when the pupil will engage in sports and maintain a healthy life style. These goals require Physical Education student-teachers to gain teaching skills that will help them plan, organize, manage and assess the Physical Education lessons. These skills will, in turn, lead the student-teachers to reach the goals of the subject. All these will be acquired via observations and practical teaching in the training schools (Hativa, 2003; Yariv, 1999; Sidentop & Tannechi, 2000).

My experience in the field reveals that student-teachers from all sectors connect better and understand teaching events in class when they teach and spend time in school. We witness that during the week of consecutive practicum, when they append time in school every day.

A previous study I conducted regarding the practicum in teaching Physical Education reveals that the students regard the practicum as the most important factor in their training and recommend that this part of their teacher education be expanded at the expense of theoretical studies (Hadari, 2003).

This finding reaffirms findings presented in teacher education literature (Korthagen, 2001). Korthagen believes that school is where the student-teachers encounter teachers’
daily problems; they learn to cope with discipline problems in the field, rather than in theory. In another study, Korthagen (2004) maintains it is important to provide a worthy learning environment to the student-teachers so as to help prospective teachers to become familiar with the school’s surroundings for their professional development. Shulman (1986) described the practicum as the application of theory into practice. Zilberstein (1998) also discusses the significance of the practicum and about applying theoretical knowledge so as to turn it into practical knowledge.

Zeichner (1995) attributes broad meanings to the practical experience. The student-teachers observe teachers, experience and get to know the “real world” of teaching. Working in the field exposes the prospective teachers to the act of teaching. In his article about rethinking the relationship between the teacher education college and the training school (2010), Zeichner states that the practicum is a major component of teacher-education. Taking the practicum and its goals for granted limits their value as learning opportunities and raise the need to rethink how to turn them into effective learning environments and stepping stones for teacher research.

Studies asking how teachers learnt how to be teachers found that teachers say “by teaching in practice”. Hence, great significance is attributed in the teacher education to the practicum, and it is student-teachers’ belief a professional teacher is one who learns from teaching, not one who learns from academic courses about teaching (Darling Hammond, 2000). Most teachers believe that the courses in college are too theoretical and do not suit the school and class reality (Johnston, 1992).

Shkedi (2009) believes that student-teachers arrive at the college with a good deal of knowledge and concepts about the work of teaching. It is doubtful that the case is the same in other professions. As pupils in school, the student-teachers saw the teachers at work and learnt about teaching what Lortie (1975) calls “apprenticeship via observation” – this is an observation process that takes place without intent, and even unconsciously, and it is actually the first encounter that future teachers have had with the world of teaching.
Research reveals that many teachers stated that their process of training included courses that were too theoretical and were not at all connected to school reality. Goodlad (1990) also notes the significance of the practicum as a major factor in the training of prospective teachers. Zilberstein (2005), discussing the worthy teacher, claims the practicum is what influences the teacher and shapes his or her training towards the status of a worthy teacher. That is where they learn class management, deal with discipline and the entire learning process. According to the teachers, there is no substitute to teaching in practice (Furlong et. al, 2000). Reforms in teacher education in England determine that prospective teachers had to spend 80% of their training time in the schools. In the United States, as well, training schools have adopted the P.D.S model (Professional Development School), acknowledging the significance of practice in the schools.

An additional factor in the student-teachers’ positive perception of the practicum day is the technical domain – the equipment and conditions of learning. The student-teachers mentioned them positively; the Arab student-teachers are well aware of the fact that their education system lags behind the Jewish one and the Arab student-teachers even compared the situation to the one in the Arab sector, where lack of equipment and conditions cause them not to want to experience in their natural surroundings.

The Jewish school has a good image and seems like a good place to practice in contrast to the Arab school. This finding is supported in the literature in Zaharka’s article (2007), where he states that the Physical Education facilities in the Arab sector lag far behind those of the Jewish sector.

Abu-Asba (2008) also compares Jewish and Arab education and states that the Arab local authorities dire economic situation does not enable them to provide proper education services to Arab schools, and hence the lack of equipment and learning facilities. This lack is also mentioned in Arar’s article (2009). Some of the Arab high schools and most primary schools lack sports facilities, gymnasiums and courts for physical activity. This makes it hard to manage consecutive, serious Physical Education lessons.
The relationships with the master-teacher influence the student-teachers’ positive attitudes to the practicum. The findings reveal that the student-teachers from both sectors have expressed great satisfaction with the help and practice they get, as well as with guidance and help in preparation for teaching, helping the student-teachers’ with their lesson plans, and providing feedback. During the practicum, an atmosphere of friendship and mutual fertilization, and these relationships continue also after the practicum ends, as stated by one of the Jewish student-teachers: “I am still in touch with her, I borrow equipment and she still helps me.”

The treatment the Jewish and Arab student-teachers receive is identical, meaning the master-teacher focuses on guiding the student-teacher regardless of the sector from which this student-teacher comes.

Arab student-teachers ranked the statements pertaining to their relationships with the master-teachers than did their Jewish colleagues. The research findings reveal significant differences between Arab and Jewish student-teachers as to their agreement or lack of agreement with the various statements regarding the relationships between the master-teachers in the Jewish school, such as help in preparing the lesson plans, proper guidance and being role models.

In their interviews, the Arab student-teachers claimed that the treatment of Arab master-teachers is not like that of Jewish master-teachers. The greater support comes from the Jewish master-teachers. This can be attributed to the rigid, hierarchic type of education that is more emphasized in Arab schools than in Jewish ones (Zirzur, 1999; Arar, 2006). Israeli Arab society is essentially patriarchal, due to its history as a rural, traditional and conservative society. Its education system is a mirror of the overall Arab society, mostly the local one (Zaharka, 2007). An example is provided by one of the student-teachers: “We sit and laugh a little. I don’t because he is not my master-teacher and I am not used to talking and laughing with him.” The Arab student-teacher is not used to master-teachers sitting with him like friends. This is not something he was accustomed to in the culture from which he came. The master-teachers are often regarded as people who are
very close to the student-teachers: “We have a great relationship. She treats me like her son.”

In addition, the student-teachers encounter conflicts which characterize the practicum day, such as autonomy in teaching on the one hand, and expectations of focused guidance and help from the master-teacher on the other hand. A master-teacher who allows autonomy to the student-teachers develops their sense of responsibility and the ability to make decisions. In the Jewish sector, this autonomy is given by master-teachers, while in the Arab sector, this does not happen often, and hence the Arab student-teachers’ great appreciation of their Jewish master-teachers.

This finding is supported in the literature pertaining to the influence of master-teachers on the practicum process. Research posits that the master-teacher is closer to the student-teacher than any other figure in the teacher education process. The master-teacher affects the student-teacher’s professional development, shaping the student-teacher’s attitudes to teaching and his or her role as an educator (Stansbury & Zimmerman, 2000). The master-teacher’s role is central and of the utmost significance in the process of training (Ziv, 1990). It has influence over the student-teacher’s attitudes and behavior (Coster, Korthagen and Obiles, 1998). The master-teacher is the one who opens the class door to the student-teachers, guides them and shows them how to integrate into the work, helps them prepare the different activities, follows their work and analyzes it with them. The master-teacher’s work is exposed to the student-teachers and is a role model and an object of imitation and identification. Zuzovsky (2000) also found that the master-teacher is of great influence with advanced student-teachers. This finding also appears in the research conducted by Maskit and Winestein’s research (2001), who found that master-teachers are greatly involved in the practicum in terms of both what is desired and what actually happens in practice. The student-teacher’s expectations of the master-teacher are that the latter be supportive and helpful and provide them with a variety of ideas and methods, guide them in class organization and management, and provide them with positive or negative feedback by making constructive comments (Hadari, 2003; Bullough, Hall, Draper, Smith, Robert, 2008).
Another research which examined the effectiveness of master-teachers reveals that allowing the student-teachers to experience new processes is one of the most effective factors of the training process (Connor et. al, 1993). The development of a teacher’s professional behavior patterns starts already in the teacher-education stage, especially during the practicum. The master-teacher’s role is to expose the student-teacher to teaching, to professional working patterns, to cause the encounter with the practical translation of autonomy in teaching on all its advantages and disadvantages, to provide genuine opportunities where it is possible to make choices, to affect, guide and help. The master-teacher constitutes a role model, from whom the student-teachers learn, upon whose instructions they act. Research conducted in the United States (Mccaughrty, Hodges, Kullina, Cothran, Martin, Faust 2005) found that master-teachers develop ways of communication and support which enable student-teachers and novice teachers to pursue the work and last.

The more the student-teachers advance in the practicum, the more they are inclined to adopt the attitudes of their master-teachers (Duquette, 1994) – the student teachers tend to imitate after observing the master-teacher for a long period of time.

The desire expressed by student-teachers from the Arab sector to train in a Jewish school as expressed in this research is supported in the literature. Zirzur (1999) writes that Arab education emphasizes rigidity and the hierarchy in school. Zharka (2007) also describes a rigid society, whose education system reflects it. This explains why Arab student-teachers do not as much autonomy in the Arab school as in the Jewish one.

In summary, it can be said that student-teachers from both sectors perceive the master-teacher in the Jewish school as a significant figure in the process of teacher education. This is an outcome of the close interpersonal relationships which develop in the course of the practice. Hence it is important to the student-teachers.

An additional factor which contributes to the positive attitude to the practicum in the Jewish training school is the environment’s attitude on the practicum day. The environment is the school and its population on its culture, overt and tacit laws, teachers,
pupils and management. As Lortie (1975) claimed that the school environment is the place of practice. That is where the student-teachers cope with new domains of responsibility. Attitudes to Physical education also arise as causes of the positive perception of the practice in the Jewish training school. The lowest agreement rate pertained to the statement “In the Arab School they have a Physical Education Culture” (about 47%), meaning the student-teachers do not believe there is a Physical Education learning culture in the Arab sector. The student-teachers related both to their difficulties and to the good aspects of the Jewish school.

On the positive side, student-teachers from both sectors mentioned the welcoming attitude on the part of the teachers, the principal who generally treated them nicely, the free entry into the teachers’ room and a generally good feeling as part of the staff. The highest level of agreement pertained to the statement, “The teachers treat the Jewish Physical Education student-teachers and the Arab ones equally” (about 82.5%).

Normally, the teachers and the principal treat all Physical Education student-teachers equally. The Arab student-teachers also mentioned the positive attitude to them, and that they always wished to take part in all school activities: “On Purim Day we sang and danced with them, and they had fun. I enjoyed the fact that the children knew me by name. They said, ‘Good morning, Habir’”

As for their difficulties, both Jewish and Arab student-teachers noted that the beginning was not easy, and expressed fears and lack of confidence. The Jewish student-teachers, despite their being graduates of the Jewish education system, faced difficulties starting to start the practice, face the pupils and teach – the reality is not easy. Suddenly they had to cope with problems which thus far they had only encountered in theory, and now they had to apply what they had studied.

The Arab Student-teachers also experienced this difficulty. The entry into the Jewish school, the encounter with a culture that differs from the one they had known before, fears of the responses of the school population, especially the teachers and the pupils, which were, according to the student-teachers, accompanied with insults and nasty
remarks on the part of the pupils, although the Arab student-teachers could account for them: “Children repeat things they hear in their environment.”, they still felt insulted.

This finding can be attributed to the Geo-Political situation in the Middle East. The national problems exist in a state like ours (Elhaj, 1996), defense problems and the Israeli-Arab conflict are all significant factors in the children’s attitudes to the Israeli Arabs. The crisis between Israeli Arabs and the Jews becomes more intensive every year, and the feud has to do with land, War with Lebanon and the uprising in Judea and Samaria (first in 1987 and then in 2000). These have led to a feeling of ongoing discrimination among the Israeli Arabs, Bedouins and even the Druze. They experience the need to unite with the Arabs of Judea and Samaria and the Arab neighboring countries.

Israeli society is characterized by multiple cultures. The differences between the Arab and Jewish citizens are expressed in religion, language, cultural characteristics, housing, and national ambitions (Elhaj, 2004). The cultural reality in Israel is that of the “wrong” tab: the pain and discrimination of the traditional versus the modern, the eastern versus the western, the Arab versus the Jew, the Sepharadi versus the Ashkenazi, the veteran versus the newcomer, the religious versus the secular and the local versus the foreigner – all that due to historical circumstances.

Korthagen (2004) claims it is important to provide a worthy learning environment to student-teachers, one where the student-teacher feels comfortable and safe. Such an environment is usually provided by the master-teachers. It also helps in the construction of a positive attitude to significant teaching and learning (Chen and Darst, 2001). Many researchers emphasize the school as a major factor in the student-teacher’s training (Zanting, Verloop and Vermunt, 2001b). It has to be noted that the school’s culture and organization in some of the Arab schools, are mostly characterized by a closed organizational climate, which makes it hard for student-teachers to feel that they belong

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4 Sepharadi – Genrally Jews from north Africa; Ashkenazi – Jews from Europe
with the staff although they come from the same culture, and hence their attitudes to the better Jewish school climate and its influence on their perception of the practicum.

In summary, it seems that the environment of the Jewish school is supportive and worthy of both Jewish and Arab student-teachers’ trust. Hence it influences their positive perception of the practicum, which is more significant with the Arab student-teachers, to a point where they prefer to train in the Jewish schools.

Another factor noted by the Arab student-teachers as positive in the Jewish school is that of improving their Hebrew skills. The Arab student-teachers admitted that their mastery of Hebrew was lacking, claimed that their Hebrew skills improved following the practicum in the Jewish school,

The student-teachers’ presence in a Hebrew speaking environment, and the fact they need to use Hebrew while teaching lead to a significant improvement in their Hebrew language skills. The professional terms many of which do not have Arabic equivalents lead to an improvement of language skills, as seen in the following quotes: “I learnt the terms in Hebrew and it is hard to express them in Arabic. Arab children will not understand the Hebrew terms. I have to say them in Hebrew and then translate them.”; “I would like to teach in the Jewish sector, because you practice the lesson plan in Hebrew and then teach in Hebrew. In the Arab sector you have to translate and it is hard.”

In other words, in the Jewish school they use sports terms in Hebrew and find it hard to translate them into Arabic, as many of the terms do not exist in Arabic. Hence most of them will continue to use the Hebrew terms even if they end up teaching in Arab schools, which will cause them some difficulties in the Arab sector.

This is a finding for which I have found no references in the literature, and therefore is an innovative finding.

In light of these findings, it can be said that the research hypothesis maintaining Jewish and Arab student-teachers have the same perceptions has been confirmed.
IV.10.2. The Cognitive Dissonance

The second research question and the third hypothesis pertain to the main issues of cognitive dissonance in the Arab student-teachers upon entering the practical experience in the Jewish school.

The fact that the student-teachers are Israeli Arabs already places them in some conflict between two identities: the Israeli and the National Arab, their being a minority wishing to integrate into the majority – these creates states of cognitive dissonance. The conflict is between their two identities, the Arab, identifying with their fellow Palestinians and the Arab nation which is in a state of war against the country in which they live, and the modern Israeli, whose values are closer to those of the Jewish society (Mia’ara & Diab, 2005). This conflict leads to a cognitive dissonance even before entering the Jewish training school, as was mentioned earlier the student-teacher does not arrive at the school a clean slate, but rather with his or her beliefs and values (Shkedi, 2008).

The interviewed Arab student-teachers said many things describing a cultural cognitive dissonance. They have to cope with contradictions and conflict. Theory maintains that there people have a latent desire to maintain consistency between their opinions and beliefs and their actual behavior. Here they have to behave according to the culture of the college and the school, as stated, “I came in on the first day and so an Arab world experiencing the Jewish school.” – One culture entering the other (Cohen and Friedman, 2002). The student-teachers’ Arab world is not only a world of knowledge and skill, but also of values, and so a cognitive dissonance is created in a school from a different culture (Gabison, 2007).

The literature discusses the cognitive dissonance issue. The practicum has a significant contribution to the creation of this cognitive dissonance (Kagan, 1992). This is important for student-teachers with “luggage” they carry with them regarding teachers, pupils, school and teaching. Therefore, the encounter with the school, the class and the experienced master-teacher is significant with the dissonance issue. According to Elliott
(1992), the practicum brings about changes in the student-teachers’ cognitive and emotional properties, which develop both in the course of the academic studies in the college and during the intensive well planned practicum in the school. The student-teacher develops professionally in both frameworks.

It was found that the student-teacher who comes from a different culture with its “burdens” and entering a different culture, as is the case with the Arab student-teachers practicing in the Jewish school, experience a cognitive dissonance.

The exposure to other cultures during the practicum often leads to comparison or conflict between bodies of knowledge, individual beliefs and conduct. Comparisons constitute a factor leading to perceptual change (Posner and al, 1982). Different kinds of social gaps have been expressed in this research: the graduates of the Arab education system versus those of the Jewish system, and all that in the Jewish system surroundings. These gaps often create a cognitive dissonance within the Arab student-teachers who have tried to compare the culture in which they had grown and the training school where they practice.

The statements of the Arab student-teachers regarding the Arab school’s culture, attitudes to Physical Education, lack of equipment and facilities and understanding the significance of Physical Education in comparison to the Jewish schools – All these gaps lead to a cognitive dissonance. The student-teachers go through new experiences, culture and climate in the Jewish school, which differ from those they have had in the Arab school, and they make the comparison (e.g. “In the Jewish school some of the children are insolent. The children have too much freedom and this allows them to be rude. There are no such things in the Arab school.”) – The behavior to which they are exposed in the Jewish school does not correspond to their beliefs, increases the lack of balance and hence, the cognitive dissonance.

Discipline in the Arab schools is stricter, while it is looser in the Jewish school. In our sector there is more respect for teachers than in the Jewish sector, because here they let pupils say what they are feeling, but it has to do with the culture at home, and it is not necessarily insolence, but lack of respect. In Arab schools, when the teacher wants quiet,
the pupils are quiet. No pupil dares to talk. They respect the teacher and listen. But everything has advantages and disadvantages. The pupils ought to be able to voice their opinions, but there are limits. In the Jewish school the children do not give respect to the teachers.” This is an example of the comparisons made by the Arab student-teachers between their culture and that of the school, which cause a cognitive dissonance.

As for the language, there are problems. The Arab student-teachers are native Arabic speakers who study, prepare lesson plans, teach and have to think in Hebrew. Furthermore, some of the Physical Education terms cannot be translated into Arabic. The Arabic language hardly has any translations for Physical Education terms, which poses a great difficulty for Arabic speakers. This is another reason why they prefer to train in the Jewish school, as it is much harder to cope with these terms in the Arab school,

These difficulties of translating professional terms from Hebrew, the language of learning, into Arabic repeated in each of the interviews with the Arab student-teachers.

There is also the problem of facing the pupils and having to experience the difficulty of speaking the other language. The student-teachers are often insulted as they are called “Arabs” in a mocking kind of way. It was found that most of them try to justify it by saying that normally they do not get angry, because the pupils are children. They say it but they do not understand. They hear what their parents say. It is not from the heart. Some of them may say it, but they don’t understand that we are all the same human beings.

The cognitive dissonance is also expressed regarding holidays and ceremonies. In the Jewish school and college, they celebrate the Jewish and national Israeli holidays in ceremonies, singing the national anthem and more, and the Arab student-teachers participate: “On Purim Day we sang and danced with them, and they had fun. I enjoyed the fact that the children knew me by name.”
This creates an inner conflict with the Arab student-teachers – should they participate in the Jewish ceremonies? Should they sing the national anthem? Some of them do participate so as not to be different.

Their wish to integrate into the prevailing culture is great, and the more they wish for it, the higher the level of the dissonance as the intensity of beliefs is higher (Cohen and Friedman, 2002).

In contrast, Arab holidays are not given any attention in the college or in the Jewish school. In other words, even being student-teachers in a multi-cultural college does not lead to expressing their culture, which adds to the cognitive dissonance they experience in the college.

It was interesting to find that the Jewish student-teachers identified the cognitive dissonance with their Arab colleagues. There are many examples of that in their statements: “They want to be the same as us, and make great efforts in language and explanations, so as not to appear different. They don’t want to be different.”

The Jewish student-teachers, too, see their Arab colleagues’ wishes to integrate, be equal in all aspects. The Jewish student-teachers also shared their Arab colleague’s insults when they are called “Arabs”

In summary, we can see that although the Arab student-teachers experience a cognitive dissonance upon their entry into the multi-cultural Jewish college and the practicum in the Jewish school, it does not affect their positive perception of the practicum, and their wish to experience in the Jewish training school.
IV.10.3. Influence of the Culture of Origin

The following findings pertain to the third research question engaging in whether the culture from which the student-teachers come influences their perception of the practicum.

Student-teachers from both sectors come to the practicum day from their college studies. The college is multi-cultural. There are students from different sectors: Jews and Arabs, religious and secular: all that makes the student-teachers more familiar with other cultures. Nonetheless, according to the findings the Jewish student-teachers are less interested in learning about the Arab culture than the Arab student-teachers are interested in the Jewish culture (Mi’ari and Diab, 2005).

In the interviews, the student-teachers were asked why they chose to study teaching Physical Education. Most of them, in both sectors, listed such reasons as love of sports, their being active sportsmen, family encouragement or pressure, mostly among the Arab student-teachers, a few of whom noted the contribution to their sector.

Choosing teaching as a mission and as a tool for improving society has also been perceived as more significant than social and economic status in a study by Suliman, Zeidan and Toren (2007). Love of the profession was also expressed in a study where the population consisted of 81 mathematics student-teachers (Becker and Levenberg, 2003). They stated that love of mathematics, their interest and the challenge of teaching it were the crucial factors in their decisions to choose teaching as a profession.

When they arrive at the practicum day in the Jewish school, most student-teachers are familiar with the prevailing culture in general. They encounter the learning climate and culture; the Jewish student-teachers are familiar with the situation from their own days as pupils, and the Arab ones encounter a different school climate from that which they have known in their culture. The different language does not help them either. The quantitative analysis reveals that the lowest rate of student-teachers who agreed with a statement had to do with “My mother tongue helps me teach in the Jewish school” (about 31%).
other words, the student-teachers do not arrive at the school as a clean slate. They come with perceptions and attitudes they have developed when they were pupils (Shkedi, 2008).

The cultural differences between Arabs and Jews in Israel are in basic values of ethnic origins, language, religion and nationality, as seen in the following quote: “I came in on the first day and so an Arab world experiencing the Jewish school. It was hard for me. It took me a month to get used to it. It was hard with the pupils, not because I am Arab. I did not think it would be easy.” Namely, the Arab world of the student-teacher is not only a world of knowledge and skills, but also a world of values, identity conflicts and different affiliations.

Their being Israeli Arabs is expressed upon their arrival in the school, where the children ask them questions, sometimes out of curiosity, and at other times to tease.

We can see the charged situation between Israeli Arabs and Jews as expressed by the children. These relationships are complex as a result of the ongoing Jewish-Arab conflict since 1948, when the Arab majority turned into a minority. This is not a minority of immigrants, but rather of local people. An additional characteristic is that the Israeli Arabs are citizens of a state which is at war with their people, the Palestinians, and with their nation – the Arab nation. The Jewish majority treats them as a “fifth column” (Mi’ari and Diab, 2005). This problem is enhanced by the differences in ethnicity, culture, nationality and religion.

The Arab student-teachers are aware of their entry into another culture and therefore they are anxious as stated by one of the Arab student-teachers: “I improved my Hebrew here, and started teaching in a society that is different from Arab society.”

On the other hand, Druze student-teachers had fewer concerns. In their answers we see they regard themselves as part of the Israeli culture, and some of them feel closer to the Jews than to the Arabs, and this creates a problem with the Arabs, so much so that they feel betrayed. This is far from being a simple dilemma in the Druze community, as they
serve in the Israeli army, and this brings them closer than any other members of the Arab sector to the Jewish culture and customs, and they do not consider themselves “Arabs” but rather people of a different, unique religion (Dana, 1998; Fallah, 2000).

Sometimes, teacher education colleges develop programs seeking to learn about the complexity of training student-teachers from different cultures, and adjust the training to the reality of the state (ElHaj, 1996).

The Christian student-teacher was also insulted when she was referred to as “Christian” as she came to the school regardless of her religious affiliation. The student-teacher does not believe that her original culture should not interfere her work in the Jewish school, and she ought to be treated the same as all the other student-teachers.

In the interviews and the questionnaires, student-teachers maintained their culture does not interrupt their perception of the practicum. However, when the interviews were analyzed, it was evident that when it comes to discipline and respect, the original culture does have an influence on their perceptions as to how the pupils are supposed to behave. Some of the Arab student-teachers maintained that discipline in the Jewish school is better than that in the Arab school, while others maintain the opposite.

On the other hand, discipline problems in the Jewish school are resolved right away. The approach is positive and the child is treated as a mature person, whereas in the Arab school no one listens to the child.

The issue of respecting the teacher and listening to her is of great significance to the students of the Arab culture, where respect is essential, as stated: “In our sector there is more respect for teachers than in the Jewish sector, because here they let pupils say what they are feeling, but it has to do with the culture at home, and it is not necessarily insolence, but lack of respect. In Arab schools, when the teacher wants quiet, the pupils are quiet. No pupil dares to talk. They respect the teacher and listen. But everything has advantages and disadvantages. The pupils ought to be able to voice their opinions, but there are limits. In the Jewish school the children do not give respect to the teachers.”
“In the Arab school there is discipline. They are afraid of the teacher. If the teacher raises his voice they clam down and listen. In the Jewish school, I don’t see much discipline. We don’t call the teacher by name, and in the Jewish school they do. It’s not good. They have to know the teacher is not their friend and there are limits. When I call someone by his name he is my friend.”

These quotes reveal the Arab student-teachers’ criticism of what they consider excessive freedom the pupils in the Jewish school have. This is, again, the issue of respect for teachers as is the custom in the Arab culture. The Arab student-teachers interpret this freedom as lack of respect for teachers (Zirzur, 1999).

This comparison of cultures is supported by other studies. Eilam (2002) studied Arab student-teachers who have been trained with an Arab orientation and found that comparing the student-teachers’ cultures with other cultures is effective in teacher education. A few participants in Eilam’s study (2002) accepted the new, western ideas, but most adhered to their Arab ideas. Eilam believes that the student-teachers might have truly believed in their type of education, or perhaps they sought to avoid a cognitive dissonance, or they simply represented patriotism and loyalty to their cultural group.

Elior (1998) also claims that the school is a good place for developing openness, which is a pre-requisite for inter-cultural encounters. It allows for access and the time frame required for developing a broad mind and curiosity needed for doing away with the stigmas created by mass culture and media. School is a means for developing pluralism.

The findings regarding multiculturalism in the college reveal the Arab student-teachers’ desire to be equal in all domains: “No problem. Jews and Arabs are the same; in college, outside college – the same. At first it was hard. One graduates from high school and goes to university or to college – that’s different. One sees Jews, Arabs, all sectors.” The encounter of different cultures and blending them is not as easy as stated in the first part of the quote. This is in line with the literature maintaining that people are multi-cultural creatures, though they are not aware of it (Sagi, 1993).
The Arab student-teachers are more willing to learn about the Jewish culture. In their statements, the Arab student-teachers keep comparing the two cultures for better or worse; some take from the Jewish culture external features and habits, but adhere to their own culture when it comes to respect. This is supported in the literature by Mi’ari and Diab (2005) who claim that the process of modernization. Among the young Israeli Arab generation has led to an imitation of the Jewish society’s lifestyle.

According to the Jewish student-teachers, the encounter with the members of another sector makes them understand better the culture of their Arab colleagues. Some of the student-teachers have changed their attitudes following their studies in the multi-cultural college. There are even comparisons between the sectors. The emphasis is on the Arab sector’s integrity and honor. The student-teachers are aware of the different cultures and respect them. “

This category also discusses friendships and good relationships between the members of the two sectors. One would be likely to expect tensions, mainly political ones, but the opposite is true, as defined by one of the Jewish student-teachers: “Sometimes I feel that I hang out with Arabic speakers more than with Hebrew ones. There is no political discourse. Even during the Second Lebanon War there were no discussions. Each student minded their own problems.”

The goal of the college is to get the students to study, but also to create friendships. The Jewish student-teachers have no problem connecting between the sectors, especially in the regular class, where there are but a few Arab students.

Conversely, in the interviews, the Jewish student-teachers clearly state they are willing to be friends with the Arab student-teachers in the college framework, but not to live with them. There is still a gap between statements about friendship and friendship with the Arab student-teachers after study hours.

The literature supports this finding. Mi’ari and Diab (2005) state a number of studies have been conducted into the relationships between, and found that Arabs are more
willing to be friends with Jews than the other way round. This asymmetry characterizes many minority-majority relationships. Minority members feel they can benefit from the contacts with majority members. This compels heads of mixed, multi-cultural colleges to improve the atmosphere and create different opportunities for social contact and dialogue between the Arab and Jewish students. Such a dialogue is imperative for education towards peace in light of the Israeli-Palestinian conflict seeking to create a better living space and an improved discourse (Solomon, 2000). Numerous colleges seek to develop such programs so as to adjust to the reality in the state (Elhaj, 1996).

In conclusion it can be said that as for the first research question, and for the research hypotheses No.1 and 2 the findings reveal that the practicum day is perceived to be of the utmost significance in the course of their training for teaching Physical Education. Students from both sectors perceive the practicum positively, where all the factors in the Jewish school – master-teachers, learning environment, equipment and facilities contribute to this positive perception. Furthermore, Arab student-teachers emphasize the difficulties they experience upon entering the Jewish training school, where the climate is so different from that of the Arab school, but they still prefer to train there due to the good approach to Physical Education, the good relationships with the master-teachers, the general good response of the environment and the teaching conditions available to them. An additional finding that is innovative is that the Arab student-teachers improve their mastery of Hebrew significantly, also because of using professional terms which cannot be translated into Arabic.

As for the second research question and research hypothesis No. 3, it was found that the Arab student-teachers experience a cognitive dissonance, as they are in a conflict between their identities as Arabs and Israelis. Their entry into a school whose culture differs from their own and exposure to this culture also causes the cognitive dissonance, both in their first encounter with the markers of this culture such as holidays and ceremonies, and language. The pupils’ attitudes in the Jewish school also add to this dissonance. In the college, too, they encounter markers of a culture different from theirs,
and they try to adjust, but still experience the cognitive dissonance. The level of the dissonance rises as their belief in their own culture becomes more intense.

The third research question and the forth research hypothesis revealed that the student-teachers’ original culture certainly influences their perception of the practicum, as they arrive with their beliefs and values. The Jewish students find it easier to integrate into the school culture, though it harder to cope as teachers. Conversely, Arab student-teachers tend to compare the two cultures. They come from one culture with their behavior patterns, values and beliefs and enter into a different culture to which they have to adjust and train for teaching. Seldom does their original culture help them in the Jewish school and it often interrupts (regarding discipline and respect). They strive to integrate into the Jewish culture as equals. This is enabled by the master-teachers and the staff, but the pupils often express racist attitudes.

In the college, all students are equal, and one sector declares partnership and brotherhood between the two cultures, but there are gaps between declarations and reality. Arab student-teachers are more likely to accept the Jewish culture than the other way round.

Finally, we see that this research contributes to knowledge in the domain of the Physical Education student-teachers’ perceptions of their practicum in the culture of a Jewish training school. In practice, the Arab student-teachers’ culture of origin causes them to experience a cognitive dissonance which they have to resolve. They try to connect to the school’s culture and climate by relying on their master-teachers and the environment as well as adopting a new professional language.
CHAPTER V: Conclusions and Recommendations

This chapter presents the research conclusions and recommendations. The chapter opens with a summary of the findings deriving from the research questions (the qualitative part) and hypotheses (the quantitative part). Further, this chapter focuses on the contribution of this research which engaged in Jewish and Arab Physical Education student-teachers perceptions of the practicum in Jewish training schools, and on the cognitive dissonance of the Arab student-teachers upon entering the practical experience in the Jewish school, meaning the transition from one culture to another and its influence on the practicum. The conclusions chapter is based on the findings.

The conceptual framework of this research relies on teaching theories relating to teaching as an applied-reflective science (Shulman, 1987; Schon, 1987; Zeichner 1990; Kagan, 1993; Korthagen, 2001, and in Physical Education in particular (Sindrop, 2000), as well as on theories pertaining to teacher education (Zilberstein, 1998, 2005; Korthagen, 2001). Since the research population consisted of Physical Education student-teachers from both the Jewish and the Arab sectors, the research was also based on theories regarding multiculturalism (El-Haj, 1996, 2004; Samocha, 2001) where the emphasis was on the practicum in teacher education (Zeichner, 2010; Korthagen, 2001, 2004) and the entry of a student-teacher from one sector into a school from the other sector, resulting in a cognitive dissonance (Cohen and Friedman (2000).

The research is a mixed-methods research, which combined qualitative and quantitative research methods to enrich the data (Creswell, 1998). Data were collected via semi-structured interviews and closed-ended questionnaires (Shkedi, 2003).

The research addressed the following questions

1. What are the perceptions of Jewish and Arab Physical Education students about the practicum in the training Jewish school?

2. What are the main issues of cognitive dissonance in the Arab student-teachers upon entering the practical experience in the Jewish school?
3. How does the culture of origin influence the concepts of these student-teachers of their practicum?

The current research was also based on a number of Hypotheses:

1. Jewish and Arab Physical Education student-teachers have the same perceptions regarding the practicum in the Jewish training school;
2. Both Jewish and Arab student-teachers perceive the practicum as a major aspect of their teacher-education process;
3. The Arab student-teachers’ original culture creates a cognitive dissonance when practicing in a Jewish training school with a different culture.
4. The Arab student-teachers’ culture of origin does not influence on their perceptions on the practicum;

The chapter summarizes the factual and conceptual conclusions drawn from the research, as well as the practical conclusions which this research contributes to the knowledge in the domain of teacher-education in a multi-cultural college in Israel. These conclusions arise from the findings which were analyzed, from the interviews and the questionnaires.

V.1. Factual Conclusions

The practicum is part of the teacher education program. Nevertheless, there are not enough studies in the literature, engaging in multi-cultural teacher-education and in student-teachers from one sector experiencing in a school from another sector.

The research sought to shed light on the Jewish and Arab Physical Education student-teachers perceptions of the practicum in Jewish training schools, and uncover the cognitive dissonance of the Arab student-teachers upon entering a culture that is different from their own both in the college and the training school.

It has to be noted that this research pertains to Arab student-teachers in Israel, and therefore it studies a unique population with a unique problem. It is hard to find in other
countries citizens of a state which is at war with their people. The Arabs are a minority in the State of Israel, and they are citizens of Israel, while their nationality is Arab-Palestinian, a nation which is in a state of an ongoing conflict with their state – Israel.

V.1.1. Answering the Research Questions and Hypotheses

Perception of the Practicum

Research question No 1. and hypotheses No.1,2 pertain to the perceptions of Arab and Jewish Physical Education student-teachers regarding the practicum in the Jewish training school.

The conclusion arising from the findings is that there are no differences in the student-teachers’ perceptions of the practicum in the Jewish school. All the Physical Education student-teachers perceive the practicum as being of the utmost significance in the course of their training. This is reaffirmed by studies engaging in the significance of the practicum, in the training process.

The beginning was not easy for both Arab and Jewish student-teachers, despite the latter being graduates of the Jewish education system. With the Arab Student-teachers entry into the Jewish school, is accompanied by anxieties due to language difficulties and the students’ attitudes. However, the equipment and learning conditions are far better in the Jewish school that those in the Arab school. This leads the Arab students to perceiving the practicum in the Jewish school positively.

An additional conclusion has to do with the relationships with the master-teachers. The help and encouragement the master-teachers give to all the student-teachers equally contribute to the student-teachers’ positive perception of the practicum. Additionally, the master-teachers’ friendly approach is highly appreciated by the Arab student-teachers who are not used to it in the Arab schools where master-teachers maintain some distance.
The research findings reveal that the good, supportive environment which relates to Physical Education seriously differs from that in the Arab school. The staff, the principal and the pupils in the training school treat the student-teachers well. All the student-teachers take part in the school’s life, and participate in celebrations and ceremonies, which brings them closer to the life in the training school and the positive perception of the practicum.

Further, the Arab student-teachers’ practice in the Jewish school contributed a good deal to improvements in their mastery of Hebrew. The need to teach in Hebrew and use professional terms in Hebrew contributed to this improvement. On the other hand, they have difficulties translating these terms into Arabic, which enhances their wish to train in a Jewish school.

In conclusion, it can be said the findings answered the first research question and confirmed the first and second research hypotheses.

V.1.2. The Cognitive Dissonance

Research question No. 2 and hypothesis No.3 pertain to the main issues of cognitive dissonance in the Arab student-teachers upon entering the practical experience in the Jewish school.

The student-teachers in this research came from both the Arab and the Jewish sectors. They study in a multi-cultural college and are sent to practice in a Jewish school. The Jewish student-teachers who are familiar with the school since the time they were pupils undergo a process that is different from that of their fellow Arab student-teachers. The research generated evidence that the latter experience a cognitive dissonance upon their entry to the Jewish training school. The conflict is between their two identities, the Israeli and the Arab-Palestinian: one identity is of the modern Israeli whose values are closer to those of the Jewish society, and the other is that of the Palestinian identifying with their fellow Palestinians and the Arab nation which is in a state of war against the country in
which they live. This conflict leads to a cognitive dissonance even before entering the Jewish training school, as was mentioned earlier the student-teacher does not arrive at the school a clean slate, but rather with his or her beliefs and values.

The student-teachers’ Arab world is not only a world of knowledge and skill, but also of values, and so a cognitive dissonance is created upon their entry into the Jewish school on its values which differ from those of the Arab school, since it is a different world, thus leading to emotional and cognitive changes with the Arab student-teachers. Hence, the conclusion is that exposure to different cultures in the Jewish training school and in the college, causes the Arab student-teacher to make comparisons, and hence – the cognitive dissonance. In the Jewish training school, the student-teachers are exposed to a climate that is different from that with which they are familiar, as well as to different learning habits and discipline. On the one hand pupils’ voices are heard and they are given responsibilities, but on the other hand, rude behavior and lack of respect on the part of the pupils, which cannot happen in the Arab school. These cause some of the Arab student-teacher’s original beliefs to shatter, thus causing the cognitive dissonance.

Another conclusion is that the Arab student-teachers also experience a language dissonance. Their mother tongue is Arabic, and they teach in Hebrew, especially the professional terms of Physical Education, and then it is hard for them to translate the latter into Arabic. In other words, the contents of knowledge, lesson plans and the professional discourse with the pupils in the training school and in the course of studies in college are all in Hebrew, the language representing the majority culture, whereas their native language, Arabic, represents the minority culture, thus leading to a cognitive dissonance.

An additional factor leading to the cognitive dissonance is that of the holidays and ceremonies which are celebrated in the Jewish school and in the college. Their conflict is whether they should participate in the Jewish ceremonies. On the one hand they wish to integrate into the majority culture and be like everyone else, while on the other hand they
are frustrated by having to attend ceremonies and celebrations of a culture that is different from their own, while their culture is not noted in the college.

In sum, it can be understood that the research hypothesis stating that Arab student-teachers who enter the training school from a different culture experience a cognitive dissonance, has been confirmed and the findings answer the second research question.

V.1.3. From One Culture to Another

Research question No. 3. and hypothesis No.4 pertain to the culture from which the student-teachers come and its influences of their perception of the practicum. The student-teachers in this research came from two main cultures of origin the Jewish culture and the Arab culture which included Moslem Arabs, Christian Arabs and Druze.

The research examined the student-teachers’ culture of origin. The conclusion is that most student-teachers took up Physical Education because their love of sports. Student-teachers from the Arab sector also took up Physical Education because of motivation to improve its status in Arab society, which is more conservative than the Jewish one.

Arab student-teachers have different cycles of affiliation:

- Their ethnic origin;
- Their religion which is different from that of the Israeli majority;
- The Arabic language;
- Their nationality and solidarity with their Palestinian brethren.

These cycles actually define their culture of origin. Hence, the findings reveal that this culture does not hinder their positive perception of the practicum although it takes place in a cultural environment that differs from their own. This does not mean it is not hard for them to practice in the Jewish school. On the contrary, as stated in the previous section, they experience a cognitive dissonance in this transition from one culture to the other. It
has to be noted that the student-teachers do not arrive at the school a clean slate, but rather with his or her beliefs and values regarding teaching.

The conclusion is that Arab student-teachers who study Physical Education in a multi-cultural Jewish college and practice in a Jewish training school prefer that to practicing in an Arab school despite the cognitive dissonance they experience. Their culture does not stand in the way of their positive perception of the practice, and they even prefer it to practice in their familiar culture of origin.

Furthermore, seldom does the culture of origin help the Arab student-teachers in their practicum. Sometimes this culture even hinders their coping with discipline problems and the behavior of Jewish pupils, as in their culture, the issue of respect for teachers is essential and affects their perceptions as to how pupils are supposed to behave in class. The Arab student-teachers are sensitive to racist expressions on the part of pupils and are insulted although they dismiss this behavior with different excuses, seeking to integrate into the Jewish school’s culture and be treated equally by all its participants. In college, the Arab student-teachers tend to compare the two cultures, and some even imitate the Jewish students’ culture in clothes, in entertainment and in speech. Additionally, the college does not emphasize the Arab student-teachers’ culture due to its definition as an essentially Jewish college.

The Jewish student-teachers find it easier to enter the Jewish training school, as it is their culture, and they have known it since they were children in a similar environment. Nevertheless, the beginning is hard for them. They understand their Arab fellow-students, and their difficulties in the Jewish school, but at the same time they are less interested in learning about the Arab couture than the other way round.

In summary, it can be understood that the main factual conclusion is that despite their difficulties upon entering the practicum in a Jewish school and the creation of the cognitive dissonance, Arab student-teachers still perceive the practicum positively, as something that is right for them, and they want to continue practicing in the Jewish school.
V.2. Conceptual Conclusions

On the conceptual level, the findings of this research reaffirm and expand the knowledge about teacher education in general and about the perceptions of the practicum in particular with student-teachers in a multi-cultural college. These findings are based on teacher education theories in general education and in Physical Education, as well as on theories pertaining to multiculturalism in Israel and cognitive dissonance theories.

The conceptual conclusions arising from the factual ones shed light on the significance of the practicum in the teacher education process in general and in Physical Education in particular in a multi-cultural college where there are no differences in perceptions between Arab and Jewish student-teachers. These conclusions lean on the findings presented in this research. They emphasize the significance of a good training school, where the climate is good, and which has master-teachers, equipment and good learning conditions, as well as a supportive environment, where the student-teacher is helped on their practicum day. Even students from a different sector in the population appreciate the school and believe it is good for their practice, although it is not easy for them, and despite the cognitive dissonance they experience.

The conclusions are depicted in the following figure.

The conclusions based on the findings according to the research hypotheses and questions are depicted in the following figure.
Figure 28: The Perceptions of Jewish and Arab Physical Education Teachers of the practicum in the Jewish Training School

- **Jewish student-teachers**
  - Difficulties upon entering the training school

- **Arab student-teachers**
  - Cognitive dissonance
  - Adopting Hebrew as the professional language
  - Improving mastery of Hebrew
  - Temporary adoption of majority culture features

- **Entire Student-teachers’ population**
  - Understanding the significance of the practicum
  - Connecting to school culture
  - Developing interpersonal relationships with the master-teacher
Explanation of Figure 28:

The findings of this research show that, Jewish and Arab Physical Education student-teachers in a multi-cultural college enter their practicum in a Jewish school. All the Physical Education student-teachers perceive the practicum as being of the utmost significance in the course of their training, and that is where they experience the real world of teaching, as stated in teacher education theories. Upon their entry into this world, the student-teachers experience difficulties which are natural when encountering the training school. Although the Jewish student-teachers are familiar with the school culture and its climate from their own school days, they still experience difficulties upon entry, this time not as pupils, but as prospective teachers on all its aspects. Still, after the initial shock, the Jewish student-teachers find themselves operating in a familiar culture, and most of their difficulties center around their being student-teachers coping with practical teaching.

Beyond the obvious difficulties of entering the world of practical teaching, Arab student-teachers also experience a cognitive dissonance, as they come from one culture and enter another. In the Jewish training school, they are exposed to a world and a culture different from their own, but on the other hand, they are also exposed to the advantages of a well equipped school with good learning conditions and a positive attitude to Physical Education. This leads to their positive perception of the practicum in the Jewish training school.

The findings show that to cope with the cognitive dissonance, the Arab student-teachers help themselves by:

- Teaching Physical Education by using the professional terms in Hebrew. This enhances their professional development, but on the other hand, it causes difficulties in translating the sports terms into Arabic, and they may use the Hebrew terms in the future when they teach in Arab schools;
The Arab student-teachers adopt the features of the Jewish culture by participating in ceremonies and celebrations of Jewish holidays. They want to be equal in all aspects, and these cultural features are part of the school’s climate and culture.

As a result of all of the above, the Arab student-teachers improve their mastery of Hebrew, thus decreasing the dissonance level. This finding is unique to this research.

In addition, like their Jewish fellow student-teachers, the Arab student-teachers emphasize the significance of the practicum in the process of their teacher education, they connect to the school’s culture, where the staff help them in their practice by providing a good learning environment, a supportive approach, and encouragement especially in the interpersonal relationships which student-teachers from both sectors have with their master-teachers – understanding, help and support on the part of the master-teachers (Maskit and, 2001; Bullough, 2008), causing the student-teachers to perceive the practicum in the Jewish school positively and regard it in a special light.

The following section presents the Practical conclusions.

**V.3. Practical Conclusions**

Based on the findings of this research seeking to improve the training process of student-teachers in a multi-cultural college, it is important to expose their beliefs and the culture from which they came. This will lead to better understanding of what the student-teachers are undergoing during their practicum in the training school, where the culture is different from their own, decrease the level of their cognitive dissonance and ease their teaching experience.

Therefore, the practical conclusions of this research are:
Consideration of cultural contexts in the stages of accepting students to the college and preventing dropout. At this stage it is important to understand who the students coming to study Physical Education, what their cultural background is and what motivates them to take up Physical Education teaching. This understanding prior to admitting the students to training may help to improve multi-cultural teacher education and make it more effective.

Designing a practice model that is better and more effective, which considers the student-teachers’ cultural background, so as to minimize the level of the cognitive dissonance by preparing student-teachers from a different culture towards their practicum in the Jewish training school, by guided visits and observations with both the pedagogical instructor and the master-teacher. Further, early on conversations with the students coming from another culture may expose their beliefs and attitudes to teaching and will also help the pedagogical instructor and the master-teacher design the practicum better.

Furthermore, there is a need to develop good training schools in Arab schools, adopting the PDS (Professional Development School) Model, and thus change the involvement of pedagogical instructors in the study of the profession within the school, bringing the innovations from the college to the school, and thus raising the level of the subject in school, which will result in the school’s more positive attitude to Physical Education.

Improving conditions and equipment for teaching Physical Education in Arab schools, so that more student-teachers can experience in the best possible conditions within their own culture.

Considering the different priorities of the students, and coping with difficulties and problems as a result of the encounter between different cultural groups.

In college: integrating a multi-cultural approach into the general and the didactic curriculum, and providing tools for creative skills in the design of multi-cultural curricula, as well as teaching value related concepts such as justice and equality in different times and different places.
As stated in the beginning of this work, the goal of the research was to improve the practicum, while emphasizing better integration of the Arab student-teachers in a multi-cultural college and in the Jewish training schools, so as to prepare better future teachers taking into consideration their home culture, their perceptions and attitudes.

**An Optimal Physical Education Practicum Model in a Multi-Cultural College**

The optimal practicum model for student-teachers from different cultures considers their backgrounds and culture. Training schools will be chosen based on their willingness to cooperate with the college and offer recommended master-teachers who are properly equipped for working with student-teachers, who have access to equipment and facilities and a positive attitude to teaching Physical Education. The college will cooperate with the school in designing and implementing the curriculum, train master-teachers, invest in increasing awareness of Physical Education and a healthy lifestyle and accompany the student-teachers in the school. The student-teachers will be assessed by both the master-teacher and pedagogical instructor.

During all teacher-education years, personal interviews will be conducted with the student-teachers, in order to gain better understanding of their backgrounds, educational perceptions and mastery of Hebrew (Arab student-teachers). Entry into the training schools will be gradual and accompanied by involvement in the planning and teaching Physical Education in the training school. Figure 29 presents the optimal multicultural practicum model.
It can be said that this research has expanded the existing knowledge about the practicum in the Physical Education teacher education program in a cross-cultural context. Thus, this research has narrowed the gap in knowledge and led to a change in the teacher education policy pertaining to multi-cultural environments. The conclusions drawn from this research are universal and are appropriate for teacher education institutions in
countries with multi-cultural societies, though the multi-cultural issue in this research is unique, as there is hardly any other place in the world where the citizens of a state (Israeli Arabs) belong to a nation (Palestinian) which is in a state of conflict with their state.

V.4. Research Limitations

The limitations of this research mostly derive from the essence of qualitative research, as already stated by numerous qualitative researchers: the advantages of qualitative research are also its weakness.

The idea that the researcher served as the student teachers’ college pedagogical instructor, might constitute a research limitation. However, in qualitative research, the assumption is that being closely acquainted with the phenomenon is an advantage (Shkedi, 2003) “what you see from there, you cannot see from here…”

My being the student teachers’ college pedagogical instructor contributes to the quality of the research, as I am the person who knows the process of pedagogical instruction and my own intentions. Moreover, the practicum has become an integral part of my professional life in teacher education. My theoretical knowledge of the topic is vast; I could provide practical solutions to problems that had arisen during the practicum.

On the other hand, the fact that most interviewees were my students during their teacher education years, might have caused a kind of “social desirability”, a situation which occurs people to introduce themselves in a way that will be comfortable for the interviewer, and perhaps they tried to “guess the right answer” or interpret the interviewer’s facial expressions (Robson, 1993; Bryman, 2001). The way to prevent it, as suggested by Robson (1993), was to take a neutral stand and avoid agreeing or disagreeing with the interviewees.

This research adopted recommendations made Bryman (2001) regarding the phenomenon of social desirability, by not being overtly friendly with the respondents nor pass judgment on their statements. And yet, I have taken a number of steps to minimize the
problem of being an involved researcher. I shared my research goals with them, and explained that the interviews would be recorded and transcribed. I also assured complete anonymity.

Additionally, the research used semi-structured interviews, where the interviewees might have tried to “guess the right answer” by the interviewer’s responses, so as to appear “the best”. When people know their answers are recorded, they might not act naturally, and so I gathered all my skills as a pedagogical instructor and avoided commenting on their answers and let them express their thoughts freely. I also made sure to explain the purpose of the interview, and the fact that the information would be used only for research purposes, as well as the significance of truthful answers to the research.

In addition, in order not to be over-subjective in my view of the research, I allowed colleagues to read my report and asked them to comment. I also reread relevant literature so as to find support for my understandings.

It is likely that another limitation in this research has to do with the target population. Expanding the research population to pedagogical instructors and master-teachers might have produced additional knowledge which would contribute to the research goal. This could be a follow-up research.

V.5. Research Generalizability

This research is a mixed research using qualitative research in its first stage and quantitative research in the second stage.

According to the literature, qualitative research does not always allow for generalization. Certain qualitative research characteristics do not suit the issue of external validity, as contrary to quantitative research, the former seeks to shed light on a human phenomenon or a specific situation (Shkedi, 2003). There are researchers who believe that it is very hard to generalize qualitative findings, and consider it a limitation (Firestone, 1993). Stake (1995) claimed that the qualitative researcher can organize the research so as to get
to as many generalization opportunities as possible. Firestone (1993) claims that qualitative research includes three types of generalizations: generalization from one case to another, analytic generalization and a generalization regarding the population.

Therefore, in this research, which examined the perceptions of Jewish and Arab student-teachers in a multi-cultural college regarding their filed experience day in general and the encounter with a different culture in particular, generalization was limited due to the small sample in the interviews (10 Jewish student-teachers and 10 Arab student-teachers). However, the quantitative part of the research was based on a larger number of participants (74 Jewish and Arab student-teachers), and thus it created a triangulation which allowed for an increased level of generalization. According to Firestone, this is the third type of generalization from a sample to the population.

Finally, it can be said that the research was a mixed qualitative and quantitative research – using semi-structured interviews, and questionnaires for a larger sample in order to analyze the data in depth, and hence the analysis of the data yielded strong findings supported from different aspects, thus enhancing the research validity and reliability (Mason, 1996). The triangulation in this research resulted in rich, profound data which enhanced the research generalizability.

**V.6. Contribution to Knowledge and Recommendations**

This research is innovative, as very little has been written about the entry of student-teachers from one culture into their practicum in another culture. The perceptions of the student-teachers shed a new light on teacher education in a multi-cultural college.

The research is also universal. The issue of multiculturalism is relevant world-wide, and this research could contribute to new insights regarding the issue of teacher education in multi-cultural countries, and this means many countries in the world. The theory developed in this research might be significant for education systems in general and to teacher educators in particular. Moreover, the new theory suggests different ways of
selecting, accepting and developing student-teachers from different cultures, and so it may suggest changes in teacher education policies around the world. This new thinking may improve teacher education and make it more effective in the multi-cultural context.

This research may also lead to the understanding of various teacher education theories, thus leading to further research in the domain of teacher education and multiculturalism. Moreover, this research calls for a follow up research by expanding knowledge via interviews and questionnaires to pedagogical instructors and master-teachers regarding the training of student-teachers from different cultures.
References


• Bem, D. J. (1970). **Beliefs, Attitudes, and Human Affairs.** Belmont, Calif.: Brooks/Cole


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• Buchman, M (.1993). Beyond Planning and Decision Making: Professional Development in Teacher Thinking .In L. Kremer & Hayon, H.C.


• Kasan, L. Krumr-Nevo, M. (2010). *Analyze Data in Qualitative Research*. Beer-Sheva: Ben Gurion University


• Kennedy, Mary M. (1997). *Defining an Ideal Teacher Education Program* [mimeo]. Washington, DC: National Council for the Accreditation of Teacher Education


• Maskit, D, Weinstein, N. (2001). Student Teachers and Their Master-Teacher during Experiencing Teaching-an Encounter of Autonomy and Involvement. Dapim, 33, Mofet Institute, Tel Aviv (In Hebrew).


• Sagi, D (1993). Perceptual Learning in Preattentive Vision. In O. Hikosaka, S. Yamagishi & S. Ebashi (Eds.), Dynamics of Perception, Biomedical Research Foundation, Tokyo. (Also as: Biomedical Research, 14, Supplement 4, 75-82.)

• Shamay, S., Paul, A. (2003). Multi-Culturalism and Multiple Cultures in Teacher-Education. Research Sponsored by the Inter-College Research Board. Tel-Aviv Mofet Institute (In Hebrew)


• Shkedi, A. (2003), Qualitative Research – Theory and Practice. Tel Aviv University: Ramot (In Hebrew)


• Thurmond, V.A. (2001). *The Point of Triangulation*. Journal of Nursing Scholarship, 33(3) 253-258


• Tillema, H. H., (2000). *Belief Changes towards Self-Directed Learning in Student Teachers: Immersion in Practice or Reflection on Action*. *Teaching and Teacher Education*, 16(5/6), 575-591


• Yakir, R., (1997). Student Teachers’ Perceptions of Teacher’s and School’s Role as Viewed in Reports on Teaching Practicum in School. College Newsletter, No. 19.

• Yariv, Y. (1999). Quiet in Class, Please. Even Yehuda,Reches (In Hebrew)


• Zanting, A. Verloop N. and Vermunt, J.D. (2001b). Student Teacher Beliefs about Mentoring and Learning to Teach during Teaching Practice. British Journal of Educational Psychology, 71 pp. 57-80


• Zilberstein, M. Ben-Peretz, M. and Greenfeld, N. (Eds).(2006). New Trends in Teacher-Education Programs, Partnerships between Teacher-Education Colleges and Schools – The Israeli Story


Appendix 1

Research Questionnaire:

Jewish and Arab Physical Education Student-Teachers’ Perceptions of the Practicum at the Jewish Training School

Dear Student-Teacher,

As you may know, our college has both Jewish and Arab students.

In the framework of my PhD research, I am interested in different aspects of the practicum in order to find ways to improve it and reach profound insights at the same time.

Therefore, your responses to the following questions are of the utmost significance.

Note: the questionnaire is anonymous and is meant only for research purposes.

Thank you for your cooperation.

Judith Hadari
### Why did you choose to study Physical Education?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>To a small extent</th>
<th>To some extent</th>
<th>To a great extent</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like sport</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I am active in sports</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Encouragement from my family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Sports Teachers are in demand in our sector</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Other: (details)___________________</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

### In your opinion, what is the significance of the following statements pertaining to the practicum in the Jewish Training School?

<table>
<thead>
<tr>
<th></th>
<th>Not important at all</th>
<th>Slightly important</th>
<th>Medium</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. The practicum is important</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. The Physical Education subject is important at school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Good atmosphere at school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. The pupils are responsible for the sports activities in the breaks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. The teachers listen to the pupils</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Good pupils’ discipline</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Conditions and equipment that are proper for teaching Physical Education</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. A professional master-teacher</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
The following are statements regarding the relationships between the different cultures in the college. Please state your level of agreement with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Irrelevant</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. The teachers treat Jewish and Arab students equally</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. I have Jewish/Arab friends in the college</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. Friendship with Jewish/Arab students is limited to college grounds only.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. I am not interested in connections with Jewish/Arab students</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. I am interested in learning about the customs and culture of the Arabs/Jews</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. I am willing to share a dorm room with an Arab/Jew</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. When I have to use learning materials I don’t hesitate to approach a Jewish/Arab student.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21. It bothers me that Jewish/Arab students get together in groups.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. It bothers me that Jewish/Arab students speak their language in class</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

The following are statements regarding the relationships between the different cultures in the Jewish school on the practicum. Please state your level of agreement with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Irrelevant</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. School teachers treat Jewish and Arab students equally</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24. The pupils treat Jewish and Arab students equally</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25. The master-teacher treat Jewish and Arab students equally</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26. There are expressions of racism on the part of the pupils</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. The pupils do not cooperate with Arab student-teachers</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>28. The Jewish school culture resembles that of the Arab school</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>29. My culture interrupts me on the experience day in the Jewish school</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
The following are statements regarding the differences between the practicum in Jewish school and in the Arab school. Please state your level of agreement with each statement. (For Arab students only)

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. My mother tongue helps me teach in the Jewish school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>31. I am familiar with sports terms in Hebrew</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>32. I am familiar with sports terms in Arabic</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>33. In the Jewish school they behave differently from the Arab school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>34. I participate in Jewish ceremonies in the college</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>35. I participate in Jewish ceremonies in the school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>36. I am hurt when the children call me “Arab”</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>37. The culture from which I come is different from the school’s culture</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>38. Discipline in the Jewish school agrees with my views.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>39. There are differences between Physical Education lessons in the Jewish and in the Arab schools</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
The following are statements regarding the differences between the practicum in Jewish school and in the Arab school. Please state your level of agreement with each statement. (For Arab students only)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>40. There is a Physical Education culture learning in the Jewish school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>41. There is a Physical Education learning culture in the Arab school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>42. Discipline is strict in the Jewish school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>43. Discipline is strict in the Arab school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>44. The pupils in the Jewish school respect the teacher</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>45. The pupils in the Arab school respect the teacher</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>46. It is important to feel at home in school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>47. The pupils get responsibilities in the Jewish school</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>48. The pupils get responsibilities in the Arab school</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
The following are statements regarding the relationships between student-teacher and the master-teacher in Jewish school. Please state your level of agreement with each statement, where “completely disagree” means the statement is not true for you, and “Completely agree” means the statement is true for you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Completely disagree</th>
<th>Slightly agree</th>
<th>Medium</th>
<th>Agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>49. The master-teacher helps me prepare my lesson plan</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50. The master-teacher provides feedback about the lessons.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51. The master-teacher helps me progress in teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>52. I feel that the master-teacher guides me properly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53. The master-teacher is always available</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54. The master-teacher treats me the same as the other students</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>55. The master-teacher understands my difficulties</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>56. The master-teacher treats me well</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>57. The master-teacher is my role model</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Have you anything else to add?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Background information is important:

<table>
<thead>
<tr>
<th>Year in college</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationality</td>
<td>Arab</td>
<td>Jewish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Father’s Education**
- Primary
- Partial
- Secondary
- Higher education (with no academic degree)
- Academic

**Mother’s Education**
- Primary
- Partial
- Secondary
- Higher education (with no academic degree)
- Academic

Thank you for your cooperation
Appendix 2: Respondents Comments
Arab
studentteachers

I have a problem with the language in which I teach. I master the Hebrew professional terms
of Physical Education, but it will be hard for me to teach them in Arabic, for instance in
primary school classes where the children have not yet learnt Hebrew. I believe you have to
use the mother tongue in school, clearly and correctly.
I wanted to add that in the Jewish school they have great awareness of Physical Education, far
greater than in Arab schools. They have options for advancement. The most important thing
they have is the extra-curricular activities which influence the pupils after the lessons.
Add more practicum days during teacher-education
The master-teacher I had in my second year was the best. She helped me a lot.
I praise the training teacher and the pedagogical instructors as they always treat the studentteachers well seeking to “be strong at Physical Education”
I started my practicum in an Arab school, and then, in the same semester, the pedagogical
instructor transferred me to a Jewish school. There are big differences between the schools.
The Jews have a lot of equipment‟ and the Arab schools do not. This is the good thing about
Jewish schools.
In the Jewish schools there are pupils who do not want Arab teachers to teach them.
My teacher, Guy, was there for me and helped me a lot.
The master-teacher is amazing!

Jewish
studentteachers

There is a lot to learn from my master-teacher: demonstrations, teacher‟s attitudes, many
ideas for activities – a role model teacher.
I received from my master-teacher so many tools that I cannot even describe them.
For the student-teachers to get the best from the practicum, their lessons have to be observed
often. Further, the master-teacher‟s professionalism has to be assessed, as well as what the
master-teacher has to contribute to the student-teachers.
The master-teacher treats the student-teachers according to their investment.

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Appendix 3:

Tables presenting the distributions in detail as arising from the statistical analysis of the questionnaires in the quantitative research stage

Table 1: Reasons for Studying Physical Education – The Entire Sample and According to Nationality (Percentages, Means and Standard Deviations)

<table>
<thead>
<tr>
<th></th>
<th>Low Extent</th>
<th>Medium</th>
<th>Great Extent</th>
<th>Total</th>
<th>Total</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entire Sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I love sport</td>
<td>2.82%</td>
<td></td>
<td>97.18%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.85</td>
<td>.44</td>
</tr>
<tr>
<td>I am active in sport</td>
<td>5.63%</td>
<td>22.54%</td>
<td>71.83%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.06</td>
<td>.92</td>
</tr>
<tr>
<td>Family encouragement**</td>
<td>16.90%</td>
<td>18.31%</td>
<td>64.79%</td>
<td>100.00%</td>
<td>N=71</td>
<td>3.73</td>
<td>1.32</td>
</tr>
<tr>
<td><strong>Arab Physical Education Student Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I love sport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am active in sport</td>
<td>5.26%</td>
<td>28.95%</td>
<td>65.79%</td>
<td>100.00%</td>
<td>N=38</td>
<td>3.92</td>
<td>.91</td>
</tr>
<tr>
<td>Family encouragement**</td>
<td>5.26%</td>
<td>15.79%</td>
<td>78.95%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.13</td>
<td>.96</td>
</tr>
<tr>
<td>Sports teacher are required in our sector**</td>
<td>13.16%</td>
<td>26.32%</td>
<td>60.53%</td>
<td>100.00%</td>
<td>N=38</td>
<td>3.71</td>
<td>1.14</td>
</tr>
<tr>
<td><strong>Jewish Physical Education Student-Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I love sport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am active in sport</td>
<td>6.06%</td>
<td>15.15%</td>
<td>78.79%</td>
<td>100.00%</td>
<td>N=33</td>
<td>4.21</td>
<td>.93</td>
</tr>
<tr>
<td>Family encouragement**</td>
<td>30.30%</td>
<td>21.21%</td>
<td>48.48%</td>
<td>100.00%</td>
<td>N=33</td>
<td>3.27</td>
<td>1.53</td>
</tr>
<tr>
<td>Sports teacher are required in our sector**</td>
<td>67.86%</td>
<td>17.86%</td>
<td>14.29%</td>
<td>100.00%</td>
<td>N=28</td>
<td>2.14</td>
<td>1.24</td>
</tr>
</tbody>
</table>

**p<0.01
Table 2: The Significance of the practicum in the Jewish School - The Entire Sample and According to Nationality (Percentages, Means and Standard Deviations)

<table>
<thead>
<tr>
<th></th>
<th>Low Extent</th>
<th>Medium</th>
<th>Great Extent</th>
<th>Total</th>
<th>Total</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Entire Sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The practicum is important</td>
<td>5.56%</td>
<td></td>
<td>94.44%</td>
<td>100.00%</td>
<td>N=72</td>
<td>4.72</td>
<td>.56</td>
</tr>
<tr>
<td>Physical Education is important in the Jewish school</td>
<td>9.72%</td>
<td></td>
<td>90.28%</td>
<td>100.00%</td>
<td>N=72</td>
<td>4.56</td>
<td>.67</td>
</tr>
<tr>
<td>God School Atmosphere</td>
<td>11.11%</td>
<td></td>
<td>88.89%</td>
<td>100.00%</td>
<td>N=72</td>
<td>4.29</td>
<td>.66</td>
</tr>
<tr>
<td>Pupils are responsible for activities in the breaks</td>
<td>12.68%</td>
<td>40.85%</td>
<td>46.48%</td>
<td>100.00%</td>
<td>N=71</td>
<td>3.48</td>
<td>1.03</td>
</tr>
<tr>
<td>Teachers listen to the pupils</td>
<td>9.86%</td>
<td>16.90%</td>
<td>73.24%</td>
<td>100.00%</td>
<td>N=71</td>
<td>3.86</td>
<td>.88</td>
</tr>
<tr>
<td>Good pupils’ discipline</td>
<td>5.63%</td>
<td>23.94%</td>
<td>70.42%</td>
<td>100.00%</td>
<td>N=71</td>
<td>3.92</td>
<td>.91</td>
</tr>
<tr>
<td>Proper conditions and equipment for Physical Education</td>
<td>1.41%</td>
<td>16.90%</td>
<td>81.69%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.28</td>
<td>.80</td>
</tr>
<tr>
<td>Professional Master-teacher</td>
<td>1.39%</td>
<td>6.94%</td>
<td>91.67%</td>
<td>100.00%</td>
<td>N=72</td>
<td>4.46</td>
<td>.69</td>
</tr>
<tr>
<td><strong>Arab Physical Education student-teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The practicum is important</td>
<td>5.26%</td>
<td></td>
<td>94.74%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.76</td>
<td>.54</td>
</tr>
<tr>
<td>Physical Education is important in the Jewish school</td>
<td>5.26%</td>
<td></td>
<td>94.74%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.55</td>
<td>.60</td>
</tr>
<tr>
<td>God School Atmosphere</td>
<td>10.53%</td>
<td></td>
<td>89.47%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.24</td>
<td>.63</td>
</tr>
<tr>
<td>Pupils are responsible for activities in the breaks</td>
<td>10.53%</td>
<td>36.84%</td>
<td>52.63%</td>
<td>100.00%</td>
<td>N=38</td>
<td>3.58</td>
<td>1.13</td>
</tr>
<tr>
<td>Teachers listen to the pupils</td>
<td>7.89%</td>
<td>21.05%</td>
<td>71.05%</td>
<td>100.00%</td>
<td>N=38</td>
<td>3.87</td>
<td>.88</td>
</tr>
<tr>
<td>Good pupils’ discipline</td>
<td>8.11%</td>
<td>24.32%</td>
<td>67.57%</td>
<td>100.00%</td>
<td>N=37</td>
<td>3.78</td>
<td>.95</td>
</tr>
<tr>
<td>Proper conditions and equipment for Physical Education</td>
<td>2.63%</td>
<td>10.53%</td>
<td>86.84%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.34</td>
<td>.78</td>
</tr>
<tr>
<td>Professional Master-teacher</td>
<td>5.26%</td>
<td></td>
<td>94.74%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.58</td>
<td>.60</td>
</tr>
<tr>
<td>Jewish Physical Education student-teachers</td>
<td>Low Extent</td>
<td>Medium</td>
<td>Great Extent</td>
<td>Total</td>
<td>N=34</td>
<td>Mean</td>
<td>S.D</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------</td>
<td>--------</td>
<td>-------------</td>
<td>-------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>The practicum is important</td>
<td>5.88%</td>
<td>94.12%</td>
<td>100.00%</td>
<td>N=34</td>
<td>4.68</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Physical Education is important in the Jewish school</td>
<td>14.71%</td>
<td>85.29%</td>
<td>100.00%</td>
<td>N=34</td>
<td>4.56</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>God School Atmosphere</td>
<td>11.76%</td>
<td>88.24%</td>
<td>100.00%</td>
<td>N=34</td>
<td>4.35</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Pupils are responsible for activities in the breaks</td>
<td>15.15%</td>
<td>45.45%</td>
<td>39.39%</td>
<td>N=33</td>
<td>3.36</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Teachers listen to the pupils</td>
<td>12.12%</td>
<td>12.12%</td>
<td>75.76%</td>
<td>N=33</td>
<td>3.85</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>Good pupils’ discipline</td>
<td>2.94%</td>
<td>23.53%</td>
<td>73.53%</td>
<td>N=34</td>
<td>4.06</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Proper conditions and equipment for Physical Education</td>
<td>24.24%</td>
<td>75.76%</td>
<td>100.00%</td>
<td>N=33</td>
<td>4.21</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Professional Master-teacher</td>
<td>2.94%</td>
<td>8.82%</td>
<td>88.24%</td>
<td>N=34</td>
<td>4.32</td>
<td>.77</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Physical Education Student-Teacher and Master-teacher Relationship in the Jewish School. The Entire Sample and According to Nationality (Percentages, Means and Standard Deviations)

<table>
<thead>
<tr>
<th></th>
<th>Low Extent</th>
<th>Medium</th>
<th>Great Extent</th>
<th>Total</th>
<th>Total</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entire Sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The master-teacher helps me prepare my lesson plans**</td>
<td>46.48%</td>
<td>22.54%</td>
<td>30.99%</td>
<td>100.00%</td>
<td>N=71</td>
<td>2.79</td>
<td>1.39</td>
</tr>
<tr>
<td>The master-teacher always provides feedback on my lessons</td>
<td>14.08%</td>
<td>16.90%</td>
<td>69.01%</td>
<td>100.00%</td>
<td>N=71</td>
<td>3.93</td>
<td>1.14</td>
</tr>
<tr>
<td>The master-teacher advances me in teaching</td>
<td>5.63%</td>
<td>16.90%</td>
<td>77.46%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.08</td>
<td>.87</td>
</tr>
<tr>
<td>I feel the master-teacher guides me properly**</td>
<td>7.04%</td>
<td>21.13%</td>
<td>71.83%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.06</td>
<td>1.00</td>
</tr>
<tr>
<td>The master-teacher is always available*</td>
<td>8.45%</td>
<td>18.31%</td>
<td>73.24%</td>
<td>100.00%</td>
<td>N=71</td>
<td>3.94</td>
<td>1.04</td>
</tr>
<tr>
<td>The master-teacher treats me like all the other Physical Education student-teachers</td>
<td>7.04%</td>
<td>8.45%</td>
<td>84.51%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.24</td>
<td>.98</td>
</tr>
<tr>
<td>The master-teacher understands my difficulties</td>
<td>8.45%</td>
<td>8.45%</td>
<td>83.10%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.11</td>
<td>.98</td>
</tr>
<tr>
<td>The master-teacher treats me well</td>
<td>1.41%</td>
<td>5.63%</td>
<td>92.96%</td>
<td>100.00%</td>
<td>N=71</td>
<td>4.48</td>
<td>.67</td>
</tr>
<tr>
<td>The master-teacher is my role model*</td>
<td>14.08%</td>
<td>18.31%</td>
<td>67.61%</td>
<td>100.00%</td>
<td>N=71</td>
<td>3.86</td>
<td>1.19</td>
</tr>
<tr>
<td><strong>Arab Physical Education Student-Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The master-teacher helps me prepare my lesson plans**</td>
<td>28.95%</td>
<td>31.58%</td>
<td>39.47%</td>
<td>100.00%</td>
<td>N=38</td>
<td>3.18</td>
<td>1.31</td>
</tr>
<tr>
<td>The master-teacher always provides feedback on my lessons</td>
<td>7.89%</td>
<td>13.16%</td>
<td>78.95%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.08</td>
<td>.91</td>
</tr>
<tr>
<td>The master-teacher advances me in teaching</td>
<td>2.63%</td>
<td>10.53%</td>
<td>86.84%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.26</td>
<td>.76</td>
</tr>
<tr>
<td>I feel the master-teacher guides me properly**</td>
<td>15.79%</td>
<td>84.21%</td>
<td>100.00%</td>
<td></td>
<td>N=38</td>
<td>4.37</td>
<td>.75</td>
</tr>
<tr>
<td>The master-teacher is always available*</td>
<td>2.63%</td>
<td>15.79%</td>
<td>81.58%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.18</td>
<td>.90</td>
</tr>
<tr>
<td>The master-teacher treats me like all the other Physical Education student-teachers</td>
<td>2.63%</td>
<td>10.53%</td>
<td>86.84%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.32</td>
<td>.87</td>
</tr>
<tr>
<td>Jewish Physical Education Student-Teachers</td>
<td>Low Extent</td>
<td>Medium</td>
<td>Great Extent</td>
<td>Total</td>
<td>Total</td>
<td>Mean</td>
<td>S.D</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------------</td>
<td>--------</td>
<td>-------------</td>
<td>-------</td>
<td>-------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>The master-teacher understands my difficulties</td>
<td>5.26%</td>
<td>7.89%</td>
<td>86.84%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.16</td>
<td>.89</td>
</tr>
<tr>
<td>The master-teacher treats me well</td>
<td>2.63%</td>
<td>97.37%</td>
<td>100.00%</td>
<td>N=38</td>
<td>4.61</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>The master-teacher is my role model*</td>
<td>2.63%</td>
<td>15.79%</td>
<td>81.58%</td>
<td>N=38</td>
<td>4.18</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>The master-teacher helps me prepare my lesson plans**</td>
<td>66.67%</td>
<td>12.12%</td>
<td>21.21%</td>
<td>100.00%</td>
<td>N=33</td>
<td>2.33</td>
<td>1.36</td>
</tr>
<tr>
<td>The master-teacher always provides feedback on my lessons</td>
<td>21.21%</td>
<td>21.21%</td>
<td>57.58%</td>
<td>100.00%</td>
<td>N=33</td>
<td>3.76</td>
<td>1.35</td>
</tr>
<tr>
<td>The master-teacher advances me in teaching</td>
<td>9.09%</td>
<td>24.24%</td>
<td>66.76%</td>
<td>100.00%</td>
<td>N=33</td>
<td>3.88</td>
<td>.96</td>
</tr>
<tr>
<td>I feel the master-teacher guides me properly**</td>
<td>15.15%</td>
<td>27.27%</td>
<td>57.58%</td>
<td>100.00%</td>
<td>N=33</td>
<td>3.70</td>
<td>1.13</td>
</tr>
<tr>
<td>The master-teacher is always available*</td>
<td>15.15%</td>
<td>21.21%</td>
<td>63.64%</td>
<td>100.00%</td>
<td>N=33</td>
<td>3.67</td>
<td>1.14</td>
</tr>
<tr>
<td>The master-teacher treats me like all the other Physical Education student-teachers</td>
<td>12.12%</td>
<td>6.06%</td>
<td>81.82%</td>
<td>100.00%</td>
<td>N=33</td>
<td>4.15</td>
<td>1.09</td>
</tr>
<tr>
<td>The master-teacher understands my difficulties</td>
<td>12.12%</td>
<td>9.09%</td>
<td>78.79%</td>
<td>100.00%</td>
<td>N=33</td>
<td>4.06</td>
<td>1.09</td>
</tr>
<tr>
<td>The master-teacher treats me well</td>
<td>3.03%</td>
<td>9.09%</td>
<td>87.88%</td>
<td>100.00%</td>
<td>N=33</td>
<td>4.33</td>
<td>.78</td>
</tr>
<tr>
<td>The master-teacher is my role model*</td>
<td>27.27%</td>
<td>21.21%</td>
<td>51.52%</td>
<td>100.00%</td>
<td>N=33</td>
<td>3.48</td>
<td>1.44</td>
</tr>
</tbody>
</table>

**p<0.01

*p<0.05
Table 4: Relationships between the Different Cultures in the Practicum in the Jewish School - The Entire Sample and according to Nationality (Percentages)

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entire Sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The school teachers treat the Jewish and Arab Physical Education student-teachers equally.</td>
<td>82.46%</td>
<td>17.54%</td>
<td>100.00%</td>
<td>N=57</td>
</tr>
<tr>
<td>The pupils treat the Jewish and Arab Physical Education student-teachers equally</td>
<td>56.60%</td>
<td>43.40%</td>
<td>100.00%</td>
<td>N=53</td>
</tr>
<tr>
<td>The master-teacher treats the Jewish and Arab Physical Education student-teachers equally</td>
<td>81.48%</td>
<td>18.52%</td>
<td>100.00%</td>
<td>N=54</td>
</tr>
<tr>
<td>There are racist expressions on the part of the pupils**</td>
<td>46.15%</td>
<td>53.85%</td>
<td>100.00%</td>
<td>N=52</td>
</tr>
<tr>
<td>The pupils do not cooperate with Arab Physical Education student-teachers</td>
<td>20.00%</td>
<td>80.00%</td>
<td>100.00%</td>
<td>N=50</td>
</tr>
<tr>
<td>The Jewish school culture resembles the one of the Arab school</td>
<td>17.78%</td>
<td>82.22%</td>
<td>100.00%</td>
<td>N=45</td>
</tr>
<tr>
<td>My original culture bothers my practicum in the Jewish school</td>
<td>16.67%</td>
<td>83.33%</td>
<td>100.00%</td>
<td>N=42</td>
</tr>
<tr>
<td><strong>Arab Physical Education student-Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The school teacher treats the Jewish and Arab Physical Education student-teachers equally</td>
<td>85.71%</td>
<td>14.29%</td>
<td>100.00%</td>
<td>N=35</td>
</tr>
<tr>
<td>The pupils treat the Jewish and Arab Physical Education student-teachers equally</td>
<td>52.94%</td>
<td>47.06%</td>
<td>100.00%</td>
<td>N=34</td>
</tr>
<tr>
<td>The master-teacher treats the Jewish and Arab Physical Education student-teachers equally</td>
<td>84.85%</td>
<td>15.15%</td>
<td>100.00%</td>
<td>N=33</td>
</tr>
<tr>
<td>There are racist expressions on the part of the pupils**</td>
<td>60.00%</td>
<td>40.00%</td>
<td>100.00%</td>
<td>N=35</td>
</tr>
<tr>
<td>The pupils do not cooperate with Arab Physical Education student-teachers</td>
<td>19.35%</td>
<td>80.65%</td>
<td>100.00%</td>
<td>N=31</td>
</tr>
<tr>
<td>The Jewish school culture resembles the one of the Arab school</td>
<td>15.63%</td>
<td>84.38%</td>
<td>100.00%</td>
<td>N=32</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>Disagree</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>My original culture bothers my practicum in the Jewish school</td>
<td>18.75%</td>
<td>81.25%</td>
<td>100.00%</td>
<td>N=32</td>
</tr>
<tr>
<td>The school teachers treat the Jewish and Arab Physical Education student-teachers equally.</td>
<td>77.27%</td>
<td>22.73%</td>
<td>100.00%</td>
<td>N=22</td>
</tr>
<tr>
<td>The pupils treat the Jewish and Arab Physical Education student-teachers equally</td>
<td>63.16%</td>
<td>36.84%</td>
<td>100.00%</td>
<td>N=19</td>
</tr>
<tr>
<td>The master-teacher treats the Jewish and Arab Physical Education student-teachers equally</td>
<td>76.19%</td>
<td>23.81%</td>
<td>100.00%</td>
<td>N=21</td>
</tr>
<tr>
<td>There are racist expressions on the part of the pupils**</td>
<td>17.65%</td>
<td>82.35%</td>
<td>100.00%</td>
<td>N=17</td>
</tr>
<tr>
<td>The pupils do not cooperate with Arab Physical Education student-teachers</td>
<td>21.05%</td>
<td>78.95%</td>
<td>100.00%</td>
<td>N=19</td>
</tr>
<tr>
<td>The Jewish school culture resembles the one of the Arab school</td>
<td>23.08%</td>
<td>76.92%</td>
<td>100.00%</td>
<td>N=13</td>
</tr>
<tr>
<td>My original culture bothers my practicum in the Jewish school</td>
<td>10.00%</td>
<td>90.00%</td>
<td>100.00%</td>
<td>N=10</td>
</tr>
</tbody>
</table>

**p<0.01
Table 5: Relationships between the Different Cultures in the College - The Entire Sample and According to Nationality (Percentages)

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entire Sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The teachers treat the Jewish Physical Education student-teachers and the Arab ones equally.</td>
<td>70.77%</td>
<td>29.23%</td>
<td>100.00%</td>
<td>N=65</td>
</tr>
<tr>
<td>I have Jewish /Arab friends in the college</td>
<td>100.00%</td>
<td></td>
<td>100.00%</td>
<td>N=68</td>
</tr>
<tr>
<td>Friendship with Arab /Jewish students is limited to college grounds only*</td>
<td>50.77%</td>
<td>49.23%</td>
<td>100.00%</td>
<td>N=65</td>
</tr>
<tr>
<td>I am not interested in social ties with Arab / Jewish Physical Education student-teachers</td>
<td>12.50%</td>
<td>87.50%</td>
<td>100.00%</td>
<td>N=56</td>
</tr>
<tr>
<td>I am interested in learning about the Arabs /Jews culture and customs *</td>
<td>89.66%</td>
<td>10.34%</td>
<td>100.00%</td>
<td>N=58</td>
</tr>
<tr>
<td>I am willing to live with an Arab / Jewish partner in the dorms **</td>
<td>69.81%</td>
<td>30.19%</td>
<td>100.00%</td>
<td>N=53</td>
</tr>
<tr>
<td>When I need help with materials I do not hesitate to turn to an Arab / Jewish Physical Education student-teacher</td>
<td>84.85%</td>
<td>15.15%</td>
<td>100.00%</td>
<td>N=66</td>
</tr>
<tr>
<td>It bothers me that Jewish / Arab Physical Education student-teachers get together in groups</td>
<td>52.54%</td>
<td>47.46%</td>
<td>100.00%</td>
<td>N=59</td>
</tr>
<tr>
<td>It bothers me that Arab / Jewish Physical Education student-teachers use their language in class **</td>
<td>32.61%</td>
<td>67.39%</td>
<td>100.00%</td>
<td>N=46</td>
</tr>
<tr>
<td><strong>Arab PE Student-Teachers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The teachers treat the Jewish Physical Education student-teachers and the Arab ones equally.</td>
<td>66.67%</td>
<td>33.33%</td>
<td>100.00%</td>
<td>N=36</td>
</tr>
<tr>
<td>I have Jewish /Arab friends in the college</td>
<td>100.00%</td>
<td></td>
<td>100.00%</td>
<td>N=38</td>
</tr>
<tr>
<td>Friendship with Arab /Jewish students is limited to college grounds only*</td>
<td>38.24%</td>
<td>61.76%</td>
<td>100.00%</td>
<td>N=34</td>
</tr>
<tr>
<td>I am not interested in social ties with Arab / Jewish Physical Education student-teachers</td>
<td>8.82%</td>
<td>91.18%</td>
<td>100.00%</td>
<td>N=34</td>
</tr>
<tr>
<td>I am interested in learning about the Arabs /Jews culture and customs *</td>
<td>96.97%</td>
<td>3.03%</td>
<td>100.00%</td>
<td>N=33</td>
</tr>
<tr>
<td></td>
<td>Agree (%)</td>
<td>Disagree (%)</td>
<td>Total (%)</td>
<td>N</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-----------</td>
<td>--------------</td>
<td>-----------</td>
<td>----</td>
</tr>
<tr>
<td>I am willing to live with an Arab / Jewish partner in the dorms **</td>
<td>91.18</td>
<td>8.82</td>
<td>100.00</td>
<td>34</td>
</tr>
<tr>
<td>When I need help with materials I do not hesitate to turn to an Arab / Jewish PE student-teacher</td>
<td>80.56</td>
<td>19.44</td>
<td>100.00</td>
<td>36</td>
</tr>
<tr>
<td>It bothers me that Jewish / Arab Physical Education student-teachers get together in groups</td>
<td>55.88</td>
<td>44.12</td>
<td>100.00</td>
<td>34</td>
</tr>
<tr>
<td>It bothers me that Arab / Jewish Physical Education student-teachers use their language in class **</td>
<td>16.00</td>
<td>84.00</td>
<td>100.00</td>
<td>25</td>
</tr>
<tr>
<td>The teachers treat the Jewish v student-teachers and the Arab ones equally.</td>
<td>75.86</td>
<td>24.14</td>
<td>100.00</td>
<td>29</td>
</tr>
<tr>
<td>I have Jewish / Arab friends in the college</td>
<td>100.00</td>
<td>100.00</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Friendship with Arab / Jewish students is limited to college grounds only*</td>
<td>64.52</td>
<td>35.48</td>
<td>100.00</td>
<td>31</td>
</tr>
<tr>
<td>I am not interested in social ties with Arab / Jewish Physical Education student-teachers</td>
<td>18.18</td>
<td>81.82</td>
<td>100.00</td>
<td>22</td>
</tr>
<tr>
<td>I am interested in learning about the Arabs / Jews culture and customs *</td>
<td>80.00</td>
<td>20.00</td>
<td>100.00</td>
<td>25</td>
</tr>
<tr>
<td>I am willing to live with an Arab / Jewish partner in the dorms **</td>
<td>31.58</td>
<td>68.42</td>
<td>100.00</td>
<td>19</td>
</tr>
<tr>
<td>When I need help with materials I do not hesitate to turn to an Arab / Jewish Physical Education student-teacher</td>
<td>90.00</td>
<td>10.00</td>
<td>100.00</td>
<td>30</td>
</tr>
<tr>
<td>It bothers me that Jewish / Arab Physical Education student-teachers get together in groups</td>
<td>48.00</td>
<td>52.00</td>
<td>100.00</td>
<td>25</td>
</tr>
<tr>
<td>It bothers me that Arab / Jewish Physical Education student-teachers use their language in class **</td>
<td>52.38</td>
<td>47.62</td>
<td>100.00</td>
<td>21</td>
</tr>
</tbody>
</table>

**p<0.01  *p<0.05