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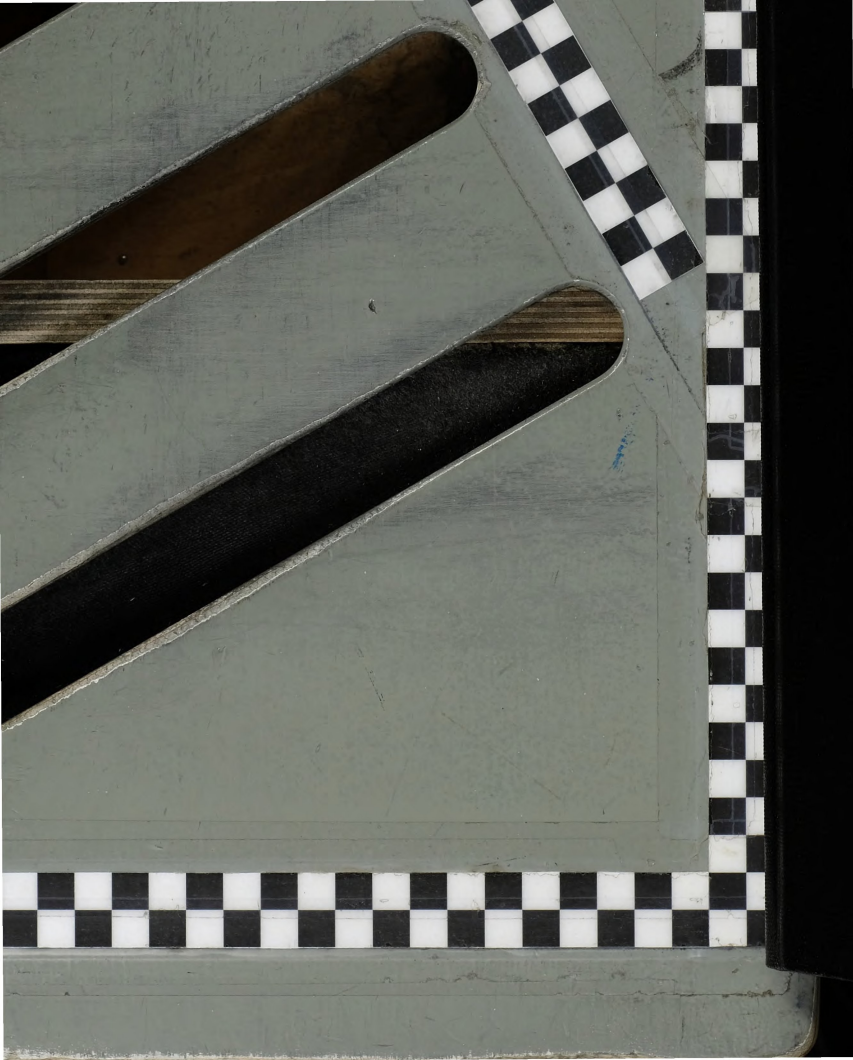
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dissertation entitled

THE NEEDS OF TEACHERS AS ADULT LEARNERS AS PERCEIVED BY  
TEACHERS AND SUPERVISORS IN INSERVICE TEACHER EDUCATION  
PROGRAMS IN JORDAN

presented by

YAHYA MOHAMMAD AFFASH

has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Educational Administration

  
Major professor

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THE NEEDS OF TEACHERS AS ADULT LEARNERS  
AS PERCEIVED BY TEACHERS AND SUPERVISORS  
IN INSERVICE TEACHER EDUCATION  
PROGRAMS IN JORDAN

By

Yahya Mohammad Affash

A DISSERTATION

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ABSTRACT

THE NEEDS OF TEACHERS AS ADULT LEARNERS  
AS PERCEIVED BY TEACHERS AND SUPERVISORS  
IN INSERVICE TEACHER EDUCATION  
PROGRAMS IN JORDAN

By

Yahya Mohammad Affash

This study was conducted to investigate the perceptions of teachers as adult learners and their supervisors regarding inservice teacher education programs in Jordan. A survey method using a questionnaire was employed to collect the data for this study. A questionnaire was distributed to a representative sample of 240 teachers and 20 supervisors in the Mafraq City District in northeast Jordan. Statistical techniques used for data analysis were descriptive statistics which included the means, standard deviations, frequencies, percentages and ranks and Analysis of Variance.

The results of the analysis indicate that:

1. All the six andragogical learning approaches were perceived as being practiced only sometimes or rarely/never by teachers.
2. Supervisors perceived all the six andragogical learning approaches as being practiced sometimes in the inservice teacher education programs in Jordan.

3. Teachers strongly agreed that all the six andragogical learning approaches should be practiced in the inservice teacher education programs in Jordan. Such a perception was strongest in the andragogical learning approach of **Teacher-Initiated Inservice Programs**.

4. Supervisors strongly agreed that all the six andragogical learning approaches should be practiced in the inservice teacher education programs in Jordan. Such a perception was strongest in the andragogical approach **Teacher-Initiated Inservice Programs**, where all 20 supervisors strongly agreed that the factor should be practiced.

5. While none of the teachers disagreed or strongly disagreed that teachers should be treated as adult professionals, none of the teachers strongly agreed that teachers are indeed being treated as adults and professionals in the inservice teacher education programs.

6. Statistically significant differences in teachers' perceptions regarding the extent to which andragogical approaches were preferred in the inservice teacher education programs were observed for the andragogical learning approaches,

(a) The mean rating for male teachers was significantly higher than the mean rating for female teachers for all the andragogical approaches except



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**A Teacher-Centered Inservice Programs and Trust in the Program Purpose.**

(b) The mean rating for elementary teachers was significantly lower than the mean rating for either intermediate or secondary school teachers for the andragogical approaches, **A Self-Directed Learner, Teacher-Centered Inservice Programs and Teacher-Initiated Inservice Programs.**

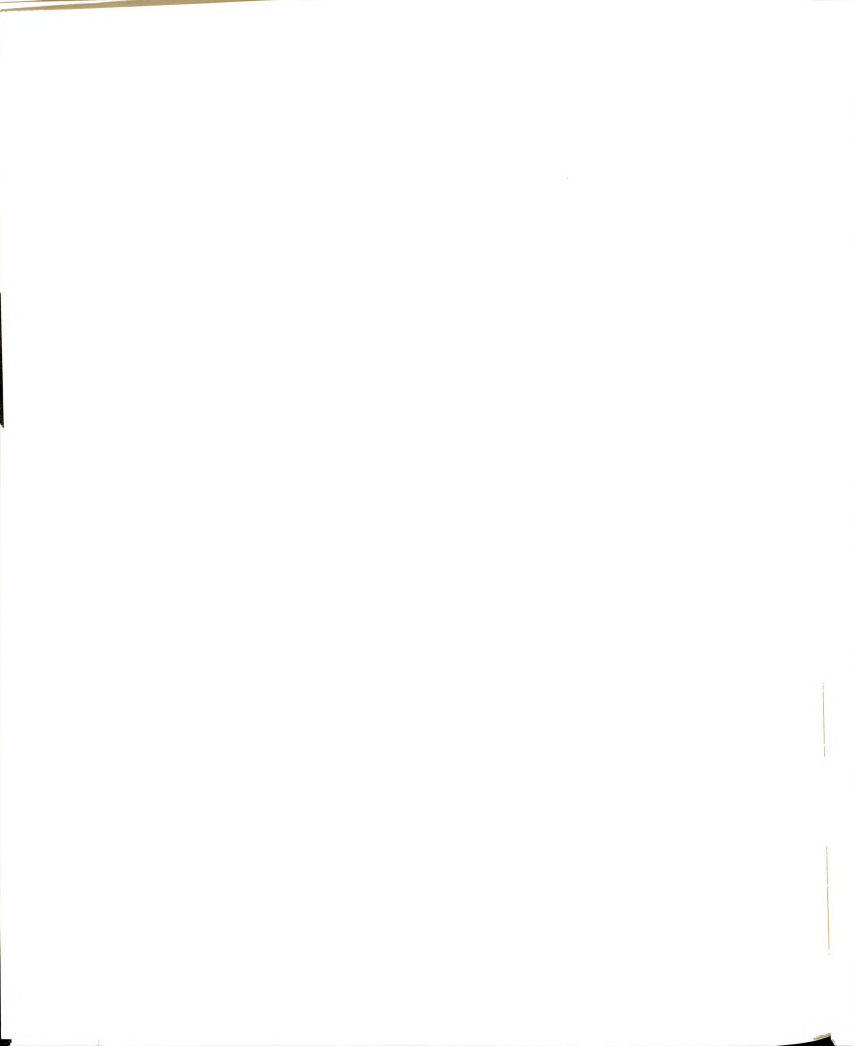


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1989





# DEDICATION

This work is dedicated with love  
to my  
Father and Mother  
for their care, patience, wisdom and foresight  
and for instilling in me the value of education.

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## ACKNOWLEDGMENTS

All praise and thanks be to Allah, Lord of the Worlds, for His providence and divine direction throughout my life. To all those who have contributed to make the study possible directly or indirectly, let me here express my thanks and gratitude.

First and foremost, I would like to express my heartfelt love, sincere gratitude and appreciation to Dr. Charles McKee, my major advisor and doctoral committee chairman, for his invaluable advice, encouragement, patience and understanding. His professional direction and guidance throughout my study here contributed greatly to the maturation of my academic and intellectual skills. For this I am indebted. He consistently made invaluable contributions to my career by "lighting the candle rather than cursing the darkness."

I am also deeply grateful to Drs. Howard Hickey, Kenneth Neff and James Snoddy, for their valuable support and service on my doctoral committee.



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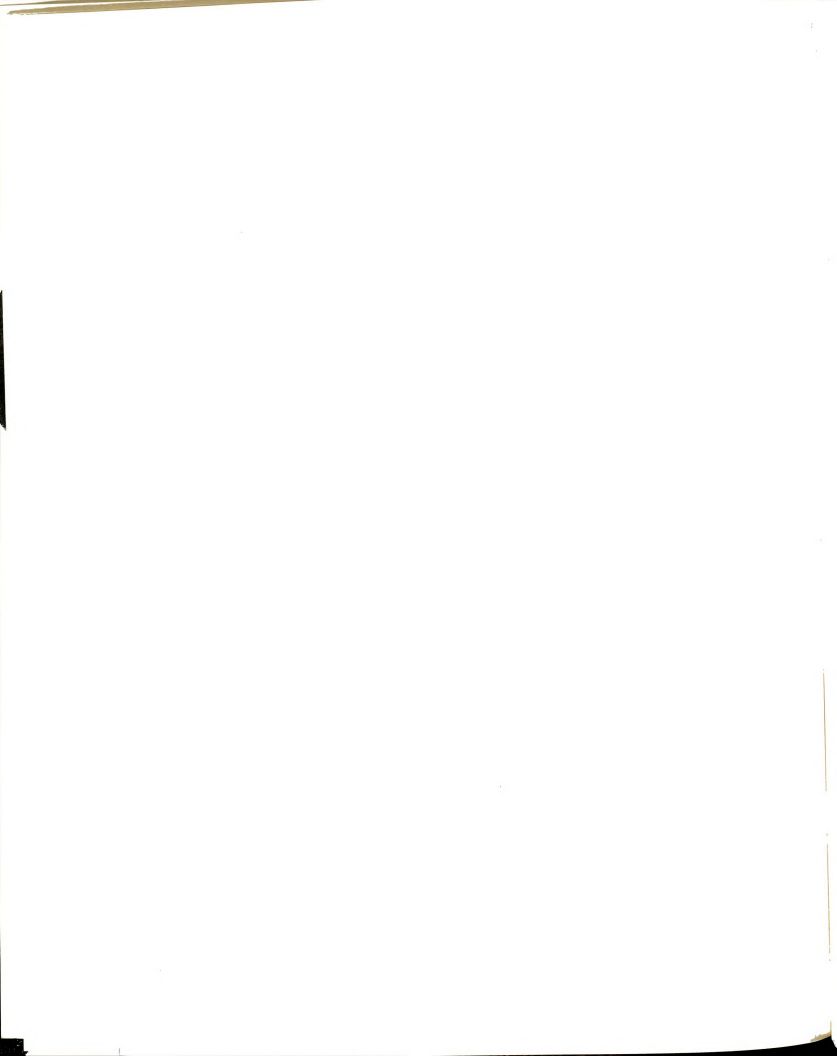
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A special thanks is due to Mr. Joshua Bagaka, from Michigan State University's Office of Research Consultation, for his professional assistance in the quantitative analysis of this study.

Thanks are also due to Mrs. Priscilla Martin for beautifully and accurately typing the rough draft and the final product.

Appreciation is extended to all the Mafraq District public school teachers and supervisors who participated in this study and spent time responding to the research questionnaire. A special thanks also to my friends and colleagues at Michigan State University and elsewhere, for their friendship and support.

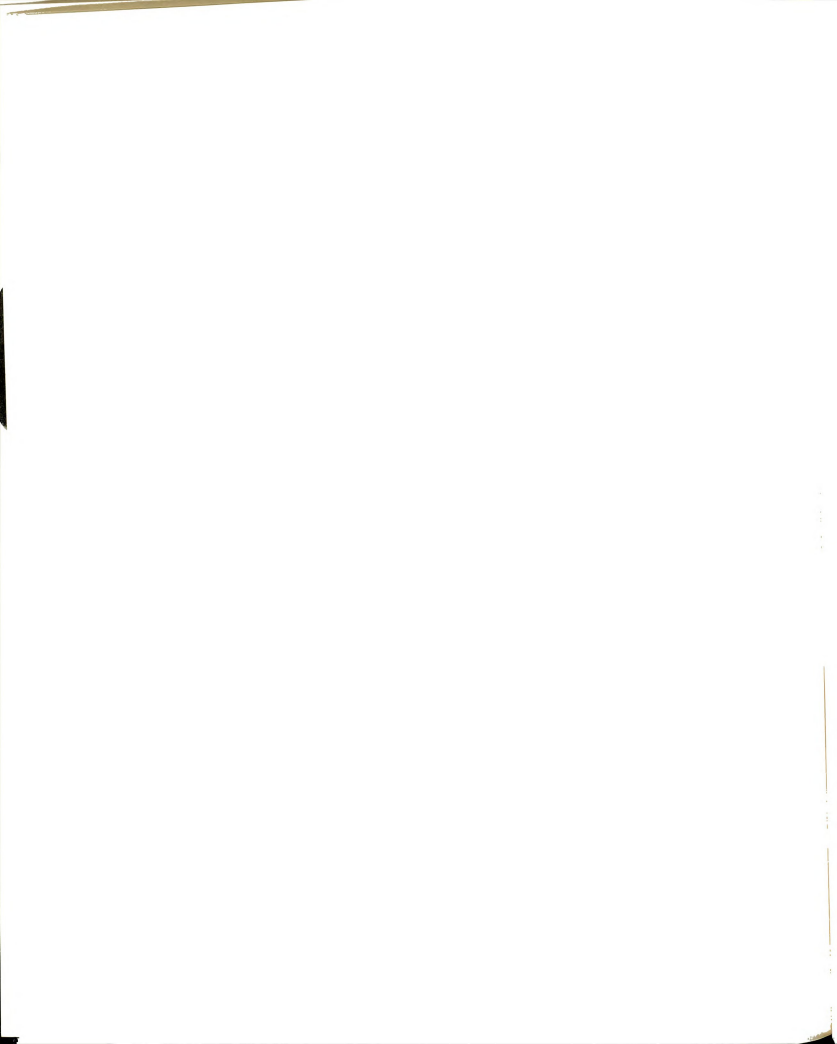
Last, but not least, my deep appreciation and gratitude to my father, Mr. Mohammad Affash, and my mother, Inzaileh, and to all of the other members of my family, brothers and sisters, for their support, care, encouragement and assistance in so many ways, during the difficult times throughout my entire academic journey.



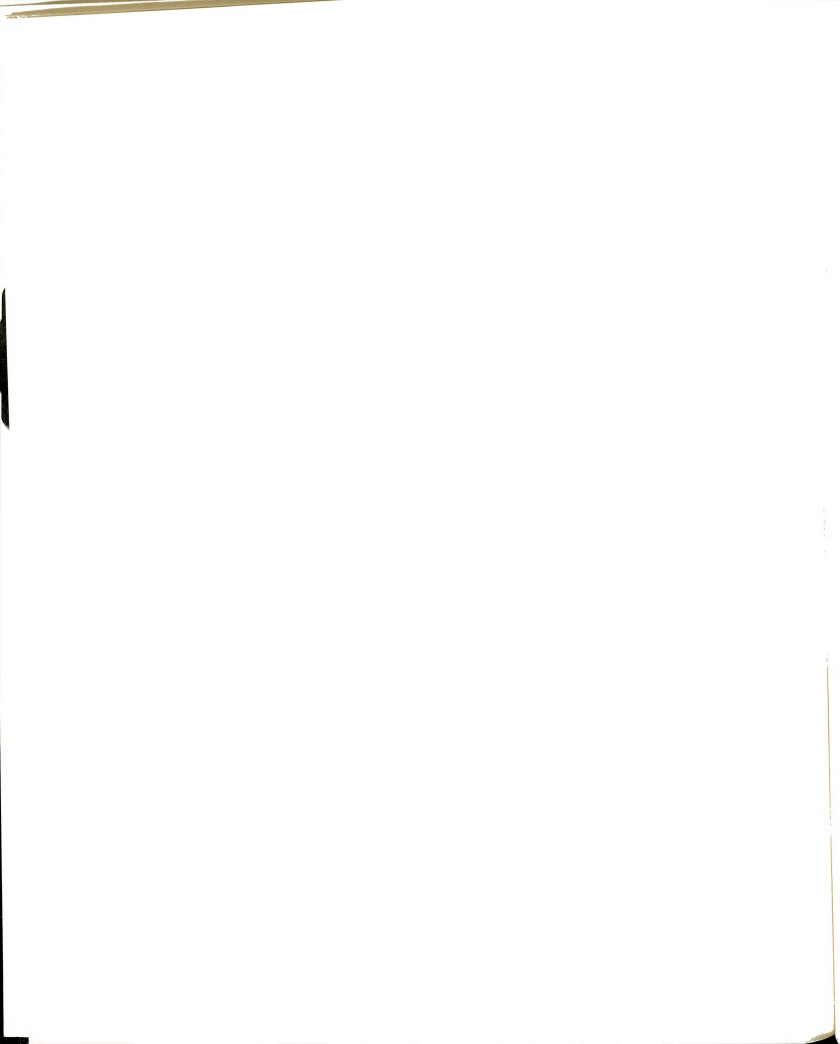
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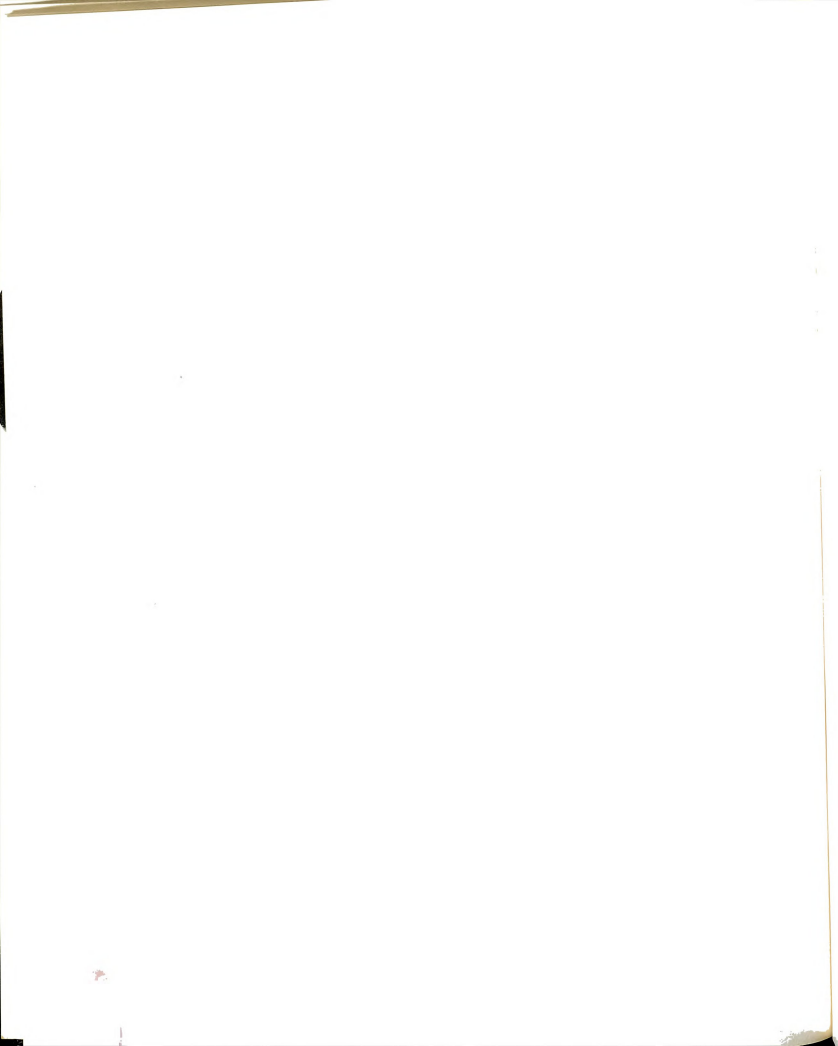


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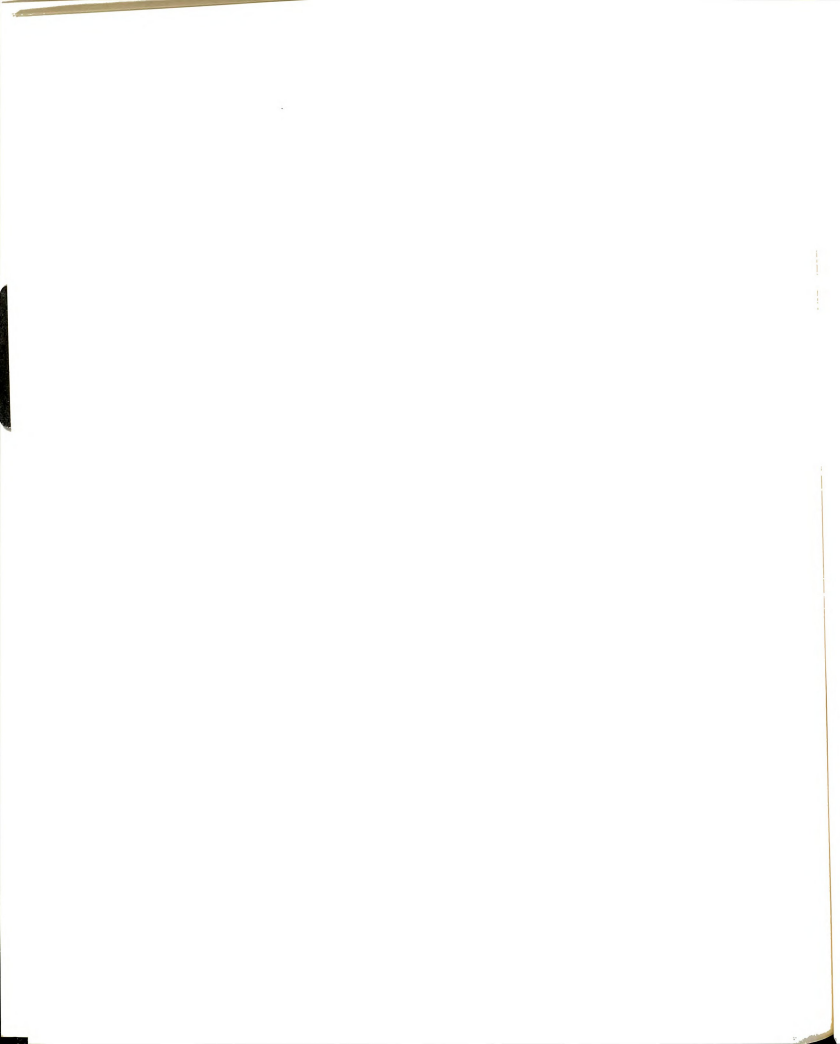
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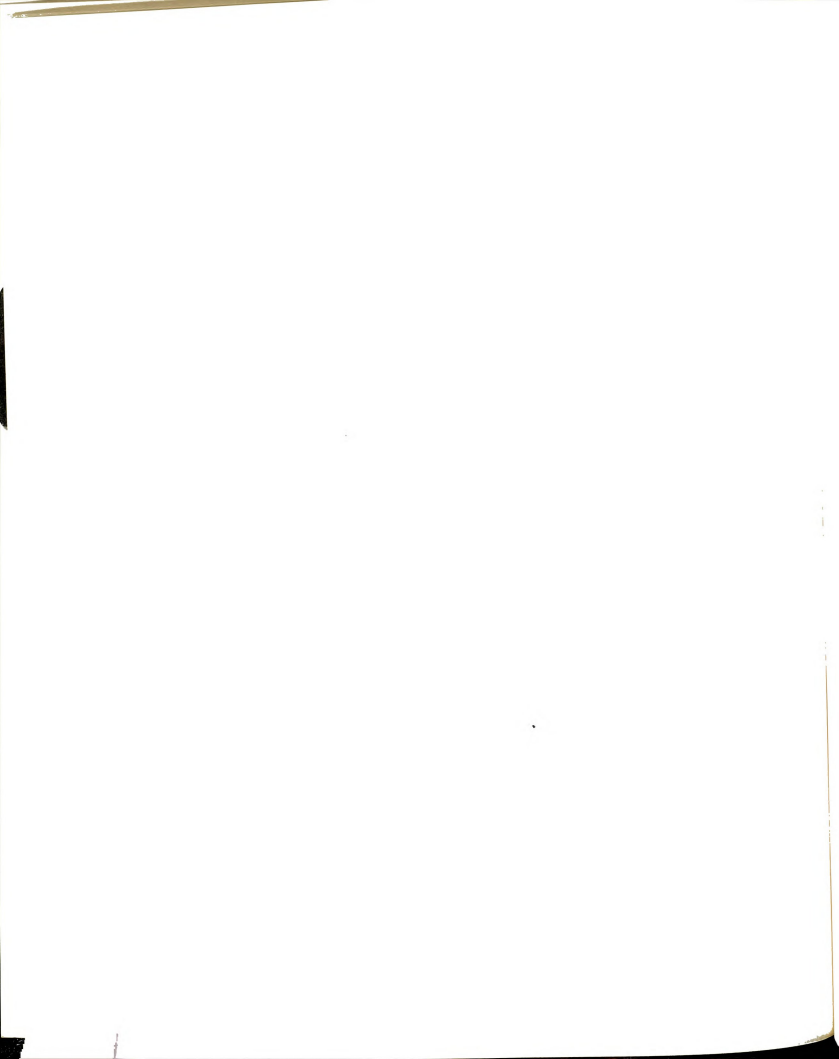
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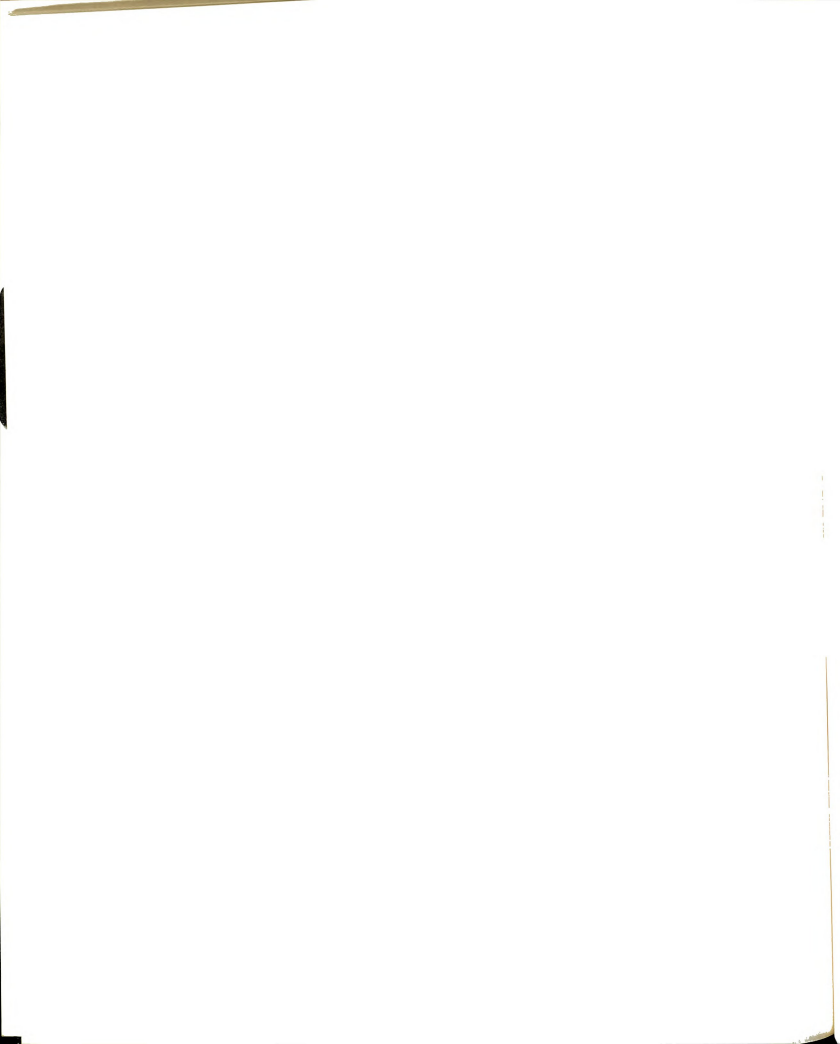


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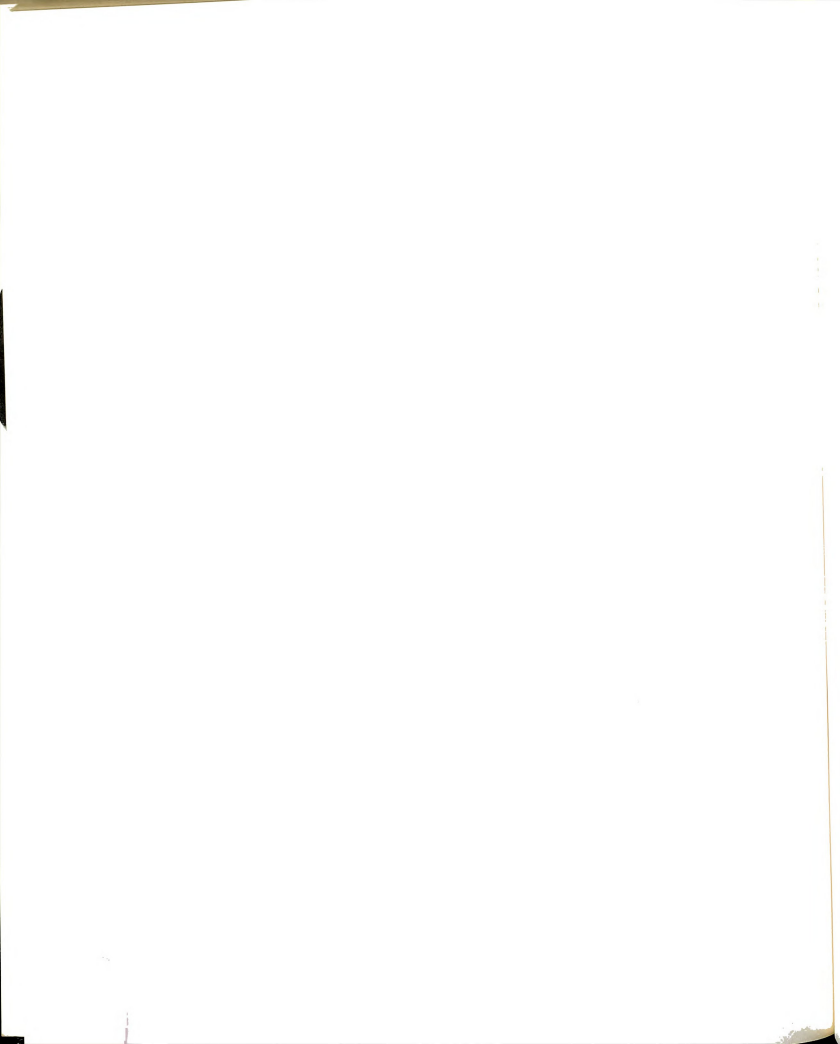




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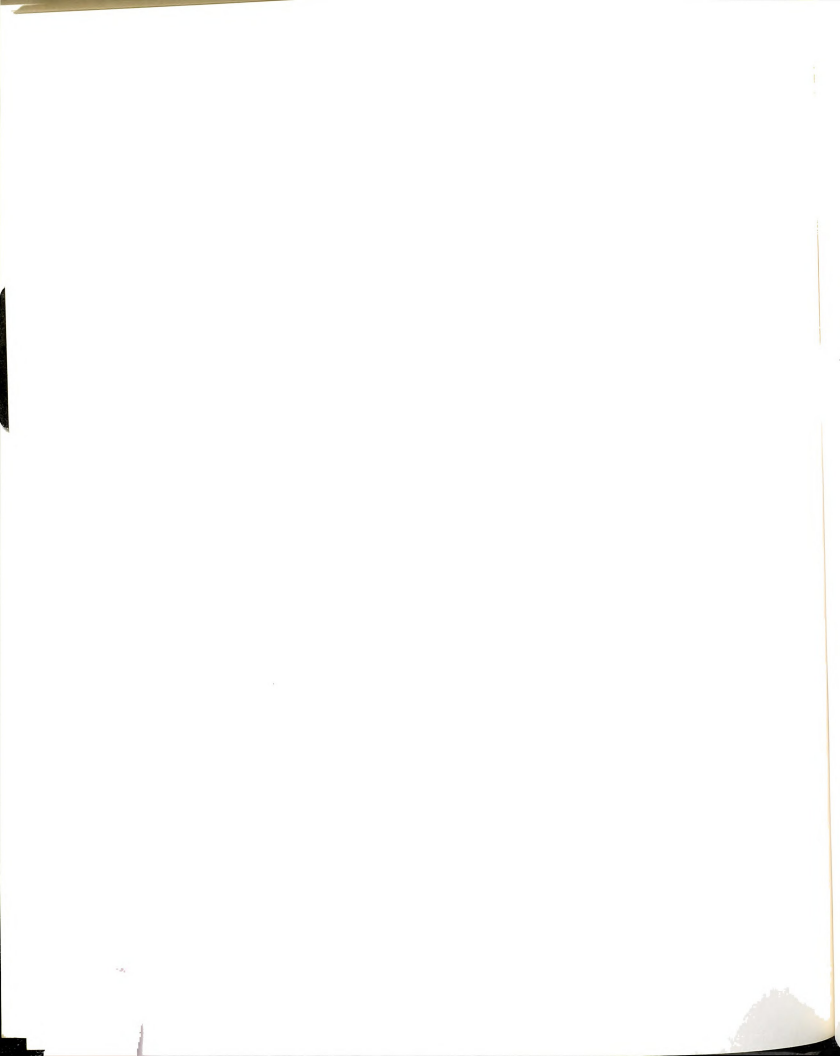


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## CHAPTER I

### BACKGROUND INFORMATION

Geographically, Jordan is situated between Africa and Asia. The Hashemite Kingdom of Jordan is bordered on the North by Syria, by Iraq on the Northeast, to the South and East by Saudi Arabia and on the West by Israel. Jordan covers an area of approximately 97,740 square kilometers, of which approximately 755 square kilometers constitute water of the Dead Sea.

Although Jordan's climate varies (like the Mediterranean in the West and desert like in the East), it is generally arid. In 1979, Jordan's population was estimated to be approximately three million. About 67% of the population are urban dwellers, 24% live in rural surroundings and 9% are nomadic Bedouins (Nyrop, 1980). The present ruler, King Hussein, ascended the throne in 1952. On December 14, 1955, Jordan became a member of the United Nations. Although Arabic is the official language, English is widely spoken, particularly in the towns. Islam is Jordan's state religion and the majority of Jordanians are Sunni Moslems. However, Jordan has a number of Christians, primarily in the towns. The Christians are

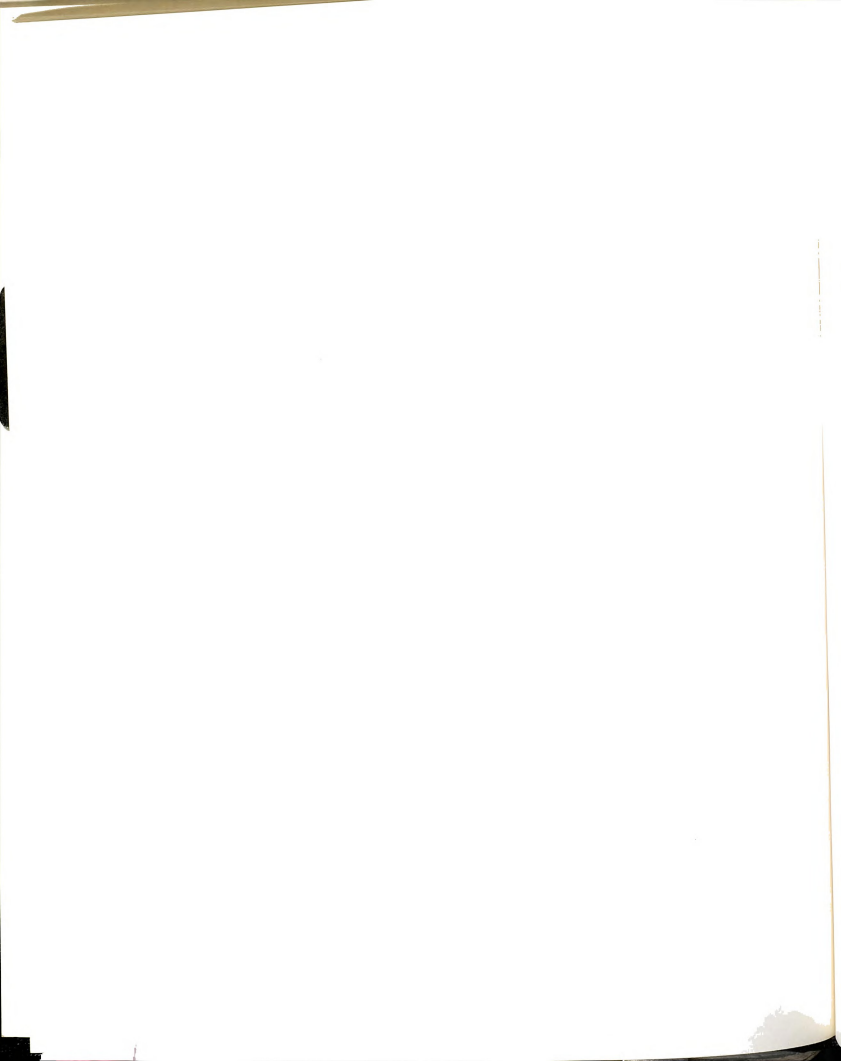




divided among several denominations: Greek Orthodox, Greek Catholic, Roman Catholic and some Protestant sects.

Agriculture still represents an important feature of Jordan's economy, engaging approximately one-third of the working population. About one-fifth of the gross domestic product is contributed by agriculture. The main crops are wheat, vegetables, many varieties of fruit and olives. Nevertheless, industry's role in Jordan's economy is increasing. Approximately 500 industrial establishments employ 30,000 individuals and considerable progress has been made in this sector.

Education has become a great concern in Jordan because of the role it plays in bringing about change in personal and social life. Reports from the Ministry of Education indicate that Jordanian students come from many ethnic groups and have widely diverse social lives. Though uncommon to a number of countries, a significant characteristic of Jordan's educational system is that it includes the United Nations Refugee's Work Agency Administration (UNRWA). The latter has provided education to Palestinian refugees since 1948. UNRWA provides its own educational program and is in harmony with the Jordanian curriculum. The agency also subsidizes education for some refugee students in both government and private secondary institutions and universities. However, the UNRWA system



is administratively independent of the Jordanian government. In addition to the government educational system, Jordan also has private educational institutions (Nyrop, 1980).

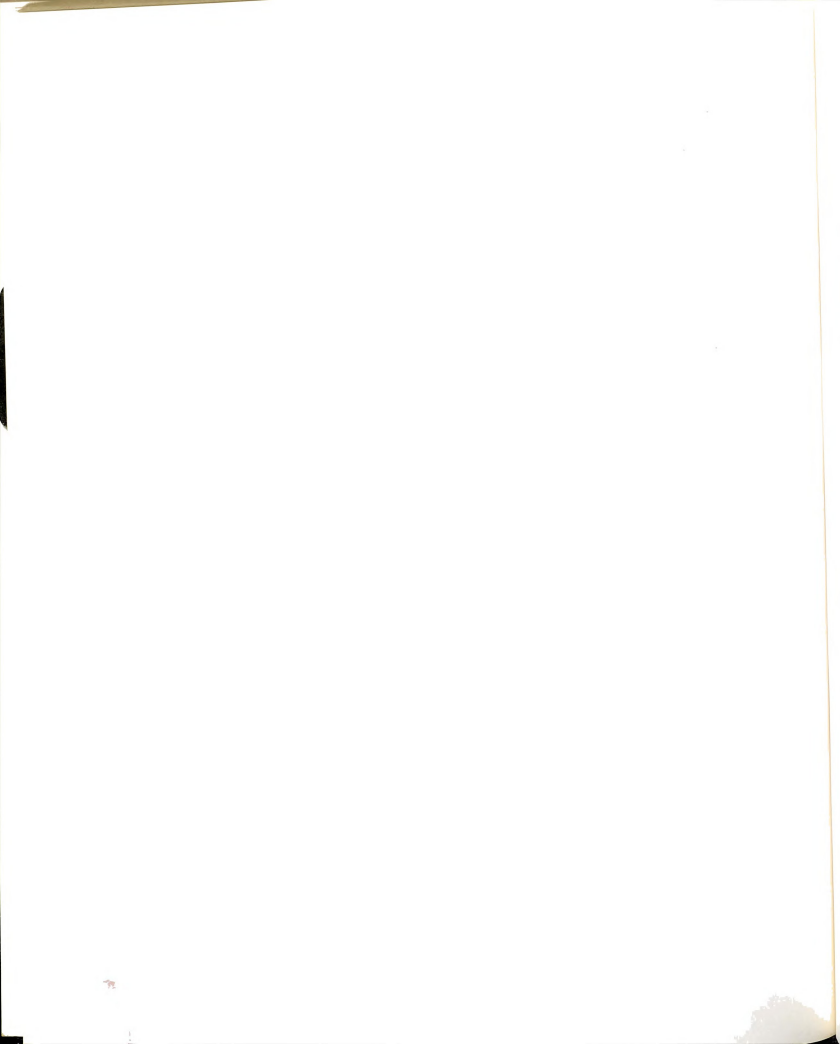
Jordan's government educational system begins with the primary cycle, since preschool education is offered only by the private sector. The system's primary and preparatory cycles are both compulsory. The cycles of the education system in Jordan are as follows:

#### The Primary Cycle

In the primary cycle only academic education is offered. The cycle is subdivided into six grades for children from ages six to twelve.

#### The Preparatory Cycle

Although some governmental preparatory schools offer vocational education, most schools at this level are devoted to general education. This cycle consists of grades seven through nine, with normal age of attendance being 12 to 14 years.



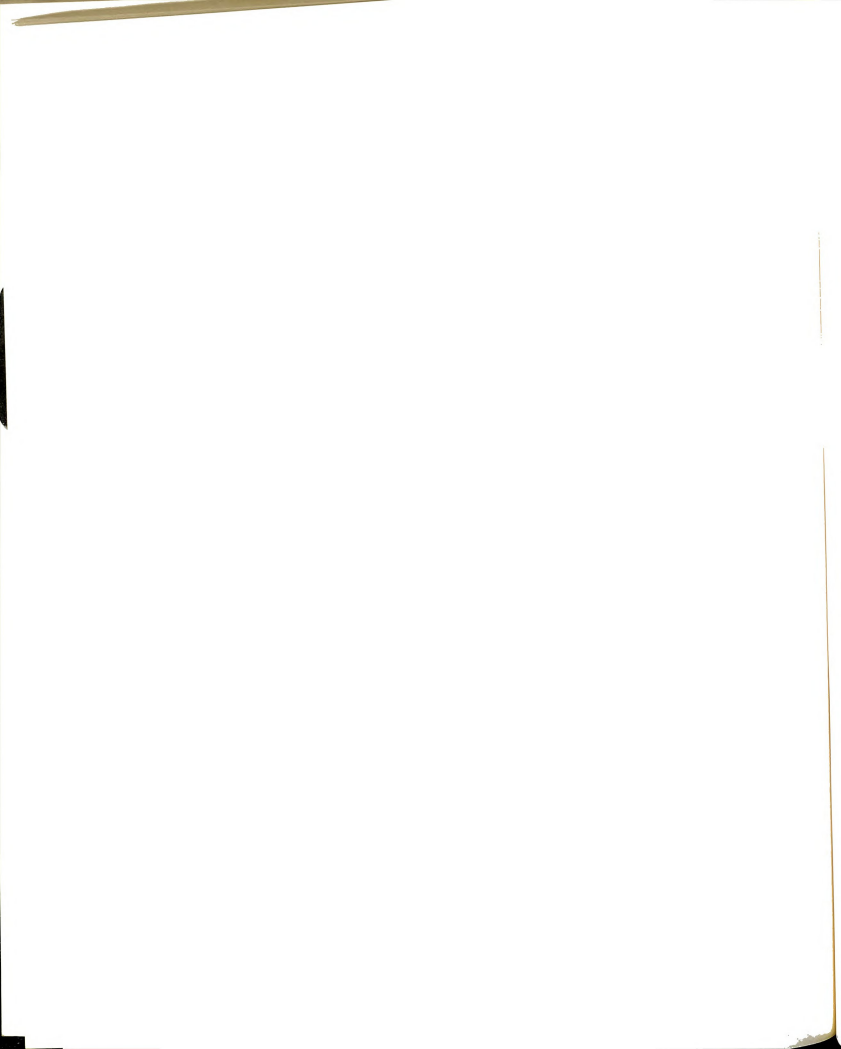
## The Secondary Cycle

Non-compulsory education begins with secondary education. This is subdivided into general and vocational education. In some instances, general and vocational schools share the same facilities. These two types of secondary schools include grades 10 through 12 and the normal age range for students is 15 to 18 years. In general academic education, all students attend a common tenth grade. Eleventh and twelfth grades are divided into scientific and literary sections. On the basis of the pupil's performance in the tenth grade, the student makes a choice between these two sections for the last two secondary years.

### STATEMENT OF THE PROBLEM

Today's world is witness to an ever-increasing pace of change in all of society's sectors. Education is no exception. To insure the effectiveness of teacher participation in the change process, an awareness of their needs must play a central role in educational planning. Christensen (1981) highlights this in the following statement:

. . . in any rapidly changing society, the schools are often asked to be a vehicle for assimilating and transmitting changes. Therefore, to help

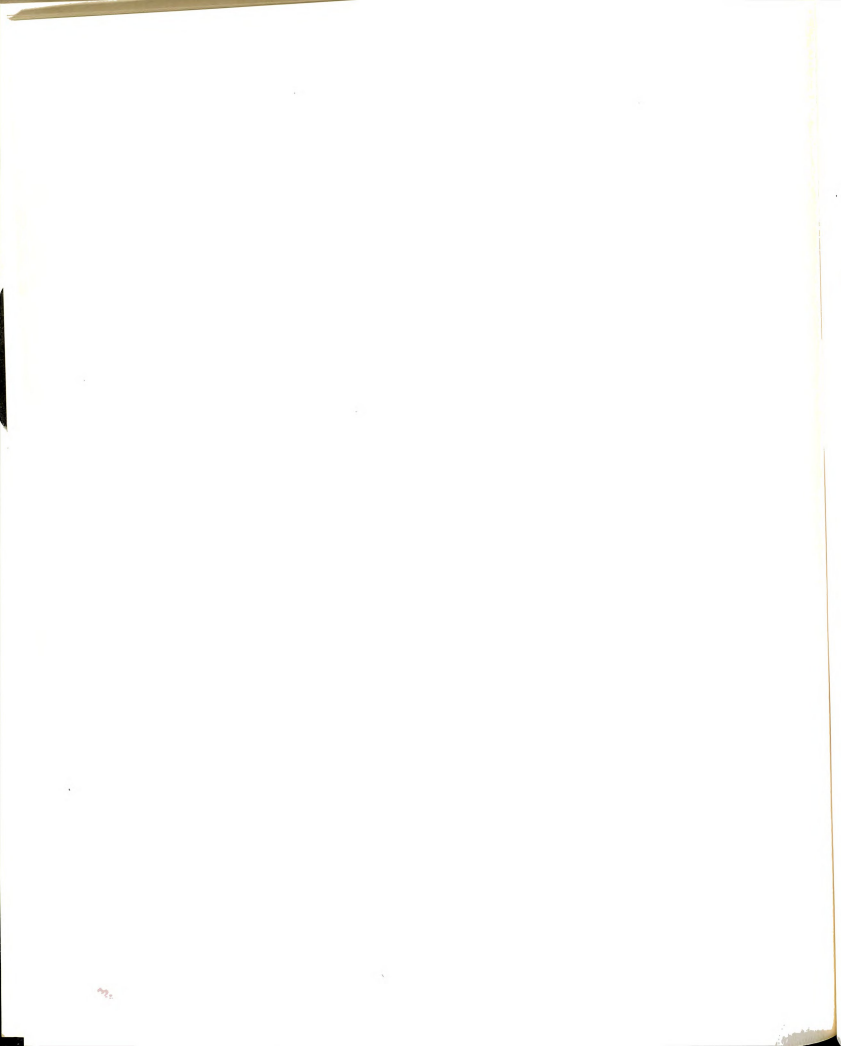


teachers respond to the demands of school, it is important to examine what teachers' needs are (p. 81).

Inservice education has long been recognized as one of the most effective methods for the continuing development of professional teaching staff. Educators have realized to be effective, inservice educational activities should respond to the real needs of the teachers to be served (Christensen, 1981; Ingersol, 1976; Schneider and Ingersol, 1978). Jordan offers inservice education programs to provide its teachers with knowledge and skills, as well as to help them keep abreast of new educational methods and techniques. As teachers become better educators, it may well be that they will be the change agents in the Jordanian educational system. It is essential carefully to identify their needs for inservice education and to plan comprehensive inservice education programs for them.

Like other Jordanian educational institutions, the In-Service Teacher Training Institute is under the control of the Ministry of Education. Since its establishment in 1971, the Institute has served to keep Jordanian teachers abreast of current educational issues. Brimm and Tollett (1974) indicate that the professional preparation of teachers is a continuous process and self renewal must occur if teachers are to remain up to date on the changing needs of society and their students. Effective inservice





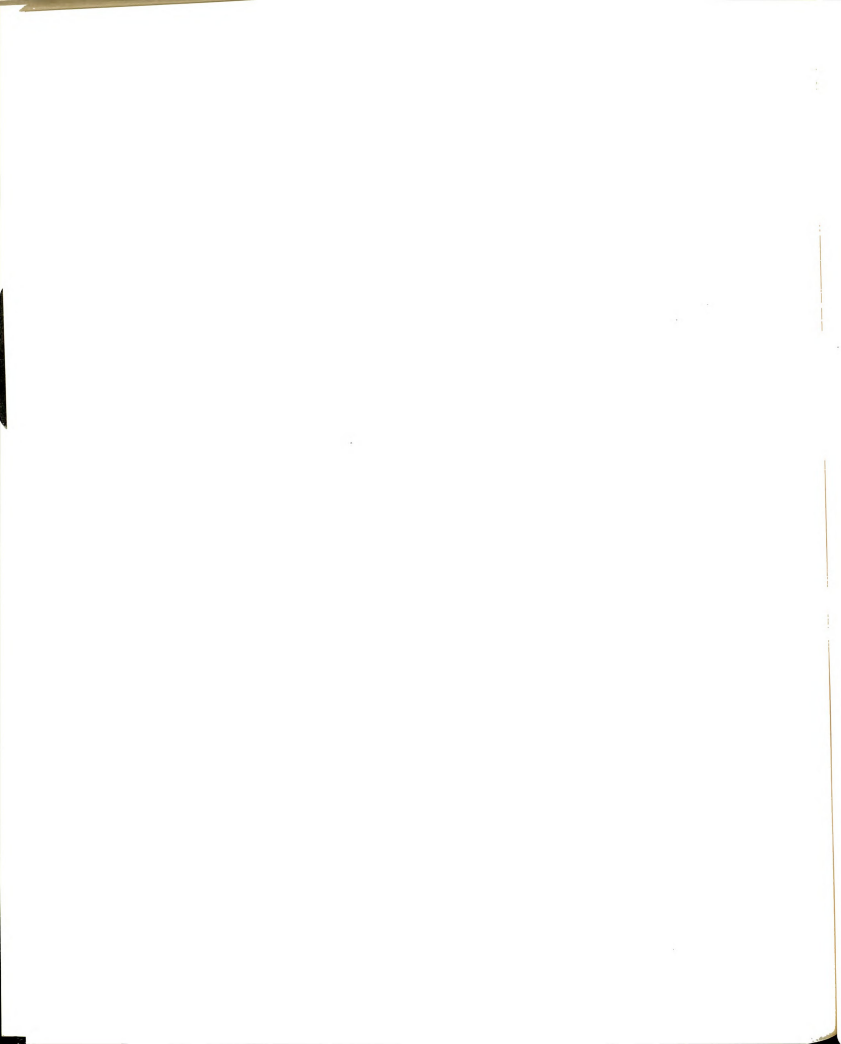
education should help teachers meet these changing needs. In a statewide research project in Tennessee, Brimm and Tollett (1974) found that determining the needs of teachers within the school system is a necessary prerequisite to the planning of meaningful inservice education programs. In the same vein, the President of the National Education Association (NEA), John Ryor stated:

Given that in the nation learning is a lifelong process and that our knowledge base is growing in geometric proportions, it seems to me that quality in-service education directed toward the needs of teachers, is an imperative (1974, p. 13).

The purposes of inservice education are multiple. In addition to school program improvement, another major objective is personal and professional teacher development. To meet all of these objectives, teachers should play a major role in inservice education based on the assumption that teachers learn best and accomplish more when they are involved in deciding what and, perhaps, how they need to learn.

As Green (1977) asserts, teachers' needs must be part of the professional development planning process.

. . . if their personal involvement is being considered, teachers are likely to have greater personal interest in the program and this would tend to increase teacher commitment to the program (p. 46).

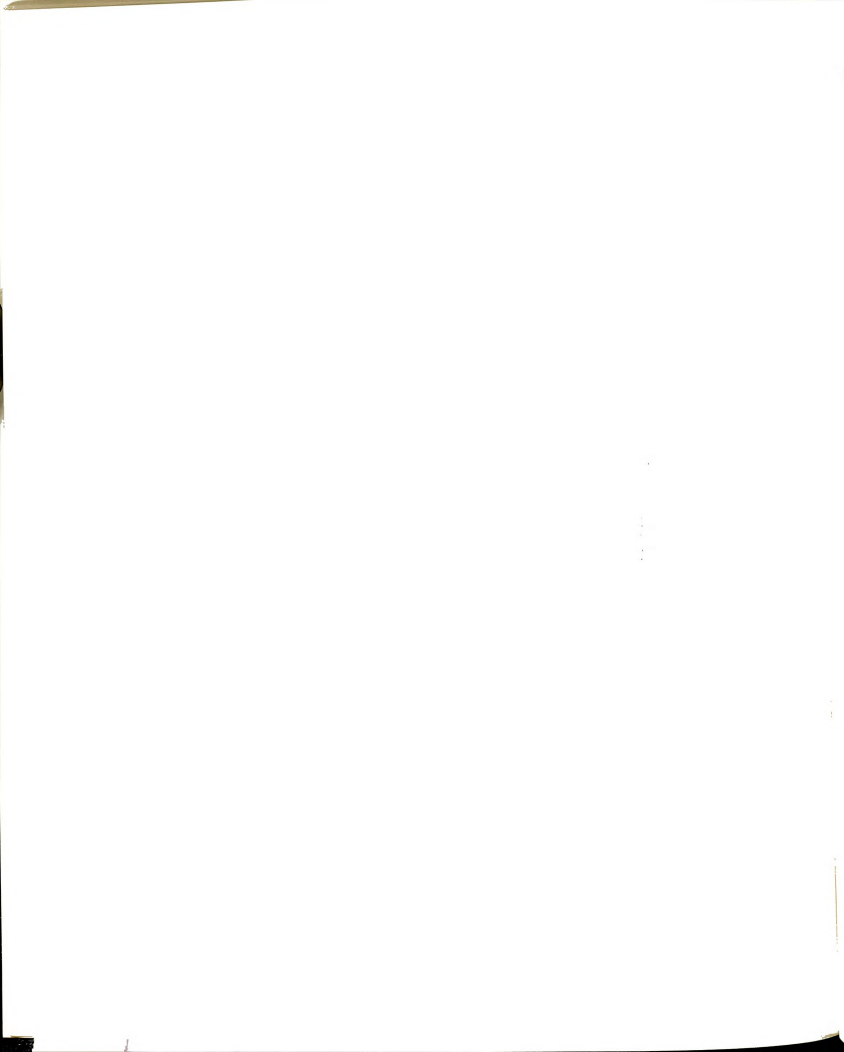


Teachers who participate in inservice education programs are adults assuming a student's role. However, the literature clearly demonstrates that the factors which contribute to adult learning are, to a great extent, different from those which contribute to learning by children and youth. In 1980, Knowles delineated these differences in his explanation of the concepts of andragogy and pedagogy. According to Knowles:

As individuals mature, (1) their self-concept moves from being a dependent personality toward being a self-directed human being; (2) they accumulate a growing reservoir of experience that becomes an increasing rich resource for learning; (3) their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles; and (4) their time perspective changes from one of postponed application of knowledge to immediacy of application and, accordingly, their orientation toward learning shifts from one of subject-centeredness to one of problem-centeredness (pp. 44-45).

Some adult education experts seem to be in consensus with Knowles that adults are basically different from children and youth in the way they learn. Hence, it is logical to assume that teacher education programs could become more effective if concepts such as these were considered more carefully.

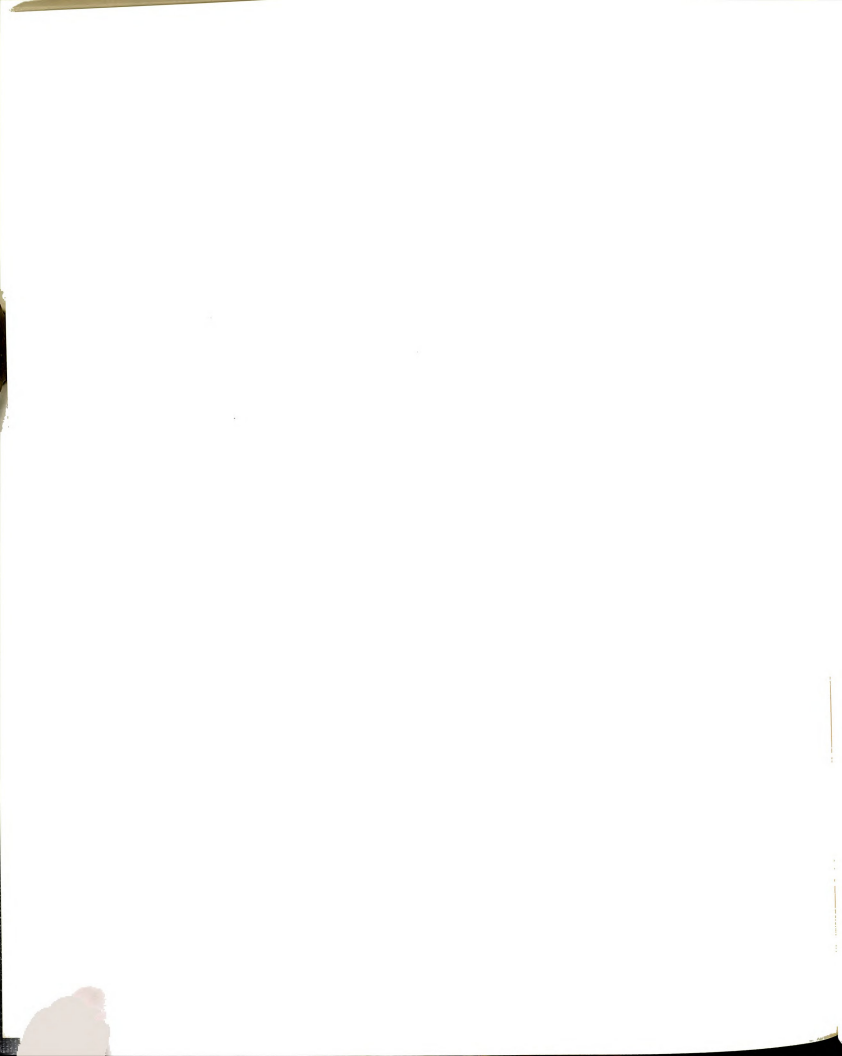
One possible reason for the past ineffectiveness of some inservice programs could be that they have not applied the andragogical learning approach. Educators have long



recognized the inadequacies of teacher preparation programs (Brimm and Tollett, 1974; Edelfelt, 1975; Harris, 1969). In 1980, Yarger and others found that teachers expressed dissatisfaction with inservice activities being offered to them because teachers claimed they are ineffective and unrelated to their immediate work (p. 42). Brimm and Tollett (1974) found that a majority (73%) of the teachers surveyed said that too often inservice activities do not appear relevant to any teacher needs. In the same study, Brimm and Tollett report that "an overwhelming majority (93%) of the respondents stated teachers need to be involved in the development of purposes, activities and method of evaluation for in-service programs" (p. 524). It becomes apparent that one of the major deficiencies of inservice education programs is that they have not taken into account the needs and expectations of teachers as adult learners.

In Jordan, many teachers participate annually in inservice education programs as part of their educational responsibilities. However, in his study of the Jordanian inservice education programs, Said (1976) found that teachers were dissatisfied with the programs.

Dissatisfaction and dissent was common among teachers, who contended that the program was dysfunctional, inflexible and that recruitment was coercive . . . inflexibility of the curriculum, rigidity in timing and location of the program and discontinuity of the program which failed to relate to any further in-service



activities that could lead to further training and certification (p. 64).

Khoury (1982) also asserts "the Jordanian in-service education was unable to satisfy teachers' needs through its current in-service training" (p. 123). In addition, the educational convention held at Amman in 1988, under the Ministry of Education's auspices and presided over by Prince Hassan, discussed the subject of teacher qualifications. One of the major concerns expressed by the convention was the urgent need for inservice education for those who are already on the job (Al-dastour, 1989).

The continuing ineffectiveness of the inservice education programs may be partially due to the failure of supervisors and program designers to take into consideration the adult learning needs of teachers. Factors such as self-concept; levels of teaching experience; readiness to learn; involvement in training program planning; and immediacy of application of learning would seem to be important to consider. Yet these issues are not evident in the inservice education programs in Jordan.

#### PURPOSE OF THE STUDY

The main purpose of this study is to assess the perceptions of teachers as adult learners and their

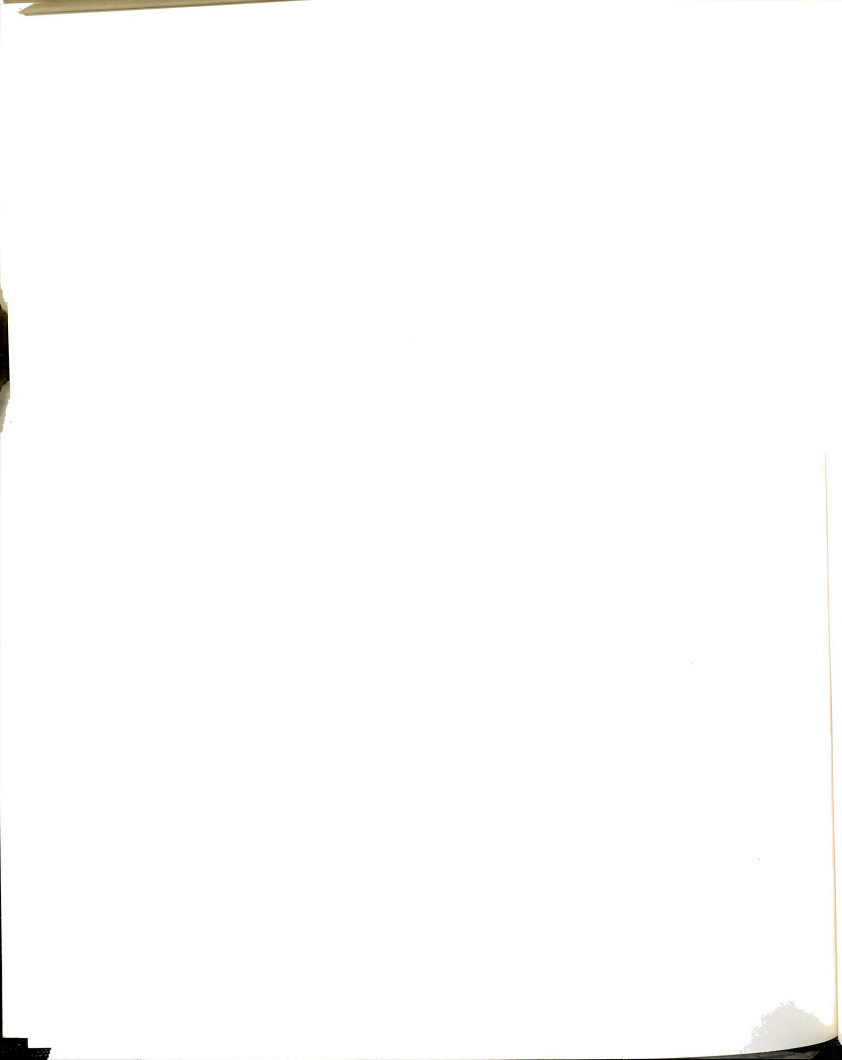




supervisors regarding inservice teacher education programs in Jordan.

More specifically, the study was to:

1. describe the purposes and practices of the present Jordanian inservice education programs.
2. assess the perceptions of teachers as adult learners and their supervisors regarding the extent to which andragogical learning approaches are being practiced in Jordan's inservice education programs.
3. assess the perceptions of teachers as adult learners and their supervisors regarding the extent to which andragogical learning approaches are preferred in the Jordanian inservice education programs.
4. make recommendations for improving Jordan's inservice education programs for practicing teachers, taking into consideration the teachers' status as adult learners based on the study results.

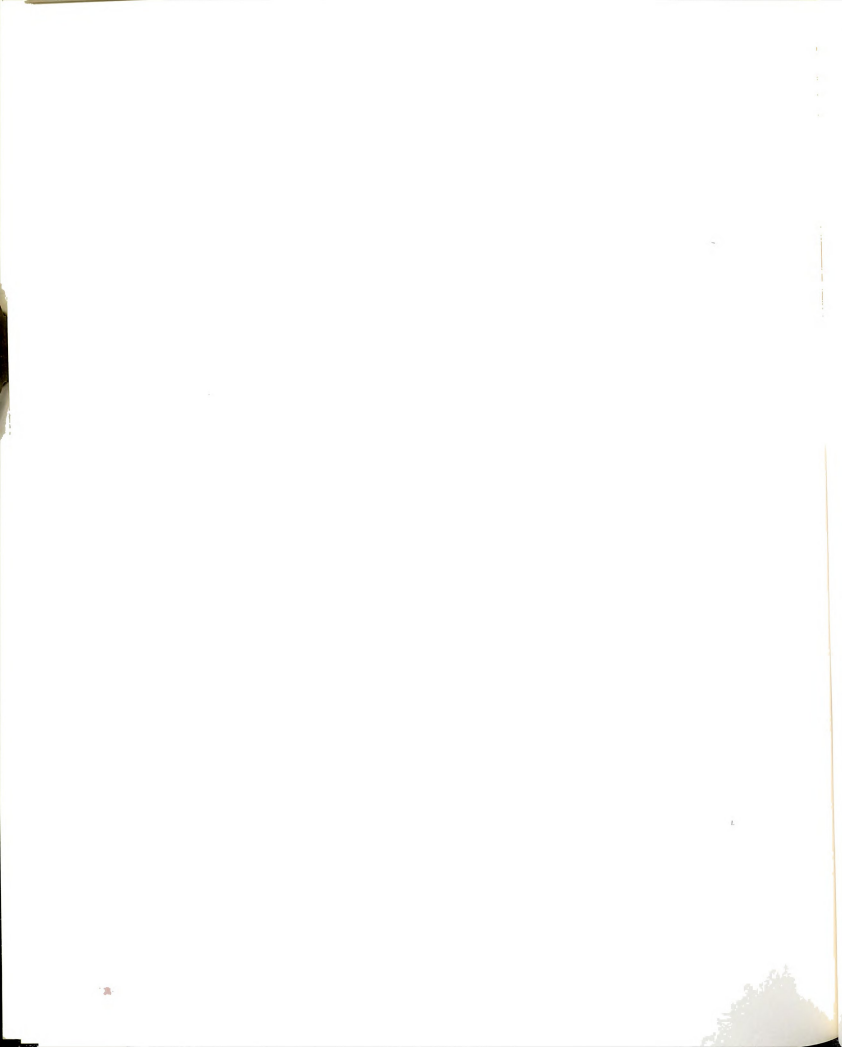


## IMPORTANCE OF THE STUDY

This study is important for several reasons. First, it appears that the needs of teachers as adult learners in Jordan's inservice education programs have not been studied either by the Ministry of Education or by individual researchers. Since this study will be the first of its kind (i.e., the first to study Jordan's inservice education programs, while focusing on the needs of Jordan's teachers as adult learners), it may provide valuable data concerning the andragogical needs of teachers. This data could be helpful to the Ministry of Education's planners and decision makers responsible for Jordan's inservice education programs.

Second, the study's findings might be of importance to the supervisors in terms of curriculum planning and instructional strategies and methodology.

Third, it is hoped the teachers concerned will benefit by the enhancement of their own motivation and teaching effectiveness. When this study's findings are considered and implemented by the program planners, the teacher may become more committed to the inservice education programs.



Finally, through its acceptance and utilization by the Ministry of Education, this study could ultimately help increase student achievement in Jordanian public schools.

#### RESEARCH QUESTIONS

Research Question 1: To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?

Research Question 2: To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by supervisors?

Research Question 3: To what extent are andragogical approaches preferred in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?

Research Question 4: To what extent are andragogical approaches preferred in the



in-service education programs in Jordan as perceived by supervisors?

Research Question 5: To what extent do teachers feel they are treated as professional adults in the in-service programs in Jordan?

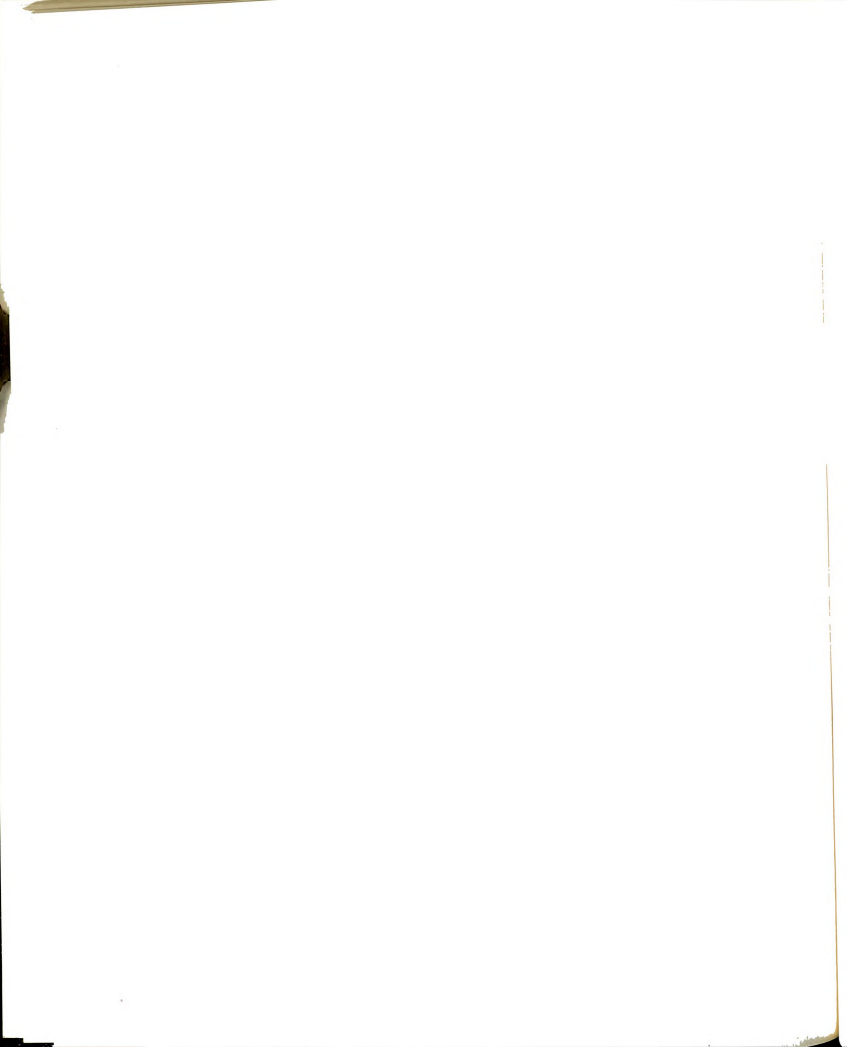
Research Question 6: What is the relationship of selected personal and demographic variables such as gender, age, school level, level of education and years of experience on the perceptions of all teachers and supervisors regarding andragogical learning approaches in the in-service education programs in Jordan?

#### ASSUMPTIONS

This study assumes that:

1. There is a need for improving the effectiveness of the Jordanian in-service teacher education programs.





2. Teachers in this study will be able to identify their needs as adult learners in the Jordanian inservice education programs.
3. The results of the study will provide the Jordanian educational authorities with data to enable them to better understand the needs of teachers as adult learners.

#### DELIMITATIONS AND LIMITATIONS OF THE STUDY

1. The study will apply to Jordanian public school teachers in the Mafrag District School.
2. The study will not involve teachers who are teaching in private or religious schools.
3. The scarcity of studies available on the needs of teachers as adult learners in Jordan forces the researcher to utilize studies conducted in other countries.
4. The results of this study will not be generalized to other countries, for cultural reasons and because of the highly centralized system of education in Jordan. However, the results of this study may be generalized to teachers and



supervisors in other Jordanian districts which have the same characteristics.

#### DEFINITION OF TERMS

For clarity of interpretation, the following terms, used in this study, are defined as follows.

Inservice teacher education program: "any professional activity that a teacher undertakes singly or with other teachers after receiving his or her initial teaching certificate and after beginning professional practice" (Edelfelt & Johnson, 1975, p. 5).

Perception: "refers to the meaning we attach to the information received through our senses. This meaning is constructed partly from objective reality and partly from the way we organize the information" (Woolfolk, 1987, p. 238).

Note: In this study, perception is an awareness of what the inservice education programs contribute to teacher competency.

Andragogy: "The art and science of helping adults learn" (Knowles, 1984, p. 52).

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Pedagogy: "The art and science of teaching children"  
(Knowles, 1984, p. 27).

Teachers: The elementary, intermediate and secondary school teachers who have participated in Jordan's inservice education programs.

Supervisors: Those who observe, assist and evaluate the teachers and who plan and conduct the inservice education programs for teachers.

Ministry of Education: The governmental agency which has the responsibility for public education in Jordan. This agency also controls the education provided by all agencies in all institutions in Jordan, with the exception of universities.

#### ORGANIZATION OF THE STUDY

This study will consist of five chapters. Chapter One will provide background information, a statement of the problem, the purpose of the study, the importance of the study, research questions, assumptions, limitations of the study and definition of terms.

Chapter Two will be a review of the literature. The literature will be divided into the following sections:

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- (a) The adult as learner
- (b) Definitions and assumptions of andragogy.
- (c) Definition, importance and purpose of the inservice education programs.
- (d) The inservice education programs in Jordan.

Chapter Three will describe the methodology and procedures utilized in this study, including the population, selection of the sample, research instrument, translation of the instrument, pilot testing of the instrument, data collection and data analysis.

Results of the study will be reported in Chapter Four. Finally, major findings, conclusions and recommendations for further study will be presented in Chapter Five.



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## CHAPTER II

### REVIEW OF RELATED LITERATURE

The literature for this study is divided into four major topic areas. These provide a format for its presentation in this chapter as follows: (a) the adult as learner, (b) definitions and assumptions of andragogy, (c) definition, importance and purpose of the inservice education programs and (d) the inservice education programs in Jordan. Each of these will be addressed in turn in the following pages.

#### The Adult as Learner

Research and theory building in adult learning have taken many directions. Some researchers have investigated why adults participate in learning activities; what adults learn on their own; and how they structure learning. Other researchers have sought to explain how adult and child learners differ (Merriam, 1987).

Essert (1951) implied a distinction between education for adults and children:

As an experience of maturing, voluntarily selected by people, whose major occupation is no longer going to school, in which these individuals or

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groups plan meaningful tasks and apply sustained inquiry to them--the major portion of adult education is engaged in helping people to meet their individual needs as they are interpreted by the individual needs (p. 5).

Through his studies of the adult as a learner, Tough (1971) has produced a general picture of the process of adult learning. According to Tough, each year every adult undertakes at least one or two major learning efforts. Such efforts are deliberate attempts to gain particular knowledge, skills or make changes. Most of these learning projects are planned by the learners themselves (p. 2).

In choosing a learning project, the individual has specific reasons for his/her choice. For example, the learner might view the knowledge to be gained as highly useful and want to possess the knowledge and skill for his/her personal benefit. Perhaps the learner desires credit toward a degree or certification in his/her career. The learner might also wish to increase personal self-understanding, self-acceptance or change his/her self-concept. Perhaps the learner may wish to improve his/her perception and understanding of others. Or the learner might want to increase his/her feelings and develop his/her creativity. In each case, the individual's desire to gain and retain definite knowledge and skill is dominant (Tough, 1971, p. 3).

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Several key assumptions about adult learners that have been supported by later research and that constitute the foundation of modern adult learning theory were identified by Lindeman (quoted in Knowles, 1984, p. 31).

- 1 - Adults are motivated to learn as they experience needs and interests that learning will satisfy; therefore, these are appropriate starting points for organizing adult learning activities.
- 2 - Adults' orientation to learning is life-centered; therefore, the appropriate units for organizing adult learning are life situations, not subjects.
- 3 - Experience is the richest resource for adults' learning; therefore, the core methodology of adult education is the analysis of experience.
- 4 - Adults have a deep need to be self-directing; therefore, the role of the teacher is to engage in a process of mutual inquiry with them rather than to transmit his or her knowledge to them and then evaluate their conformity to it.
- 5 - Individual differences among people increase with age; therefore, adult education must make optimal provision for differences in style, time, place and pace of learning.

Adult learners' motives for participation in education activities are varied. Houle (1961) utilized in-depth interviews in developing his famous classification of learners. Goal-oriented learners use education as a means of accomplishing fairly clear-cut objectives such as

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learning to speak before an audience, while activity-oriented learners are interested more in activity than in learning skills or subject matter. Activity-oriented learners may take a course or join a group to escape loneliness, boredom, an unhappy home life, etc. In contrast, learning-oriented individuals pursue learning for its own sake. In this study, the majority of learners were goal oriented, followed by those who were learning oriented and activity oriented.

Randall (1980) emphasized that adult learners need different teaching methodologies than children. He specified the following differences between adult and child learners.

1. Adults want to learn--adults don't learn just because someone said to; they must have a desire for the skill or knowledge.
2. Adults learn only when they feel a need to learn. They are practical and want to know that training will help them now. Each session should offer something that can be used immediately.
3. Adults learn by doing. They should use new information immediately.
4. Adults learn by solving realistic problems.
5. Adults want guidance, not grades; adults shy away from grades and tests--they want to know how they have progressed (p. 10).



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Generally, methods of teaching adults seem to be limited. Since teachers with some experience in the formal education system find it difficult to adapt, adult education methods used are often those of the school classroom and may well be inappropriate (Coles, 1977; Neff & Minkhoff, 1972).

Knowles (1956) stated:

The teacher must know whether or not his methods and materials are effective. It is equally important for the student to have some way of measuring his progress, since a sense of achievement is one of the chief motivations for learning (p. 15).

Knowles continued by asking, "How can one identify good teaching? What are the good characteristics of the good learning situation?"

First the teacher must know the adult student understands the objectives or goals of the course. The teacher should find out what the student wants from the class and allow the student a part in organizing its procedures. The teacher's task is to help the student perceive the problems of the course and direct activities toward their solution.

Second, the teacher's attitude, acceptance and respect for responsibility will be contagious, creating an

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atmosphere that is pleasant and comfortable to the students and conducive to learning.

Third, physical discomfort is distracting. Furniture and other physical equipment should be suitable for adults.

Fourth, the adult student will enjoy and learn more from the course, if he actively participates in the classroom discussion. In helping plan the activities for the class, the student feels some responsibility for its success and learns as much from this involvement as from direct instruction. By using the experience of the students, the generalization being taught can be applied directly to what they already know.

Fifth, the methods should be varied. Lecture, group discussion, recitation, demonstration, case studies, team teaching, filmstrips, field trips, etc., can introduce variety. However, these methods must be used according to the subject matter being learned, the type of students being taught and the course objectives. Inasmuch as possible, the teacher should be certain that teaching methods do not offend the social customs and attitudes of learners.

Sixth, the student is the center of the adult learning process and the teacher is the key. The teacher's rela-

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tionship to the student is that of a coordinator or facilitator, rather than that of an authority. The teacher acts as one who can guide the learners to a satisfactory goal.

However, the rate of learning is improved by motivation. It is the teacher's duty to use methods as they apply to particular situations (Coles, 1977; Herm, 1978).

Brundage and Mackeracker (1980) reviewed the literature dealing with adult learning and developed a comprehensive list of adult learning principles and their implications for program planning and facilitating learning. Minix (1981) summarized the following partial listing of adult learning principles (pp. 17-18).

1. Adults were constantly changing in response to internal and external pressures. Learning was best facilitated by removing obstacles which blocked learning rather than trying to motivate learners. It was concluded that adult learners would not remain in programs that created barriers to their learning.
2. Because adult learners entered learning experiences with an established self-concept each individual must be valued as a unique worthwhile person. Programs should be planned which provide time for individual attention.
3. Because adults had a variety of experiences which had been integrated into the self, programs should provide opportunities for adult learners to integrate new learnings.



4. The adult learner had a need to be accepted and valued as a worthwhile person. Hence, program plans needed to be flexible so that responsive feedback might be provided and at the same time not provide a threat to learners.
5. Adults learned more efficiently when the learnings could be directly applied to their experiences. Planned learning should appear to be relevant to life experiences.
6. Previous experiences grew in value as the adult aged. Planners should provide enough time and sufficient opportunity for integration and reflection.
7. Adults with positive self-concept and high esteem showed more response to learning and were less threatened. Learning sessions should provide a non-threatening climate which was supportive of the people involved. Planners should provide opportunities which clarified learnings, provided non-judgmental feedback and created positive interpersonal relations.
8. Adults learned best when they valued the role of the learner. Planners should provide opportunities for learners to design and implement their own learning plans.
9. Because adults entered learning programs with personal needs, feelings, problems, and expectations, program planners should create a supportive environment which permitted learners to define how they could fit into the program.
10. Because adult learners were problem-centered, the program plan might be developed around the actual needs of the learners.



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Minix further stated that a careful reading of the suggested guidelines led to the conclusion that the guidelines were compatible with the andragogical theory.

### Definitions and Assumptions of Andragogy

The concept of andragogy emerges as a central, guiding principle when the prescriptive literature of adult education is considered (Beder & Carren, 1988). Although the concept was first used in 1883 by Alexander Kapp, a German (Davenport & Davenport, 1985), and was introduced in the United States by Lindeman in the 1920s (Brookfield, 1984), it was popularized by Knowles (1970), who defined andragogy as "the art and science of helping adults learn." The term "andragogy" is derived from two Greek root words, aner (andra) meaning male and agogs (gogy) meaning leader.

The concept of andragogy stands in contrast to the old concept of pedagogy. "Pedagogy" is derived from the Greek words paid meaning "child" and agogus meaning "leader of." Thus, pedagogy means the art and science of teaching children (Knowles, 1984, p. 52).

Knowles (1984) defined the difference between pedagogy and andragogy as:

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The difference is that the content (pedagogical model) is concerned with transmitting and skills whereas the process (andragogical model) is concerned with providing procedures and resources for helping learners acquire information and skills (p. 103).

The procedural differences between andragogy and pedagogy as identified by Knowles (1984, p. 116), are summarized in Table 2.01.

According to Knowles (1984), the main purpose of andragogy is "to develop individuals to be self-directed learners and to develop, maintain, and enhance the competencies of self-directed learning" (p. 37). Andragogy is based on the following assumptions (Knowles, 1984):

1. The need to learn--adults need to know why they need to learn something before undertaking to learn it. Tough (1979) found that when adults undertake to learn something on their own, they will invest considerable energy in probing into the benefits they will gain from learning it and the negative consequences of not learning it.
2. The learner's self-concept--adults have a self-concept of being responsible for their own decisions, for their own lives. Once they have arrived at that self-concept, they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction.
3. The role of the learner's experience--adult learners come into an educational process with a greater volume and more varied quality of experiences than young learners.
4. Readiness to learn--adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations.

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Table 2.01.--Comparison of the Assumptions and Designs of Pedagogy and Andragogy

Assumptions			Design Elements		
	Pedagogy	Andragogy		Pedagogy	Andragogy
Self-Concept	Dependency	Increasing self-directiveness	Climate	Authority-oriented Formal Competitors	Mutuality Respectful Collaborative Informal
Experience	Of little worth	Learners are a rich resource for learning	Planning	By teacher	Mechanism for mutual planning
Readiness	Biological Developmental Social pressure	Developmental tasks of social roles	Diagnosis of needs	By teacher	Mutual self-diagnosis
Time perspective	Postponed application	Immediacy of application	Formulation of objectives	By teacher	Mutual negotiation
Orientation to learning	Subject centered	Problem centered	Design	Logic of the subject matter Content unity	Sequenced in terms of readiness Problem unity
			Activities	Transmittal techniques	Experiential techniques (inquiry)
			Evaluation	By teacher	Mutual re-diagnosis of needs Mutual measurement of program

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5. Orientation to learning--in contrast to children's and youth's subject-centered orientation to learning, adults are life-centered, task-centered or problem-centered in their orientation to learning. Furthermore, they learn new knowledge, understandings, skills, values, and attitudes most effectively when they are presented in the context of application to real-life situations.
6. Motivation--while adults are responsive to some external motivators as better jobs, promotions, higher salaries, and the like, the most potent motivators are internal pressures such as the desire for increased job satisfaction, self-esteem, quality of life, etc. (pp. 56-61).

Knowles (1984) discussed seven conditions of learning that must be satisfied in an andragogical educational environment. He emphasized that these conditions of learning fit into his own conception of the role of the andragogical teacher. These are summarized in Table 2.02 (Knowles, 1984, pp. 83-85).

Minix (1981) proposed that andragogy as an approach to teacher inservice education appeared to be compatible with teacher inservice trends. Edelfelt (1975) reported that teacher inservice education was moving in the direction of personalizing and individualizing teacher inservice programs. He further added that decision-making processes could be based on cooperation between all the major interest groups and inservice education should be based on the needs of students, teachers, and the school program.



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Table 2.02.--Conditions of Learning and Corresponding  
Andragogical Principles of Teaching

Conditions of Learning	Principles of Teaching
The learners feel a need to learn	<ol style="list-style-type: none"> <li>1. The teacher exposes students to new possibilities of self-fulfillment.</li> <li>2. The teacher helps each student clarify his own aspirations for improved behavior.</li> <li>3. The teacher helps each student diagnose the gap between his aspiration and his present level of performance.</li> <li>4. The teacher helps the students identify the life problems they experience because of the gaps in their personal equipment.</li> </ol>
The learning environment is characterized by physical comfort, mutual trust and respect, mutual helpfulness, freedom of expression, and acceptance of differences.	<ol style="list-style-type: none"> <li>5. The teacher provides physical conditions that are comfortable (as to seating, smoking, temperature, ventilation, lighting, decoration) and conducive to interactions (preferably, no person sitting behind another person).</li> <li>6. The teacher accepts each student as a person of worth and respects his feelings and ideas.</li> </ol>

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Table 2.02 (cont'd.).

Conditions of Learning	Principles of Teaching
<p>The learners perceive the goals of a learning experience to be their goals.</p>	<ol style="list-style-type: none"> <li data-bbox="425 239 807 435">7. The teacher seeks to build relationships of mutual trust and helpfulness among the students by encouraging cooperative activities and refraining from inducing competitiveness and judgmentalness.</li> <li data-bbox="425 456 807 589">8. The teacher exposes his own feelings and contributes his resources as a colearner in the spirit of mutual inquiry.</li> </ol>
<p>The learners accept a share of the responsibility for planning and operating a learning experience, and therefore have a feeling of commitment toward it.</p>	<ol style="list-style-type: none"> <li data-bbox="425 610 807 855">9. The teacher involves the students in a mutual process of formulating learning objectives in which the needs of the students, of the institution, of the teacher, of the subject matter, and of the society are taken into account.</li> <li data-bbox="425 876 807 1100">10. The teacher shares his thinking about options available in the designing of learning experiences and the selection of materials and methods and involves the students in deciding among these options jointly.</li> </ol>

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Table 2.02 (cont'd.).

Conditions of Learning	Principles of Teaching
The learners participate actively in the learning process.	11. The teacher helps the students to organize themselves (project groups, learning-teaching teams, independent study, etc. to share responsibility in the process of mutual inquiry.
The learning process is related to and makes use of the experience of the learners.	12. The teacher helps the students exploit their own resources for learning through the use of such techniques as discussions, role playing, case methods, etc.  13. The teacher gears the presentation of his own resources to the levels of experience of his particular students.  14. The teacher helps the students to apply new learning to their experience and, thus to make the learning more meaningful and integrated.
The learners have a sense of progress toward their goals.	15. The teacher involves the students in developing mutually acceptable criteria and methods for measuring progress toward the learning objectives.  16. The teacher helps the students develop and apply procedures for self-evaluation according to these criteria.

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Bents and Howey (1981) wrote of the need for inservice educators to give more attention to adult development and adult learning research. It was suggested that the andragogical process needed to be qualified to some extent. For example, Bents and Howey felt that all teachers did not possess the same degree of self-directedness.

Minix (1981) mentioned that andragogy itself appeared to be an evolving theory. During the initial introduction of the concept into the United States, it was presented as a dichotomy with pedagogy. However, by the late 1970s, the dichotomous nature of andragogy was replaced with a continuum which ranged from pedagogy to andragogy (Knowles, 1979).

Cross (1981) concluded that:

Whether andragogy can serve as the foundation for a unifying theory of adult education remains to be seen. At the very least, it identifies some characteristics of adult learners that deserve attention. It has been far more successful than most theory in gaining the attention of practitioners (p. 227).



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### Definition, Importance and Purpose of Inservice Education

Throughout literature on inservice, many terms are used frequently and often interchangeably: professional growth, professional development, teacher renewal and others.

Inservice teacher training has different meanings to different people. Continuing education courses, sabbatical leaves, graduate courses, master's degrees, conferences, conventions, workshops, television programs and one-shot lectures all come under the general heading of inservice training. However, each may contribute to the continuing professional growth of a teacher and, thus, fall under the general concept of professional development and growth (Orrange & Ryn, 1975).

In the Fifty-Sixth Yearbook of the National Society for the Study of Education, considered by Harris and Bessert (1969) as a milestone publication on inservice education, Hass (1957, p. 13) maintained that inservice education includes all activities engaged in by professional personnel during their service and designed to contribute to improvement on the job. In the same vein, Harris and Bessert (1969, p. 2) declared that inservice education must include all activities aimed at the improvement of professional staff members. They defined inservice

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education as planned activities for the instructional improvement of professional staff members.

A decade later, Harris used the term "inservice education" to mean:

Any planned program of learning opportunities afforded staff members of schools, colleges, or other educational agencies for purposes of improving the performance of the individual in already assigned positions (1980, p. 21).

According to Harris, a planned program is specified, eliminating a wide variety of events, that accidentally or incidentally contribute to the purpose of inservice education. In prescribing inservice education as planned and programmatic, the emphasis is placed on designing learning experiences, assessing needs, projecting expectations, budgeting, assigning responsibilities and evaluation.

In the United Kingdom, the Department of Education and Science (1970) has defined inservice training as "any activities which a teacher undertakes after he had begun to teach, which is concerned with his professional work" (Henderson, 1978, p. 11).

However, for administrative convenience narrower definitions are often adopted. For example, in 1965, the

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United States Department of Health, Education and Welfare  
described inservice training as:

A program of systematized activities promoted or directed by the school system or approved by the school system, that contribute to the professional or occupational growth and competence of staff members during the time of their service to the school system (Henderson, 1978, p. 11).

Edelfelt and Johnson (1975) defined inservice education  
of teachers as:

Any professional development activities that a teacher undertakes singly or with other teachers after receiving her or his initial teaching certificate and after beginning professional practice (p. 5).

They used the term "inservice education" synonymously with the terms "staff development," "continuing education" and "professional development."

Two final definitions of inservice education will conclude this discussion. The first definition is one utilized by the State of Michigan's Department of Education (1977).

A planned and organized effort to provide teachers and other educational workers with the knowledge and skills necessary to facilitate improved student learning and performance.

Orrange and Van Ryn (1975, p. 47) provide us with the second definition.

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In-service education is that portion of professional development that should be publicly supported and includes a program of systematically designed activities planned to increase the competencies--knowledge, skills, and attitudes--needed by school personnel in the performance of their assigned responsibilities.

The importance of inservice education has been recognized since formal education began. Wells (1978, p. 18) noted that the development of inservice education parallels the development of teacher education.

Tyler (1971) examined the history of inservice education in America during the past century. He stated that, because of the lack of certification requirements for teachers, many teachers did not have an adequate knowledge of content areas. For this reason, programs of two or three days' duration and evening courses were held to provide inservice education for teachers. Post noted that, up to 1944, inservice education was viewed as a remedial process for teachers (1975, p. 26). The primary goal was to make up deficits in teacher knowledge.

According to both political and educational priorities, objectives of inservice provisions vary somewhat from one country to another. However, there is a general recognition that educational change necessitates acquisition of new types of skill and knowledge appropriate to emerging structures, new forms of school organization,



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new patterns of relationship between teachers, pupil, parents and the community and the availability of a wider range of teaching and techniques (Tyler, 1978).

According to Tyler (1978), inservice training is:

. . . increasingly seen as part of the whole system of communication whereby the ideas and techniques developed in universities' research projects and by groups of teachers themselves, can be diffused and disseminated among those members of the teaching force for whom they are most useful (p. 708).

Inservice education is essential for the professional development of practitioners in all fields. It is even more important for those who are involved with schools.

Harris and Bessert (1969, pp. 3-4) stated four fundamental reasons why inservice education is important.

1. Preservice preparation of professional staff members is rarely ideal and may be primarily an introduction to professional preparation rather than professional preparation as such.
2. Social and educational change makes current professional practices obsolete or relatively ineffective in a very short period of time. This applies to methods and techniques, tools, and substantive knowledge itself.
3. Coordination and articulation of instructional practices require changes in people. Even when such instructional staff member is functioning at a highly professional level, employing an optimum number of the most effective practices such as instructional programs, might still be relatively uncoordinated from subject to subject and poorly articulated from year to year.

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4. Other factors argue for in-service education activities of rather diverse kinds. Morale can be stimulated and maintained through in-service education, and is a contribution to instruction in itself, even if instructional improvement of any dynamic kind doesn't occur.

Along the same line, Hass (1957, pp. 13-14) gave a number of factors which support the need for inservice education:

1. The continuing cultural and social changes which create the need for curriculum change.
2. Pre-service education cannot adequately prepare members of the public school professional staff for their responsibilities.
3. Increase in pupil enrollment.
4. The present and continuing increase in the number of teachers.
5. The present and continuing shortages of adequately prepared teachers.
6. The present and continuing need for improved school leaders.

Howey (1980, quoted in Faloughi, 1980, pp. 55-56) identified six categories of reasons why there is a need for inservice education activities for teachers.

1. 'Transitional'--as introductory activities to allow teachers to move from generalized, pre-service education to a specific role.
2. 'Job specific'--as a response to typically recurring needs and problems in a particular situation.
3. 'System-related'--as a response to dramatic changes in society and in the schools.

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Because of these changes, teachers must reorient or redefine their roles.

4. 'General professional development'--as a means of staying current professionally without regard to applying the information to one's specific situation.
5. 'Career progression'--as a means of changing roles or responsibilities.
6. 'Personal development'--as a process of understanding and enhancing the individual in a professional role.

The concept of professional development for school teachers and administrators is a continuing process because knowledge is a continuing process. This is clearly articulated in the following statement.

As long as knowledge about education continues to increase and new techniques and devices are contrived, there will be something new for the teacher to learn regardless of his degree or years of experience. The continuum of preparation can, therefore, cover the teacher's entire career (Smith, et al, 1969, p. 151).

Hass (1957) saw the need to keep the professional up to date.

The major reason for in-service education is to promote the continuous improvement of the total professional staff of the school system. All teachers, administrators and supervisors must constantly study in order to keep up with advances in subject matter and in the theory and practice of teaching. Continuous in-service education is needed to keep the profession abreast of new knowledge or to release creative activities (pp. 13-14).

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Moffit (1963) emphasized the importance of inservice education to the educational system.

Proper education of nation's [sic] teachers should be the concern of every citizen. It is the education of teachers that determines the quality of learning and therefore the quality of the people of this country--it therefore appears I conclude that the quality of any school system may largely be determined by the quality of the in-service educational programs involving the total professional staff (pp. 7-8).

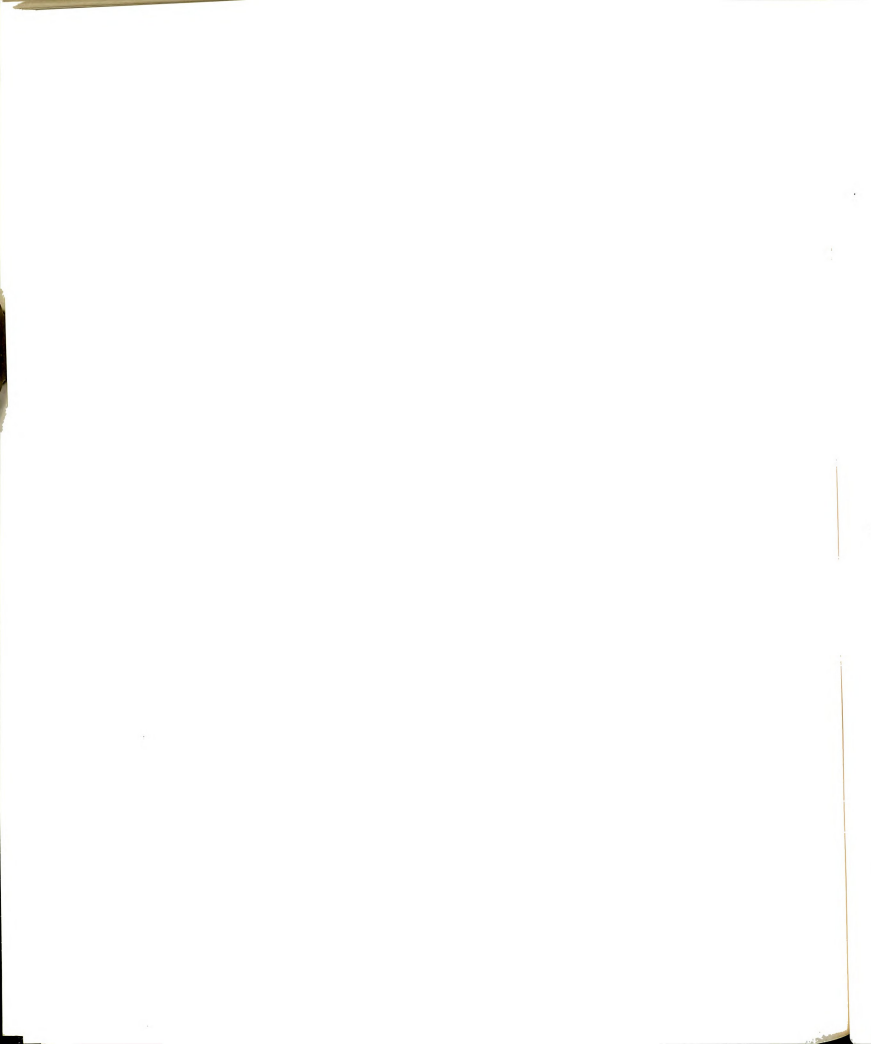
To be effective, inservice education programs should be based upon clear, specific objectives. God, Steven and Russell (1981) identified the following as some objectives of inservice education.

1. Knowledge objectives deal with learning and using specific content. For example, current efforts to introduce metrics and nutrition into the public curriculum demand that many teachers develop content knowledge in these subject areas to enable them to teach the appropriate concept and principles.
2. Strategies or skill objectives pertain to new procedures for teaching such as how to plan, manage and evaluate, independent study, content learning, small group instruction, or inquiry teaching.
3. Attitudes objectives identify the commitments, values, and other affective variables necessary to implement change in professional behaviour (p. 68).

In discussing the objectives and characteristics of inservice education, McCleary and Hentcley (1965) suggested the following.

1. Improving professional performance.
2. The program should be characterized by an atmosphere of inquiry.





3. The program should encompass opportunities for formal instruction.
4. Although the program should encompass both, the creative and experimental aspects of goal seeking should take precedence over the study of subject matter or the routine preparation of curriculum guides and aids.
5. The program should not be structured through administrative edict and should avoid the implication that it is tied to a plan or system of salary adjustment.
6. The program should encompass procedure for evaluation.
7. The program should seek active engagement with worthwhile problems in an atmosphere of freedom and psychological safety.
8. The program should make provision for both individual and group activities (p. 287).

Bishop (1976) maintained that inservice education and staff development is vital to quality education. To Bishop, an important objective of inservice education is to convey knowledge or information about new ideas and anticipated change including the rationale, concepts, objectives and strategies involved. A second objective concerns the development of competency, involving a contribution of information and related skills.

Tyler (1978) stated that we can easily identify four functions of inservice education: 1) remediation; 2) developing the competence required to deal with particular problems; 3) helping the individual learn what is needed to attain his/her own professional goals; and 4) furnishing

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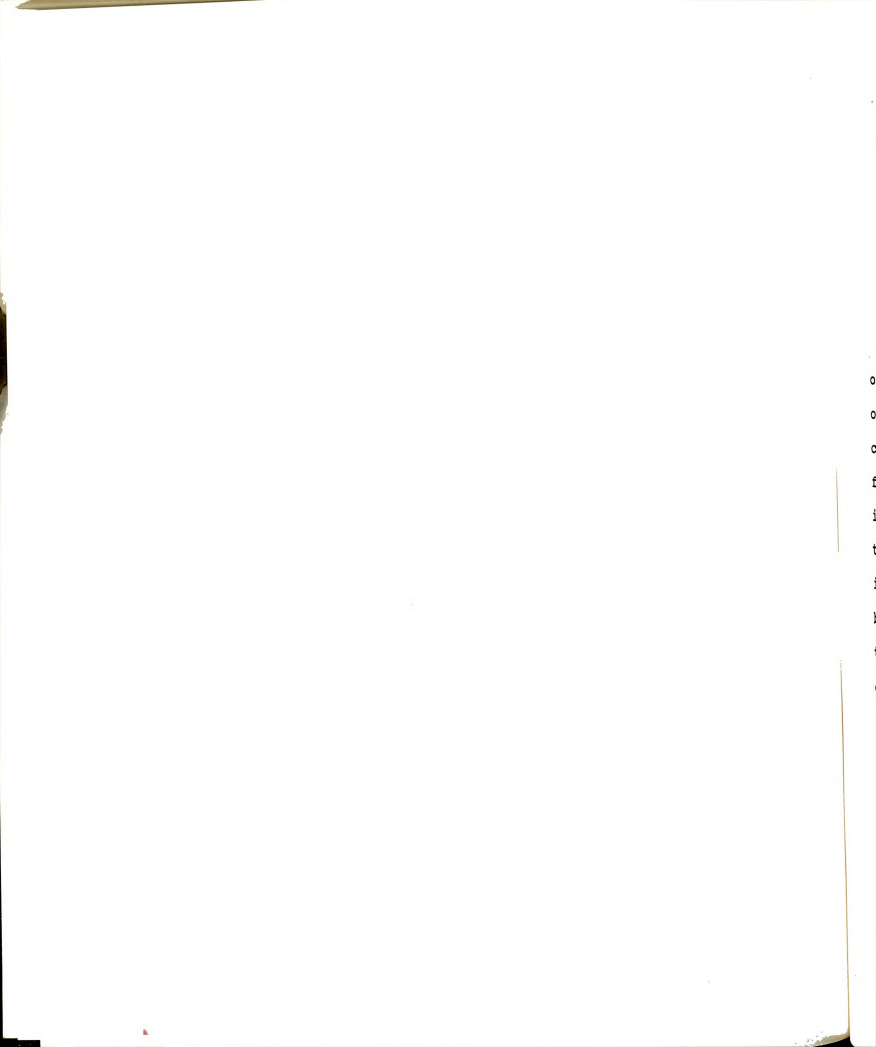
the stimulation of learning opportunities that counteract freedom and lowered professional performance.

In 1963 Moffit emphasized that continuing education for new teachers is another objective of inservice education.

Regardless of the quantity and quality of academic education received in a college or university, a teacher new to any given school system needs inservice education. . . . the beginning teacher enters into a strange and completely new situation. For many, it is the first real job the teacher has had; with the responsibilities attached thereto, everything is strange. Commonly, he is unacquainted with the other teachers, the principal, or the administrative or supervisory personnel. The students are strange, and often the community is one about which he has little knowledge (p. 6).

Edelfelt and Johnson (quoted in Al-Shehri, 1986, 38-39) emphasized that the effective inservice education program considers the teacher as an adult, specifically:

1. In-service education programs that place the teacher in an active role (constructing and generating materials, ideas, and behavior) are more likely to accomplish their objectives than are programs that place the teacher in a receptive role.
2. Teachers are more likely to benefit from inservice programs in which they can choose goals and activities for themselves as contrasted to programs in which the goals and activities are preplanned.
3. Inservice education programs in which teachers share and provide mutual assistance to each other are more likely to accomplish their objectives than are programs in which each teacher does separate work.



4. Inservice education programs having differentiated training experiences for different teachers (that is individualized) are more likely to accomplish their objectives than are programs that have common activities for all participants.
5. School-based programs in which teachers participate as helpers to each other and planners of inservice activities tend to have greater success in accomplishing their objectives than do programs which are conducted by college or other outside personnel without the assistance of teachers.

Inservice education of teachers has gained a great deal of interest and prestige in recent years. The fact that an overall shortage of teachers no longer exists in many countries has encouraged teachers' organizations to press for more inservice study opportunities. Inservice training is now an absolute necessity if schools are to develop their people, their most important resources. Therefore, inservice education should not be piecemeal or haphazard, but carefully planned over time with particular attention to the instructional needs of the students and the ever-changing social and organizational context of the school (Murrello and Orbaugh, 1982).

#### The Inservice Teacher Education Program in Jordan

This section of Chapter II seeks to provide information about the purposes and practices of inservice teacher education in Jordan. It is helpful to understand the educational context in which the program operates.

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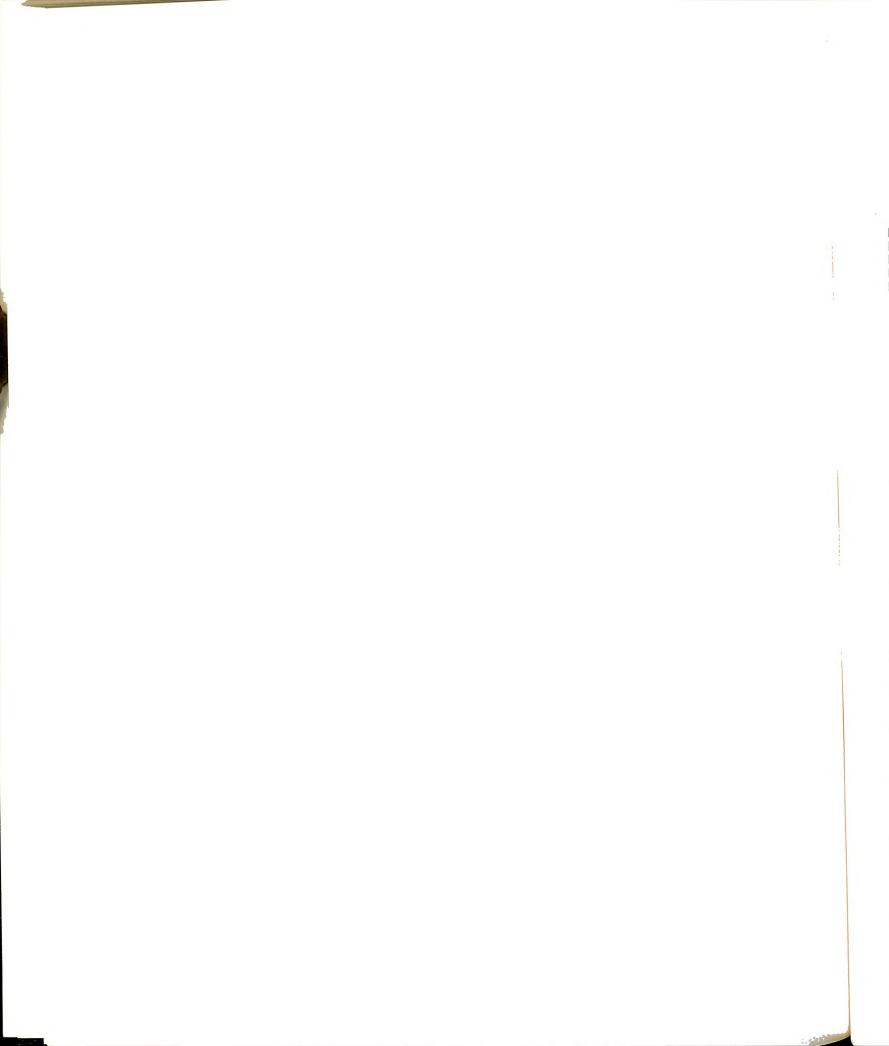
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One of the most influential factors in the progress of a nation is its educational system whose objectives derive from the beliefs and aspirations of the people and the society it serves.

The education system of Jordan has its roots embedded in the Islamic-Arabic cultural pattern and reflects the hopes of the nation for the future within that pattern. The philosophy of the educational system is stated in Educational Law No. 161 (Article No. 3). It is governed by the Islamic-Arabic value system which places a high priority on education as a means to develop knowledgeable, productive and responsible individuals.

By law, the Ministry of Education (MOE) is responsible for education in the country. The MOE carries out its responsibilities in consultation with the Jordan Board of Education (JBE) whose decisions are binding on the Minister of Education only in matters pertaining to the formulation of curricula and the selection of textbooks. However, the JBE acts as an advisory body in other matters (Article No. 33). According to the Constitution (Article No. 51), the Minister of Education is in charge of the Ministry's affairs, for which the Minister is responsible to the Prime Minister and the Parliament. The MOE is divided into 15 directorates, as shown on Figure 2.01. One of the directorates is responsible for teacher education and





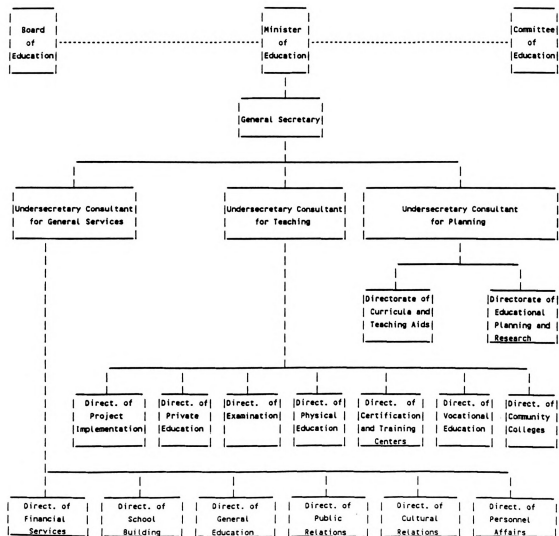


Figure 2.01---Administrative Structure of the Jordanian Ministry of Education (MOE)

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certification. Each directorate comprises a number of divisions and sections which perform their various tasks according to the prescribed division of labor for each unit (Ordinance No. 39, 1971).

According to Article No. 3 of Ordinance No. 34 of 1960, the MOE has the authority to establish a five-member Teacher Education Committee (TEC) from among the personnel of the MOE. The TEC is headed by the Undersecretary of the Ministry and is charged with planning inservice education. The initial inservice education policies that were developed by the five-member TEC in 1960 included provisions and plans for inservice education and made the Training Division responsible for their execution. In 1971, because of the need for inservice education, the Certification and Inservice Teacher Training Institute (CITTI) became the agency solely responsible for the compensatory inservice teacher education. The CITTI must also train and certify unqualified compulsory stage teachers.

Table 2.03 reports the numbers and percentage of qualified and unqualified teachers in all stages in 1964 when Education Law No. 16 was enacted. In addition the table gives the same types of figures for 1975, demonstrating that the MOE is still far short of having fully and formally qualified teachers in the school system.



Table 2.03--Comparative Numbers and Percentages of  
Qualified and Unqualified Teachers in  
All Stages of Jordanian Public Schools  
in 1964 and 1975

<u>Unqualified</u>					<u>Qualified</u>		
	Total	Less Than J.C.D.*	%	J.C.D.* (for Grades 1-9)	B.A. (1-12)	M.A. (1-14)	
54	Total	3768	2859	75.9	743	166	0
	Male	2460	1830	74.4	510	120	0
	Female	1308	1029	78.7	233	46	0
75	Total	12793	6313	49.4	3506	2939	35
	Male	6809	1889	27.7	2511	2379	30
	Female	5984	4424	73.9	995	560	5

Junior College Diploma

Source: Ministry of Education, Statistical Yearbooks, of 1964-1974 (and Statistics Division Documents, MOE, 1975).

Thus the notions that have prevailed in inservice teacher education reflect to a very considerable extent the purposes of inservice education (Training Division Annual Report, 1972; Report No. 26481 of the Minister of Education to the Prime Minister, concerning projects and activities of the MOE, Sept. 11, 1973; CITTI Annual Report, 1974). The major purposes of inservice education are to:



1. remedy deficiencies identified by teachers and/or by school supervisors.
2. compensate for complete lack of pre-service training.
3. assist teachers in implementing new curricula and/or utilizing new textbooks adopted by the JBE.
4. assist newly appointed and/or transferred teachers to cope with their new responsibilities.
5. refresh and update knowledge and skills.
6. help teachers adjust to special classroom settings such as self-contained, multi-grade and schoolhouse classrooms.
7. aid teachers in the utilization of radio and/or television educational programs.
8. assist teachers in the production and/or utilization of audio-visual aids and laboratory equipment.
9. enhance qualifications of teachers through inservice programs leading to higher certificates.



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10. "to raise the professional level of the trainees" (Article No. 6 of Ordinance No. 34, established in 1960).

The most important activities of inservice education programs are: the remedial and updating, as well as the special and summer programs which are limited to short periods, usually from two to six weeks.

Trainees are recommended by supervisors more on the basis of their personal feelings about the needs of teachers than through systematic, diagnostic procedures and techniques. The supervisors are instructed by the TEC to give first priority to compensatory inservice training (Training Division Annual Report, 1968).

An upgrading program for teachers holding the B.A. degree has been in operation at the local universities since 1973. The curriculum is comprised of 32 credit hours in professional courses and leads to a Diploma of Education and a 25% salary increment.

Since 1971, local inservice programs of one to six day's duration have been held in teacher centers in the school districts. These consist primarily of two-hour seminars and are led by supervisors and/or specialized individuals recruited by the CITTI.



Goad (1984) analyzed the CITTI program in Jordan. He states:

In 1971, the proportion of unqualified teachers was 70% . . . . CITTI was established in the belief that in-service education was the most appropriate method for certification of the largest possible number of teachers in the shortest possible time and with the least expense (p. 65).

Further, Goad summarized the goals of CITTI as follows:

1. To qualify teachers serving in government and private schools by raising their professional competence to a level comparable to that of the teacher Training Institute graduates.
2. To qualify directors of government and private schools in school administration by means of a one-year course following the Diploma of a Training Institute or CITTI.
3. To carry out any other tasks entrusted to it by the Certification and Training Committee of the Ministry of Education (p. 66).

Methods of teaching are varied in the Institute. Seminars, workshops, assignments and summer courses are organized with a particular emphasis on self-directed learning. Guidance in practical teaching is emphasized through visits by an individual tutor or by a tutor accompanied by specialists. During the two years of study each student may be visited in his school on 12 separate occasions. Educational guidance is provided by an academic tutor who supervises 50-70 teachers, observing and guiding them in practical teaching, especially with the translation

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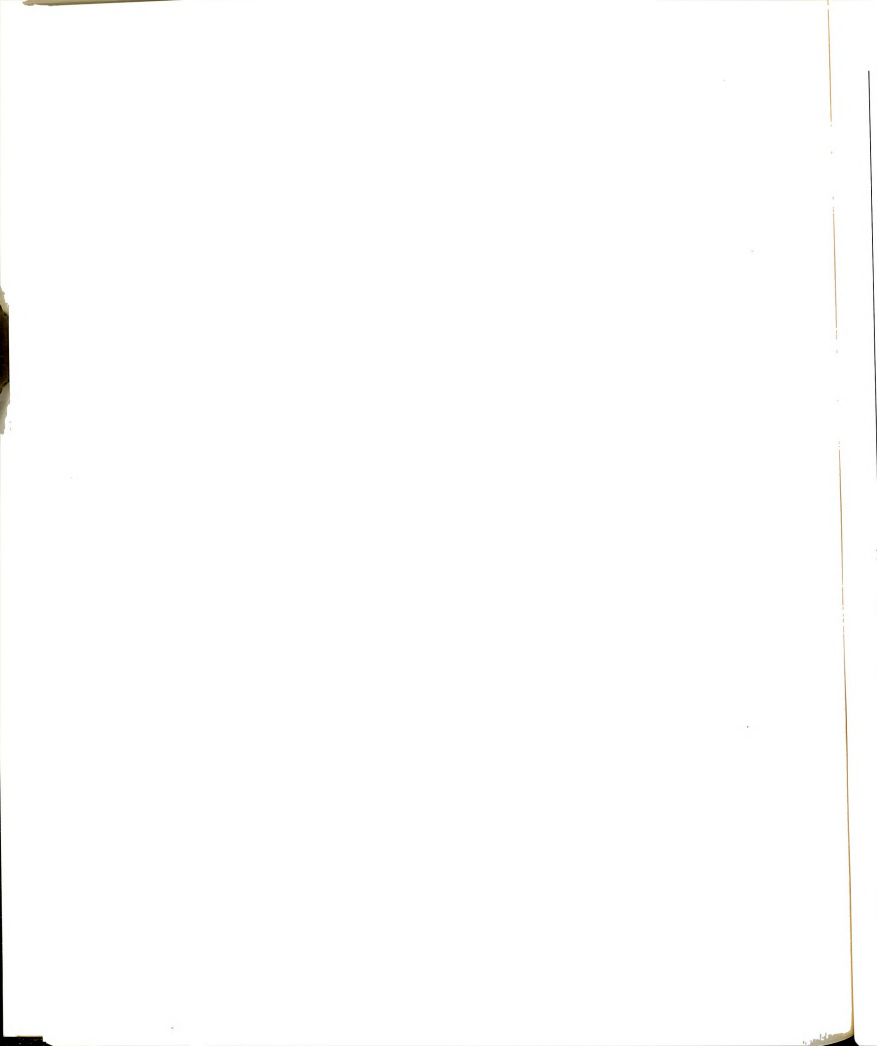
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of theoretical concepts into practical application (Goad, 1984, p. 68).

Thus, significant development occurs in expanding the inservice education programs for teachers. First, there is agreement between the Ministry of Education, the Ministry of Higher Education and the colleges of education in the local universities to accept each semester a number of teachers holding the B.A., so these teachers may obtain either a diploma or master's degree in education. Second, in 1988, two higher colleges for the certification of teachers were established. One was located in Amman and the other in Irbid. This opens the opportunity to teachers who hold the associate's degree to pursue their higher education and obtain the B.A. in Education. All tuition and expenses are paid by the government. This procedure is emphasized by the Ministry of Education because there is a need to qualify teachers and provide them with knowledge and skill (Afif, 1989).

Figure 2.02 demonstrates the growth in numbers of teachers in all stages in public schools.

One of the major concerns expressed by the educational convention held at Amman in 1988 was the need for inservice education for teachers on the job. This convention was



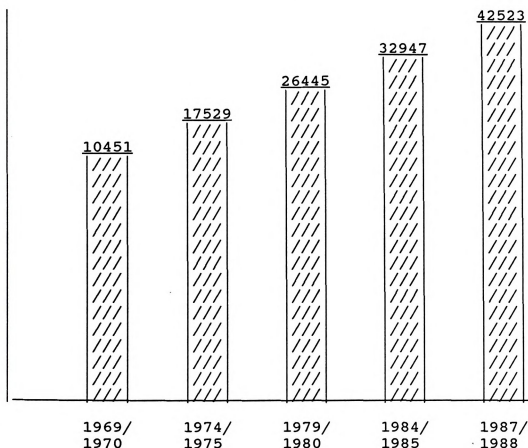


Figure 2.02.--Growth in Number of Teachers in All Stages in Public Schools

Source: Ministry of Education (1988). Education in Jordan, (p. 16). Amman: Author.

held under the MOE's auspices. Prince Hassan presided over it (Al-Dastour, 1989).

The MOE tries to carry out the recommendations of the convention. Therefore, it has designed the following plan. First, teachers who hold the B.A. will be qualified within 10-11 years (1987-1997) by dividing the teachers into seven groups. Each group consists of 700 teachers who will earn either a diploma or master's degree in education





Year	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	
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\*Each group consists of 1,700 teachers.

Figure 2.03.--Inservice Education Plan for Teachers Holding the Associate's Degree

Source: The Ministry of Education, Risalat Al-Mu'allim, 29(3), 162.





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from the local universities. Second, teachers who hold the associate's degree are divided into seven groups. They will be admitted into the Higher College for a certificate to earn the B.A. Each group consists of 1,700 teachers. These plans are clarified in the Figures 2.03 and 2.04.

#### SUMMARY

The review of the literature focused on four major topics. First, the characteristics of the adult learner were discussed. Second, definitions and assumptions of andragogy were examined. Third, the definition, importance and purpose of the inservice education programs were reviewed. Finally, the history and practices of the Jordanian inservice education programs were examined. In the following chapter, the design and methodology of the present study will be explained.

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## CHAPTER III

### STUDY DESIGN AND METHODOLOGY

The primary purpose of this study was to assess the perceptions of teachers as adult learners and their supervisors regarding inservice teacher education in the Mafrag public school districts in Jordan. The methods and procedures employed in conducting and analyzing the data are described in this chapter. Included are descriptions of the type of research, the target population and sample selection. Also the data collection instrument is described in terms of its construction, validity, translation, pilot testing as well as the data collection procedures and the methods employed for data analysis.

#### Type of Research

Turney and Robb (1971) categorized descriptive research in the following way.

Does the research deal with what it is? If it does, then it is descriptive research. Descriptive research is that process that is concerned with characterizing the future of situation, objectives, or practices. It allows one to find out pertinent information about an existing situation. Descriptive research usually is thought of as an effort to determine current



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practice or status so we may develop guidelines for future practices (p. 8).

Isaac and Michael (1983) further describe descriptive research as an attempt to describe things as they are, instead of trying to discover a cause and effect relationship. The authors demonstrate that descriptive research determines the facts of current situations and attempts to clarify existing reality. According to Turney and Robb (1971), descriptive research methods can tell us about what presently exists. They note that:

One type of descriptive research is survey. The survey is an attempt to analyze, interpret and report the status of an institution, group, or area in order to guide practice in the immediate future (p. 63).

Survey research seems to be the most appropriate procedure for exploring the problem being considered in this study.

### Population

The target population for this study consisted of elementary, intermediate and secondary school teachers and supervisors in the Mafraq City School District (MCSD). Located in northeastern Jordan, Mafraq District is Jordan's third largest district. Its total population is believed to exceed 100,000 people. It occupies one-quarter of

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Jordan. According to the Ministry of Municipal and Rural Affairs (1987-1988), it is considered a center for the tribes living in the area.

The Mafrag district school system has a total of 253 public schools in all three levels (cf., Table 3.01). Most of these schools are in the rural areas.

Table 3.01.--Total Number of Schools and Jordanian Teachers in the Mafrag School District

Level of School	Male		Female	
	Number of Schools	Number of Teachers	Number of Schools	Number of Teachers
Elementary	48	520	59	698
Intermediate	64	419	42	336
Secondary	<u>18</u>	<u>208</u>	<u>22</u>	<u>207</u>
Total	130	1147	123	1241

Source: Educational Statistics for Mafrag School District, 1988-1989, Department of Statistics: Educational Directorate of Mafrag District: Mafrag, Jordan.

Each school has a principal. However, some schools, depending on the size of the school have one assistant principal. This is found especially at the secondary level. According to the above-mentioned statistical report, there are 20 academic supervisors serving the teachers of the district. Their offices are in the

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directorates' headquarters. Of the total number of supervisors, 18 are male and two are female.

### Sample Selection

Selecting an ideal sample of a certain population is considered a difficult task (Borg & Gall, 1979). However, two crucial factors identified as very important steps in sample selection are the: (1) population's representation by the selected sample and (2) sample size (Borg & Gall, 1979; Scheaffer, et al, 1979).

To ensure both of these criteria were met, this researcher used the stratified random sample technique. Scheaffer, et al (1979) define a stratified random sample as "one obtained by separating the population elements into nonoverlapping groups, called strata, and then selecting a random sample from each stratum" (p. 59). The major advantage of stratified sampling is it guarantees representation of defined groups in the population (Ary, Jacobs & Razarieh, 1979).

The sample was drawn from available lists in the main office of the Mafraq District's Department of Education. The population of teachers was stratified by two variables: gender and school level. Teachers were

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classified into six strata: (1) male elementary teachers, (2) female elementary teachers, (3) male intermediate teachers, (4) female intermediate teachers, (5) male secondary teachers and (6) female secondary teachers. Accordingly, all teachers in the district were stratified and classified into six categories as described above. In each category, three schools from one level were randomly selected for inclusion in the sample. The total number of schools selected was 18, divided equally by school level and gender. Then, every teacher in each of the randomly selected schools was included in the sample. The total number of teachers in all 18 schools was 320 males and females. This total was determined to comprise the sample of teachers.

#### Selection of Supervisors

As indicated by the latest statistical report (1988-1989), the Mafrag District's Educational Directorate has a total of 20 supervisors--18 male supervisors and two female supervisors. Because of the small number, all school district supervisors were included in the study.



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The Research Instrument

A questionnaire was used to collect the data for this study. Two sections were used in the primary instrument for collecting data necessary for this study (cf., Appendix A).

Section One

In this section of the instrument, a set of seven questions was designed to collect demographic and personal data about the respondents. The demographic variables included:

1. Gender. Two categories were included: male and female.
2. Age. This variable contained four categories: (20-29), (30-39), (40-49) and (over 50) years.
3. Present responsibility. This variable contained two categories: teacher and supervisor.
4. School level. This variable contained three categories: elementary school, intermediate school and secondary school.

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5. Experience in teaching. This variable contained four categories: 1-5, 6-10, 11-15 and over 15 years.
6. Experience in supervision. This variable contained four categories: 1-5, 6-10, 11-15 and over 15 years.
7. Highest level of educational achievement (degree). This variable contained five categories: high school, teacher training certificate, B.A., M.A. and other.

## Section Two

In this section, a 25-item questionnaire was constructed to collect the desired data for the major purpose of this study: that is, to assess the perceptions of teachers as adult learners and their supervisors regarding inservice teacher education programs in Jordan.

The questionnaire was a slight modification of Minix's instrument (1981) (cf., Appendix A). The researcher requested and received permission from Minix to use his instrument in the present study (cf., Appendix B).

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Minix's instrument was developed to: (1) provide information on teachers' perceptions of andragogical learning approaches and (2) ascertain the extent to which andragogical theory and process had been experienced by the teachers in inservice education programs (Minix, 1981).

The respondents (teachers and supervisors separately) were requested to respond to 25 items on two Likert-type scales. The first scale was identified as the extent of agreement scale. The respondents were requested to respond to the items in this scale in one of the following five ways: Strongly Agree (SA), Agree (A), Agree/Disagree (A/D), Disagree (D) or Strongly Disagree (SD). The second scale was identified as the frequency of occurrence scale. The respondents were requested to respond to this scale in one of the following ways: Always (A), Frequently (F), Sometimes (S), Rarely (R) or Never (N).

Minix (1981) reported that the reliability of the instrument, determined by the test-retest method, was .85. The content validity was judged by submitting the selected items to experts in the area of andragogy such as Malcolm Knowles, Wayne James, Herschel Hardly and John Ingalls. The validity was judged to be satisfactory.

For the purpose of this study, this researcher determined that nine items were unrelated to the teaching

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activities in Jordan. These nine items were deleted from Minix's original questionnaire. The final version of the instrument used for this investigation consisted of 25 statement items which were randomly arranged on the questionnaire to avoid creating a response set among participants. The 25 items in the questionnaire were grouped into six approaches or clusters according to their commonality and the author's logical interpretation. However, the factor analysis technique was not used in this process because it was previously utilized on the original instrument.

Of the 25 statement items, 23 were related to one of six approaches as follows.

1. The beliefs of a self-directed learner: five items.

Item 3: I am capable of directing my own professional development.

Item 4: Inservice programs should provide options for teachers who do not want to follow the planned program.

Item 5: Each teacher should be responsible for his/her professional development.





Item 8: Teachers should be allowed to set their own goals at inservice programs.

Item 15: I should be permitted to direct my own learning experiences.

2. The characteristics associated with teacher-centered inservice programs: seven items.

Item 17: The best inservice programs should help me learn new processes for dealing with my concerns.

Item 18: Inservice settings should be scheduled at convenient times for teachers.

Item 19: Solving problems that are of interest to the classroom teacher should be emphasized at inservice meetings.

Item 21: Teachers should group themselves according to their interests and needs at inservice meetings.



Item 23: Inservice presenters should show teachers that the teachers' abilities and experiences are valued and respected.

Item 24: Inservice presenters should take time to develop a friendly and cooperative atmosphere.

Item 25: Cooperation among teachers at inservice settings is an important aid to learning.

3. Improving teachers' self-knowledge: four items

Item 13: Inservice programs should help teachers learn about themselves.

Item 14: Theories presented at inservice programs should be directly related to the teachers' personal experiences.

Item 16: Self-evaluation should be an integral part of inservice programs.

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Item 22: Teachers should be encouraged to examine their own feelings, attitudes and behaviors in inservice programs.

4. Trust in the program purpose: three items.

Item 6: A feeling of trust should exist between inservice planners and teachers.

Item 7: Teachers should be helped by inservice programs to free themselves of patterns of thought that block their growth.

Item 9: Inservice programs should have a clear purpose.

5. Small group work: two items.

Item 12: I prefer working with small groups of teachers, to listening to lectures.

Item 20: Small groups should be created to solve problems at inservice programs.

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6. The teachers' desire to have teacher-initiated inservice programs: two items.

Item 1: Teachers should be permitted to design their own inservice programs.

Item 2: The experiences of the teachers taking part in an inservice program should be utilized as sources of information.

Two of the items which were not part of the andragogy scale were designed to ascertain the extent to which teachers felt they were treated as professionals and adults.

Item 10: Teachers should be treated as adults at inservice programs.

Item 11: Teachers should be treated as professionals at inservice programs.

Respondents to the questionnaire were asked to indicate the degree of needs for inservice teacher education programs in the specified areas on a Likert-type scale of five points (1-5). The responses for the extent of agreement scale were given the following values: Strongly



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agree=1, Agree=2, Agree/Disagree=3, Disagree=4 and Strongly Disagree=5. The data for the frequency of occurrence scale were rated as follows: Always=1, Frequently=2, Sometimes=3, Seldom=4 and Never=5. On the questionnaire, the teachers were instructed to respond according to their perceptions of their own personal-professional needs while the supervisors were asked to respond according to their perceptions of inservice education needs among teachers.

### Questionnaire Validity

Mosher and Kalton (1972) defined validity as ". . . the ability of the survey instrument to measure what it sets out to measure" (p. 356). Furthermore, they believe that a researcher and/or a team of workers in a particular area with enough knowledge can judge the validity of the research instrument. They stated: "the assessment of content validity is essentially a matter of judgement; the judgement may be made by the surveyor or, better, by a team of judges engaged for the purpose (p. 356).

The researcher conducted a study of the face/content validity of the English version of the questionnaire at Michigan State University. In terms of the overall content validity and clarity of the items, the questionnaire was provided for review to four Jordanian and Saudi Arabian graduate (Ph.D.) students at Michigan State University's

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College of Education. For the same purpose, a research consultant at Michigan State University's College of Education reviewed the questionnaire. Based on their suggestions and comments, the words in some items were modified to adapt to the culture of Jordanian teachers and supervisors.

### Translation of the Questionnaire

The researcher initially translated the questionnaire from English into Arabic, the respondents' native language. The back translation method was used to translate the questionnaire. Two native speakers of Arabic with excellent command of English independently translated the instrument into Arabic and then into English again. The translated instrument in Arabic was reviewed by the instructor of Arabic language in Michigan State University's Department of Linguistics and Germanic, Slavic, Asian and African Languages (cf., Appendix B). This procedure was employed to ensure the instrument was compatible in Arabic and English.

### Pilot Testing of the Instrument

Fox (1969) identified the purposes of a pilot test as:

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(2) providing data to estimate the instrument's reliability.

The instrument was administered to a sample group of 25 Arab doctoral students at Michigan State University. This pilot test sample was not part of the study's sample. However, they were essentially similar in culture to the sample in Jordan. This test was conducted to determine if the questionnaire items were yielding the kind of information needed. No important differences in the interpretations of the meaning of items were reported. Based on the data from direct responses to the instrument, as well as written and verbal comments by the respondents, it was determined that the items were interpreted as intended. This established reasonable validity regarding the construction of the items. On the basis of pilot test results, some minor revisions in wording and in item arrangement were made to the instrument. After these minor revisions were made, the researcher gave three doctoral students at Michigan State University the revised Arabic questionnaire and requested them to identify confusing or difficult items. The results of the responses indicated that the questionnaire items were clear. The average length of time it took to complete the questionnaire was 15-25 minutes.

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Data Collection Procedures

The researcher's doctoral committee approved the proposal of this study in May, 1989. The University Committee on Research Involving Human Subjects (UCRIHS) was provided with two copies of the proposal and asked to review the material and grant approval to conduct the study. That approval was granted (cf., Appendix B). Data for this study were collected during May and June, 1989.

A packet containing the survey instrument and a cover letter with all the information to obtain the needed information was mailed to the Assistant Director of the Mafraq District Department of Education. The researcher's academic advisor sent an explanatory letter to the Jordanian Minister of Education to obtain permission to conduct the study (cf., Appendix B). With the approval of the Minister of Education, a directive from the Ministry of Education was forwarded to the Mafraq District Director of the Department of Education to conduct the study in the public school. (A copy of the Ministry of Education's directive is in Appendix B).

The Director of the Department of Education issued letters to the principals of the stratified random sample schools included in the study to allow teachers to participate in the study (cf., Appendix B). After the



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teachers completed the questionnaire, each principal brought back the questionnaires to the main office of the Department of Education. The supervisors were contacted directly by the Assistant Director of the Department of Education in their offices at the Department of Education. They were asked to bring the questionnaires to the Office of the Assistant Director.

The total number of distributed questionnaires was 320 copies, divided between the potential two groups of respondents in the following manner: 300 questionnaires to teachers, 125 questionnaires to elementary school teachers, 95 questionnaires to intermediate school teachers, 80 questionnaires to secondary school teachers and 20 questionnaires to supervisors.

All questionnaires were accompanied by a cover letter. The cover letter explained the purpose of the research, urged the participants to respond to all items as accurately and truthfully as possible and assured the anonymity of respondents.

Furthermore, the letter informed the participants/respondents that their participation was on a voluntary basis and that their return of the completed questionnaire would be considered consent to participate.

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Each of the questionnaire's two sections was introduced by instructions to each of the two groups of respondents explaining how responses to each item should be recorded. The overall percentage of usable returned forms was 81.25%. Table 3.02 indicates the number of questionnaires distributed to the sample and number of completed responses.

Table 3.02.--Number of Questionnaires Distributed to the Sample and Number of Completed Responses

Role Group	Number of Sample	Number of Responses	Percentage of Responses
Teachers	300	240	80.00%
Supervisors	<u>20</u>	<u>20</u>	<u>100.00</u>
Total	320	260	81.25%

### Descriptive Data

One purpose of this study was to describe the history and practices of the present Jordanian inservice education programs. Data for this purpose was collected from Jordanian and international agencies such as the Ministries of Education, Higher Education and Planning, as well as the United Nations Educational Scientific and Cultural Organization (UNESCO). Although all of these agencies and

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institutions were contacted, information on the subject was scarce. Only a few written documents (records and papers concerning the historical development of inservice education programs and practices) were obtained.

Therefore, although the descriptive section in Chapter II of this study was based on the available literature, most of it was based on correspondence between the researcher and the Jordanian Ministry of Education and the Mafraq District Department of Education.

#### Treatment and Analysis of the Data

The Statistical Package for the Social Sciences (SPSS-X) available in the MSU IBM Mainframe computer was used in the computation and analysis of data for this study. The analysis of data from the questionnaire incorporated the use of simple descriptive statistics in the form of counts, percentages and ranks. In addition to descriptive statistics, a one-way Analysis of Variance (ANOVA) was used to determine whether or not there exists significant differences in teachers' perceptions regarding the andragogical learning approaches between and among certain demographic variable levels.

Data analysis for research questions 1, 2, 3, 4 and 6 was based on the aggregate mean ratings for the teachers'

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and supervisors' perceptions on the six andragogical learning approaches. The mean ratings were based on the responses to the five-point, ordinal Likert-type scale items which ranged from (1) Always to (5) Never for the actual practice and (1) Strongly agree to (5) Strongly disagree for the expected practice. Analysis of research question 5 utilized the teachers' responses to the two items which provided the teachers' perceptions on whether or not teachers should be treated as adults and professionals at the inservice teacher education programs. Statistical tools used in the presentation and analysis of data for each of the six research questions are given below.

**Question 1: To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?**

On a five-point ordinal Likert-type scale ranging from (1) Always to (5) Never, means and standard deviations for the six andragogical learning approaches were computed for the elementary, intermediate and secondary school teachers. The extent to which the andragogical learning approaches are being practiced in the inservice teacher



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education programs as perceived by teachers was evaluated using the interpretation of the mean ratings given by,

- 1.00 - 1.99: Always
- 2.00 - 2.99: Frequently
- 3.00 - 3.99: Sometimes
- 4.00 - 5.00: Rarely or Never

**Question 2:** To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by supervisors?

Means and standard deviations for the supervisors' responses on the five-point ordinal Likert-type scale were computed. Based on the aggregate mean ratings for each of the six andragogical learning approaches, ranks were also determined. The extent to which the andragogical learning approaches are being practiced in the inservice teacher education programs as perceived by supervisors was evaluated using the interpretation of the mean ratings as given in research question 1.

**Question 3:** To what extent are andragogical approaches preferred in the inservice education programs in Jordan as

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**perceived by elementary, intermediate and  
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On a five-point ordinal Likert-type scale ranging from (1) Strongly agree to (5) Strongly disagree, means and standard deviations for the six andragogical learning approaches were computed for the elementary, intermediate and secondary school teachers. The extent to which the andragogical learning approaches are preferred in the inservice teacher education programs as perceived by teachers was evaluated using the interpretation of the mean ratings given by,

- 1.00 - 1.99: Highly preferred (strongly agree)
- 2.00 - 2.99: Preferred (agree)
- 3.00 - 3.99: Neutral (agree/disagree)
- 4.00 - 5.00: Not preferred (disagree/strongly disagree)

**Question 4: To what extent are andragogical approaches preferred in the inservice education programs in Jordan as perceived by supervisors?**

Means and standard deviations for the supervisors' responses on the five-point ordinal Likert-type scale were computed. Based on the aggregate mean ratings for each of the six andragogical learning approaches, ranks were also

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determined. The extent to which the andragogical learning approaches are preferred in the inservice teacher education programs as perceived by supervisors was evaluated using the interpretations of the mean ratings as given in research question 3.

**Question 5:** To what extent do teachers feel they are treated as professional adults in the inservice programs in Jordan?

Two items (1) Teachers should be treated as adults at the inservice teacher education programs and (2) Teachers should be treated as professionals at the inservice teacher education programs were used in addressing research question 5. For the expected and actual treatment, a Likert-type scale ranging from (1) Strongly agree to (5) Strongly disagree for the expected treatment and (1) Always to (5) Never for the actual treatment were utilized. Frequencies and percentages were computed for each response level. The extent to which teachers are treated as adults and professionals together with the expected treatment were evaluated using the frequencies and percentages.

**Question 6:** What is the relationship of selected personal and demographic variables such as gender, age, school level, level of

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education and years of experience on the perceptions of all teachers and supervisors regarding andragogical learning approaches in the inservice education programs in Jordan?

Based on the aggregate mean responses for the teachers' perceptions on the extent to which andragogical learning approaches are preferred in the inservice teacher education programs, a one-way Analysis of Variance (ANOVA) was utilized to determine whether or not there exist significant differences in teachers' perceptions among and between levels of these demographic variables. Due to the small number of supervisors in the study, no statistical tests were performed to determine whether or not statistically significant differences exist between and among these demographic variable levels. However, means and standard deviations were used to indicate whether differences exist in supervisors' perceptions between and among these demographic variable levels.

#### SUMMARY

The methods and procedures used in conducting and analyzing the data were explained in this chapter. The target population of the study, the research instrument and its validity, translation and pilot testing were



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described. Data collection procedures and statistical analysis methods were also described. The results of the data analysis performed in this study will be reported in Chapter IV.

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## CHAPTER IV

### PRESENTATION AND ANALYSIS OF DATA

#### Introduction

The primary purpose of this study was to assess the perceptions of teachers as adult learners and their supervisors regarding inservice teacher education programs in Jordan. The study was conducted to provide tentative answers for the research questions presented in Chapter I. In this chapter, findings related to these questions are presented in five sections. The first section describes the respondents who participated in the study in terms of their distribution among the demographic variables: gender, age, school level (elementary, intermediate or secondary) in which teachers work, years of teaching (supervisory) experience and level of education. The second section reports findings regarding respondents' perceptions concerning andragogical approaches being practiced in the inservice education programs. The third section reports findings regarding respondents' perceptions concerning andragogical approaches preferred in the inservice education programs. The fourth section reports findings regarding respondents' perceptions concerning

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treatment of teachers as professionals and adults in the inservice teacher education programs. Findings for the relationship between respondents' perceptions regarding andragogical approaches and certain demographic variables will be presented in section five.

#### Analysis of Respondent's Information for Teachers and Supervisors

A total of 260 educators were involved in this study of which 240 (or 92%) were teachers while 20 (or 8%) were supervisors. Of the 240 teachers who participated in this study, 146 (or 61%) were males and 94 (or 49%) were females. On the other hand, of the 20 supervisors involved in this study, 18 (or 90%) were males while 2 (or 10%) were females.

The majority of the teachers who participated in this study were between the ages of 30 and 39 years while most of the supervisors were between the ages of 40 and 49 years. Table 4.01 shows the distribution of teachers by age groups and gender. Table 4.01 indicates that of the 239 total teachers who indicated their age, 154 (or 64.1%) were 39 years or younger and 85 (or 35.9%) were 40 years or older. Among the teachers who were involved in this study, 145 (or 60.7%) were males and 94 (or 39.3%) were females.

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Table 4.01.--Distribution of Teachers by Age Group and Gender

Age Group	Female		Male		Total	
	No.	%	No.	%	No.	%
20 - 29	27	61.4	17	38.6	44	18.3
30 - 39	51	46.4	59	53.6	110	45.8
40 - 49	14	18.9	60	81.1	74	30.8
50 and over	2	18.2	9	81.8	11	5.1
Total	94	39.3	145	60.7	239	100.0

Table 4.02 shows the distribution of supervisors by age group and gender. From this table, it is clear that while the majority of the teachers are below 40 years old, the majority of the supervisors are above 40 years old. It seems that female teachers are younger than male teachers. Out of 20 supervisors who were involved in this study, 14 (or 70%) were 40 or more years old while six (or 30%) were

Table 4.02.--Distribution of Supervisors by Age Group and Gender

Age Group	Female		Male		Total	
	No.	%	No.	%	No.	%
20 - 29	1	100.0	-	-	1	5.0
30 - 39	1	20.0	4	80.0	5	25.0
40 - 49	-	-	11	100.0	11	55.0
50 and over	-	-	3	100.0	3	15.0
Total	2	10.0	18	90.0	20	100.0



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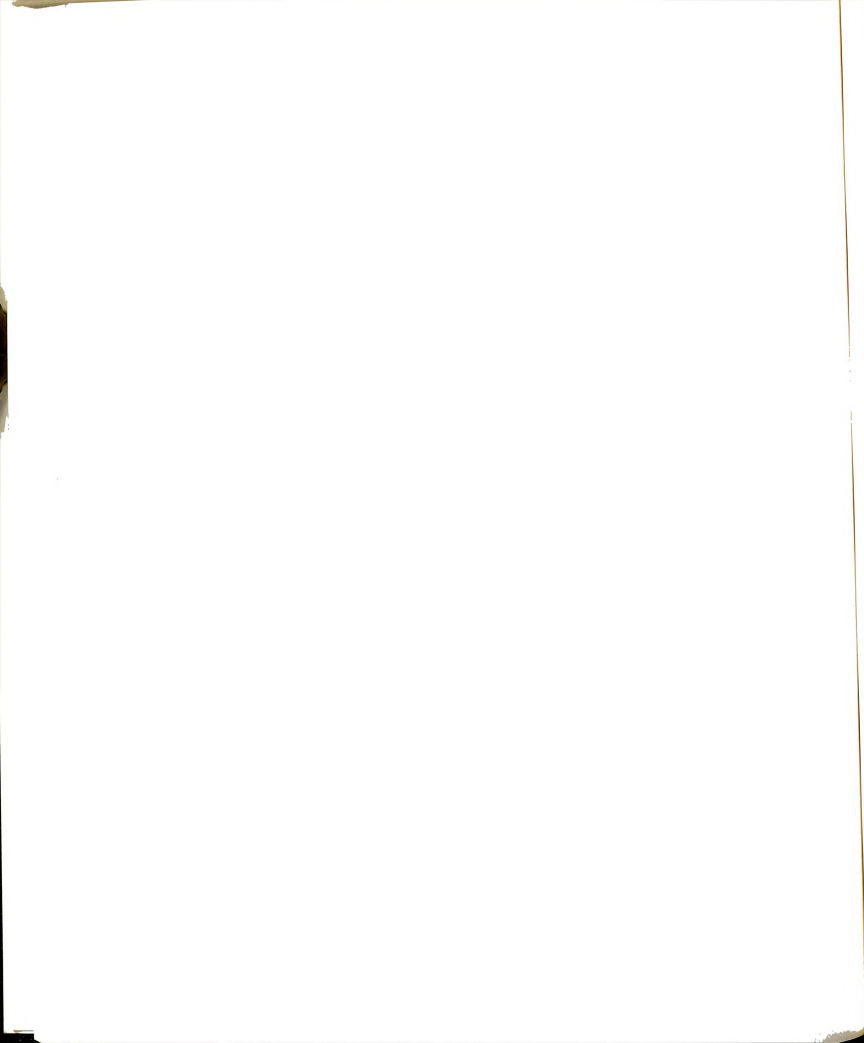
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no more than 40 years old. Like the teachers, the majority of the respondents among the supervisors were male. Of the 20 total supervisors only 2 (or 10%) were females, while 18 (or 90%) were males.

The level of teaching experience among the respondents ranges from one year to over 15 years. Table 4.03 shows the distribution of teachers by number of years in teaching experience and school level. From Table 4.03, it is clear that the majority of the respondents have been in the teaching profession for six to 15 years, while only 20 (or 8.4%) have been in the profession for over 15 years. Of the 240 teachers who participated in this study, 100 (or 41.7%) were elementary school teachers, 80 (or 33.7%)

Table 4.03.--Distribution of Teachers by  
School Level and Teaching Experience

	Elementary Schools		Intermediate Schools		Secondary Schools		All	
Experience in Years	N	%	N	%	N	%	N	%
1- 5	19	43.2	11	25.0	14	31.8	44	18.5
6-10	38	40.4	26	27.7	30	31.9	94	39.5
11-15	38	47.5	32	40.0	10	12.5	80	33.6
Over 15	4	20.0	11	55.0	5	25.0	20	8.4
No Response	1	50.0	-	-	1	50.0	2	
Total	100	41.7	80	33.7	60	25.6	240	100.0



were intermediate school teachers and 60 (or 25.6%) were secondary school teachers. Overall, 138 (or 58%) of the teachers indicated that they have been in the profession for no more than 10 years while 80 (or 33.6%) have been in the profession for 11 to 15 years and 20 (or 8.4%) have been teaching for over 15 years.

Respondents were asked to indicate their highest level of formal education. Table 4.04 presents the distribution of teachers by the highest level of education attained. From Table 4.04 it is shown that out of 240 teachers, 137 (or 57.1%) indicated that they did not attain the bachelor's degree, although 129 of them were trained

Table 4.04.--Distribution of Teachers by  
Highest Education Level Attained

Level of Education	Number	Percentage
High School Trained Teachers	8 129	3.3 53.8
Bachelor of Arts Degree	100	41.7
Master's Degree	3	1.2
Total	240	100.0

teachers. Among 103 (or 42.9%) who had the bachelor's or a higher degree, 100 (or 41.7%) had the bachelor's degree, while three (or 1.2%) had master's degrees.

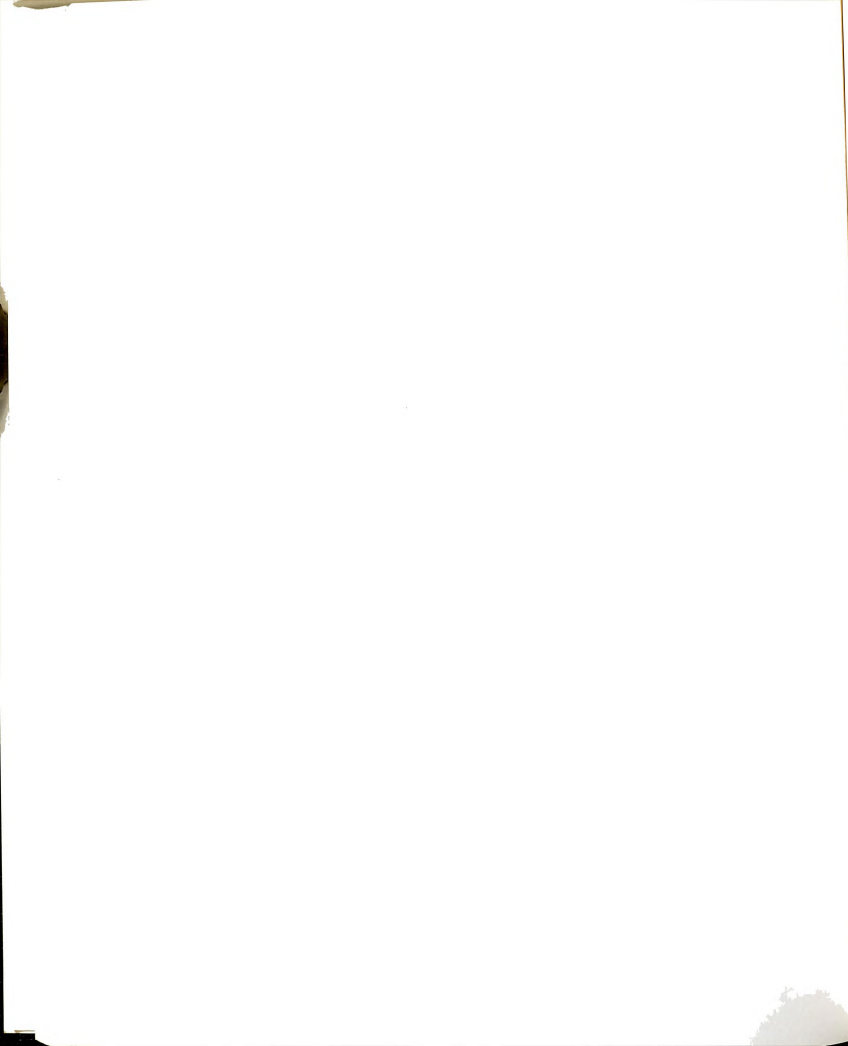


Table 4.05 presents the distribution of supervisors by education level and years of supervisory experience.

Table 4.05.--Distribution of Supervisors by  
Education Level and Years of  
Supervisory Experience

	Bachelor's Degree		Master's Degree		All	
Experience in Years	N	%	N	%	N	%
6-10	5	62.5	3	37.5	8	42.1
11-15	5	71.4	2	28.6	7	36.8
Over 15	1	25.0	3	75.0	4	21.1
No Response	-	-	1	100.0	1	5.0
Total	11	55.0	9	45.0	20	100.0

From Table 4.05, it is shown that, of the total of 20 supervisors who participated in this study, 11 (or 55%) had the bachelor's degree, while 9 (or 45%) had master's degrees. The level of experience for the supervisors ranges from six to over 15 years with 15 (or 78.9%) who have been in the profession for between six and 15 years. Only four (or 21.1%) of the supervisors had more than 15 years of supervisory experience.



### Presentation of Research Findings

The research findings in relation to the six research questions are presented in the remaining part of this chapter. Each research question will be restated followed by a presentation of the research findings in connection with the research question.

#### Teachers' Perceptions Concerning Andragogical Approaches Being Practiced in the Inservice Education Programs

**Research Question 1:** To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?

Respondents were asked to rate the extent to which they perceive the andragogical approaches as being practiced in the teachers' inservice education programs in Jordan. On a five-point Likert-type scale, ranging from (1) Always to (5) Never, means and standard deviations for the six andragogical learning approaches were computed for the elementary, intermediate and secondary school teachers. (For the number and percentage of responses to each item level, see Appendix C.) Data analysis for Research Question 1 was then based on these aggregate mean ratings of the teachers' perceptions on each of the six

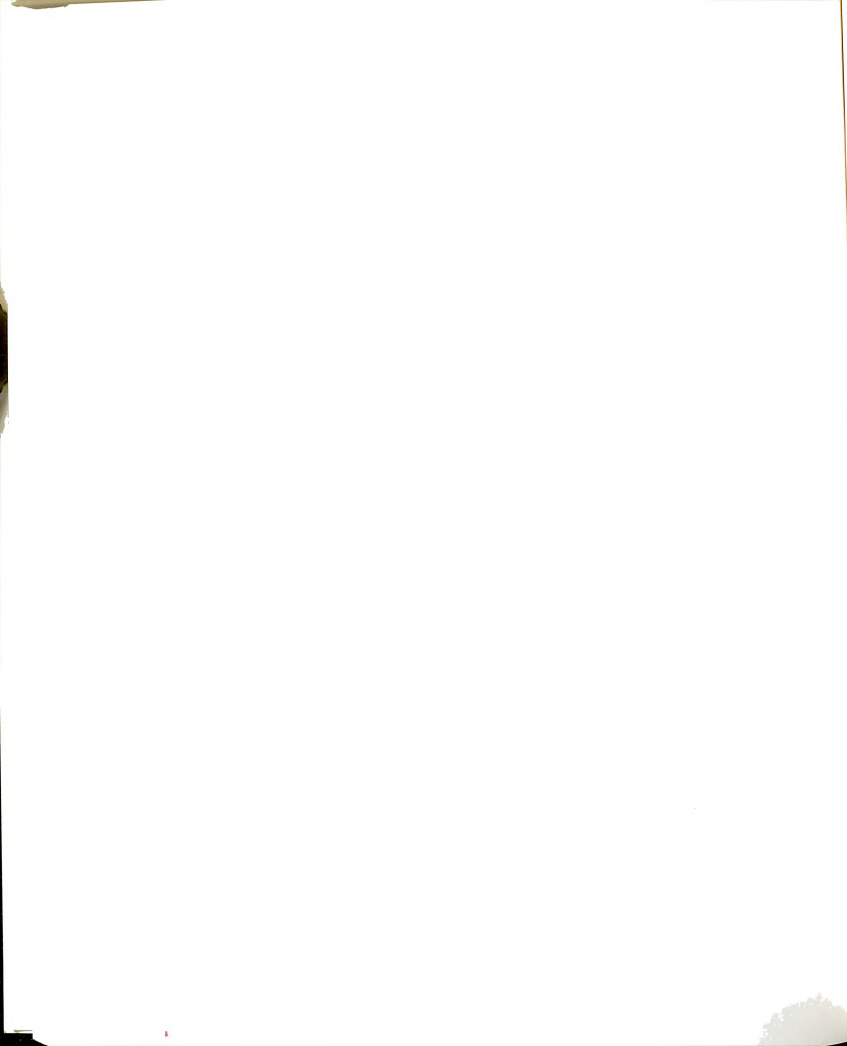




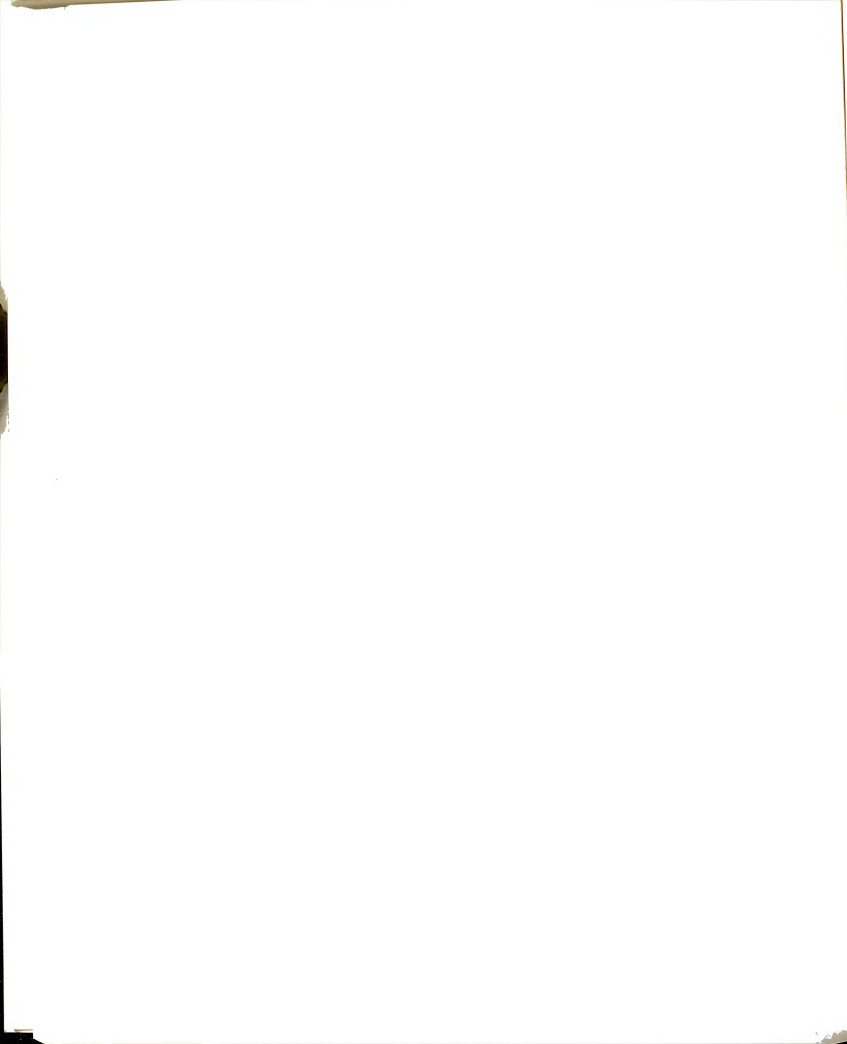
andragogical learning approaches. Separate mean ratings were also computed for teachers at each of the three school levels. The mean score for all andragogical approaches was on a continuum, ranging from the minimum 1.00 to the maximum 4.119. The fact that no mean near 5.00 was observed implies that most respondents did not select the "never" category. As a result, the following four categories of the mean ratings were adopted throughout the research:

- 1.00 - 1.99 : Always
- 2.00 - 2.99 : Frequently
- 3.00 - 3.99 : Sometimes
- 4.00 - 5.00 : Rarely or Never

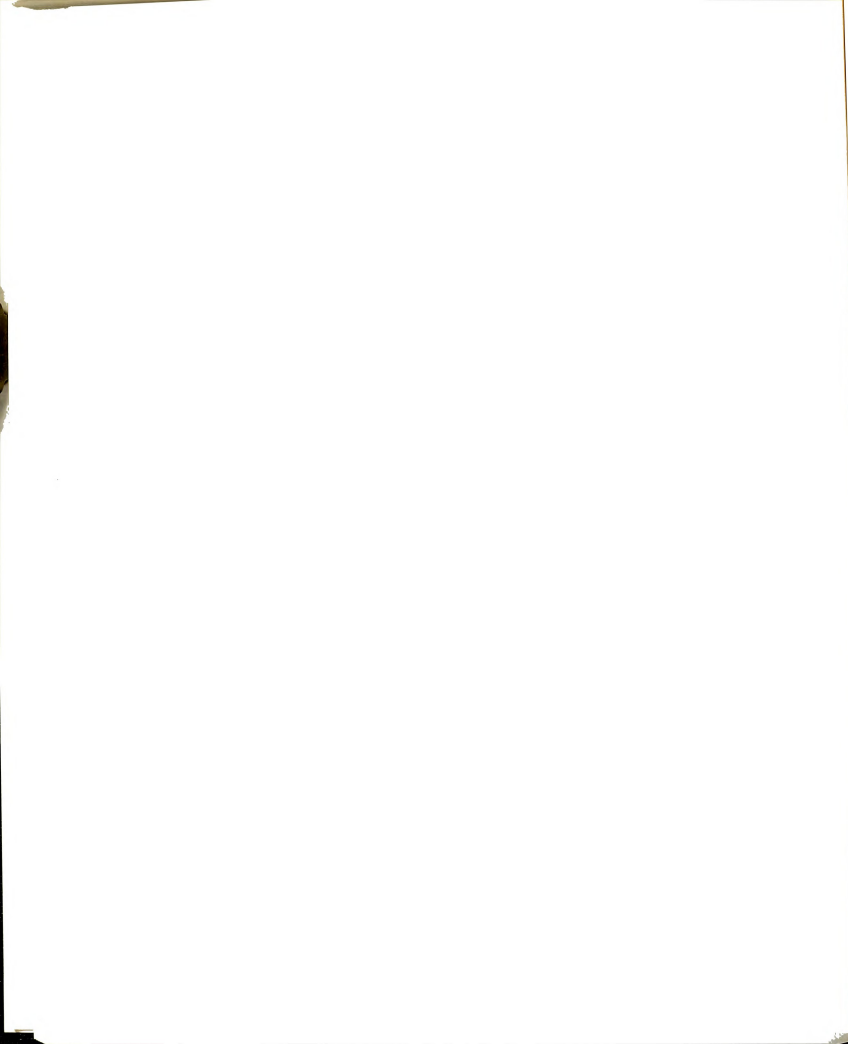
Table 4.06 shows the means and standard deviations for the six andragogical learning approaches for each of the three levels of school teachers. As shown in Table 4.06, the means for the six andragogical learning approaches range from 3.634 to 4.074. The andragogical approaches of: **A Self-Directed Learner** (mean=3.979), **Improving Teachers' Self-Knowledge** (mean=3.982), **Trust in the Program Purpose** (mean=3.979) and **Teacher-Initiated Inservice Programs** (mean=3.634) were perceived as being practiced sometimes. However, the andragogical learning approaches of **Teacher-Centered Inservice Programs** (mean=4.048) and **Small Group Work** (mean=4.074) were perceived as rarely or never practiced in the teachers' inservice education programs.







Although there was a general agreement among all teachers at all levels that andragogical learning approaches are not practiced frequently in the Jordanian teachers' inservice education programs, elementary school teachers perceive all of the approaches as being practiced sometimes with the exception of **Teacher-Centered Inservice Programs** (mean=4.019) which they perceived as being rarely or never practiced in the teachers' inservice education programs. On the other hand, intermediate school teachers perceived all of the approaches as being rarely or never practiced with the exception of **Teacher- Initiated Inservice Programs** (mean=3.556) which was perceived as practiced sometimes. However, there was general agreement between intermediate and secondary school teachers on the four andragogical approaches: **A Self- Directed Learner** (mean=4.066, 4.030), **Teacher-Centered Inservice Programs** (mean=4.119, 4.005), **Trust in the Program Purpose** (mean=4.008, 4.011) and **Small Group Work** (mean=4.114, 4.223) which they perceived as being rarely or never practiced. The only andragogical approach on which all the three groups of teachers agreed was **Teacher-Initiated Inservice Programs** (mean=3.515, 3.556, 3.941) which was perceived as being practiced sometimes.



Supervisors' Perceptions Concerning  
Andragogical Approaches Being Practiced in the  
Inservice Education Programs

**Research Question 2:**      To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by supervisors?

Supervisors were asked to rate the extent to which they perceive andragogical approaches are being practiced in the inservice education programs in Jordan. As with the teachers, means and standard deviations for the supervisors' responses on a five-point Likert-type scale were computed. (For the number and percentage of respondents' responses to each item level, see Appendix C.)

Table 4.07 shows the aggregate means, standard deviations and ranks for the six andragogical learning approaches as perceived by supervisors.

Unlike the teachers' responses, none of the six andragogical learning approaches were perceived by supervisors as rarely or never practiced in the inservice teacher education programs. The mean rating for these approaches ranged from 3.25 to 3.60. Though the mean rating for the supervisors was generally lower than that of the teachers, supervisors like teachers did not perceive any of the andragogical learning approaches to be practiced always or frequently. The highest ranked andragogical





learning approach was **Trust in the Program Purpose** (mean=3.25, rank=1) followed by **Teacher-Initiated Inservice Programs** (mean=3.300, rank=2) while the least ranked andragogical learning approach was **Teacher-Centered Inservice Programs** (mean=3.60, rank=6) and **Small Group Work** (mean=3.526, rank=5). The andragogical learning approach, **A Self-Directed Learner**

Table 4.07.--Number, Means, Standard Deviation and Ranks for the Supervisors' Perceptions on the Practice of Andragogical Approaches

Andragogical Approach	N	Mean	S.D.	Rank
A self-directed learner	19	3.461	0.535	3
Teacher-centered inservice programs	20	3.600	0.604	6
Improving teachers' self-knowledge	20	3.488	0.599	4
Trust in the program purpose	20	3.250	0.506	1
Small group work	19	3.526	0.634	5
Teacher-initiated inservice programs	20	3.300	0.657	2
All		3.437	0.540	

Note: The mean ratings were interpreted as follows:

- 1.00 - 1.99 : Always
- 2.00 - 2.99 : Frequently
- 3.00 - 3.99 : Sometimes
- 4.00 - 5.00 : Rarely or never

(mean=3.461) and Improving Teacher Self-Knowledge (mean=3.488) were ranked 3 and 4 respectively.

Teachers' Perceptions Concerning Andragogical  
Approaches as Being Preferred in the  
Inservice Education Programs

**Research Question 3:** To what extent are andragogical approaches preferred in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?

Respondents were asked to rate their perceptions according to how andragogical learning approaches should be practiced. In a Likert-type scale, (1) strongly agree, (2) agree, (3) agree/disagree, (4) disagree, (5) strongly disagree, the mean responses were computed on all the six andragogical learning approaches. (For the number and percentage of respondents to each item level, see Appendix C.) These measures being an ordinal Likert-type scale, a high mean rating near 5.00 will indicate that the approach is not preferred and should not be practiced while a low mean rating near 1.00 will indicate that the andragogical approach is highly preferred and should be practiced. Specifically, the mean ratings for Research Question 3 were interpreted as follows:

- 1.00 - 1.99 : highly preferred (strongly agree)  
 2.00 - 2.99 : preferred (agree)  
 3.00 - 3.99 : neutral (agree/disagree)  
 4.00 - 5.00 : not preferred (disagree/strongly disagree)

Table 4.08 shows the mean ratings and standard deviations for elementary, intermediate and secondary school teachers for the six andragogical learning approaches. From Table 4.08, it is clear that all six andragogical learning approaches were rated as being highly preferred by elementary, intermediate and secondary school teachers. Overall, the mean ratings for the six andragogical approaches ranged from 1.179 to 1.689. The highest ranked (or most preferred) andragogical learning approaches were **Teacher-Initiated Inservice Programs** (mean=1.179) followed by **Small Group Work** (mean=1.599) while the least ranked though still preferred were **Improving Teacher Self-Knowledge** (mean=1.689) and **Teacher-Centered Inservice Programs** (mean=1.645). The andragogical learning approach which was perceived to be highly preferred by all elementary, intermediate and secondary school teachers was **Teacher-Initiated Inservice Programs** (mean=1.070, 1.138, 1.417). Overall, all the andragogical learning approaches were perceived as highly preferred with an aggregate mean of 1.556. However, the overall mean among elementary school teachers was the

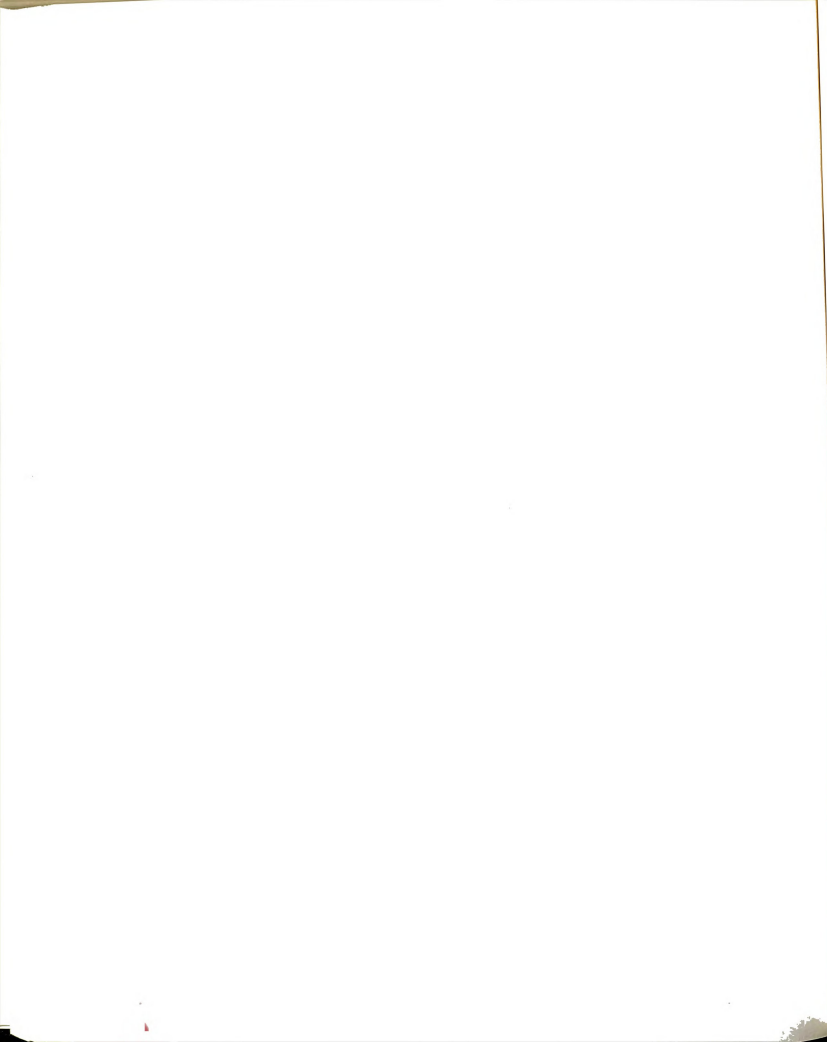
Table 4.08.--Means and Standard Deviations for the Teachers' Perceptions on the Preference of Andragogical Approaches by School Level

Andragogical factor	Elementary teachers			Intermediate teachers			Secondary teachers			All teachers		
	N	mean	s.d	N	mean	s.d	N	mean	s.d	N	mean	s.d
A self-directed learner	100	1.542	0.334	80	1.600	0.377	59	1.756	0.489	239	1.614	0.397
Teacher-centered in-service program	100	1.679	0.300	79	1.575	0.246	59	1.680	0.380	238	1.645	0.309
Improving teachers' self-knowledge	100	1.670	0.339	79	1.680	0.384	58	1.733	0.444	237	1.689	0.381
Trust in the program purpose	100	1.577	0.379	80	1.658	0.375	59	1.605	0.408	239	1.611	0.3852
Small group work	100	1.560	0.391	79	1.557	0.424	59	1.720	0.536	238	1.599	0.4450
Teacher-initiated	100	1.070	0.174	80	1.138	0.225	60	1.417	0.506	240	1.179	0.3351
Overall	100	1.516		80	1.535		59	1.652		239	1.556	

Note:

Mean ratings are interpreted as follows

- 1.00 - 1.99 -strongly agree
- 2.00 - 2.99 - Agree
- 3.00 - 3.99 - Agree/disagree
- 4.00 - 5.00 - Disagree or strongly disagree



lowest (1.516) followed by the intermediate school teachers (mean=1.535) and the mean for the secondary school teachers was the highest (mean=1.652).

Supervisor's Perceptions Concerning Andragogical  
Approaches as Being Preferred in the  
Inservice Education Programs

**Research Question 4:** To what extent are andragogical approaches preferred in the inservice education programs in Jordan as perceived by supervisors?

Supervisors were asked to rate their perceptions regarding the extent to which the andragogical learning approaches should be practiced in the inservice teacher education programs. In an ordinal Likert-type scale,

- (1) Most preferred (strongly agree)
- (2) Preferred (agree)
- (3) Neutral (agree/disagree)
- (4) Not preferred (disagree/strongly disagree)

means and standard deviations were computed on all the six andragogical learning approaches. (For the number and percentage of respondents to each item level, see Appendix C.) The mean ratings were interpreted as in Research Question 3. Table 4.09 shows the means, standard deviations and ranks of the six andragogical learning approaches as perceived by supervisors.

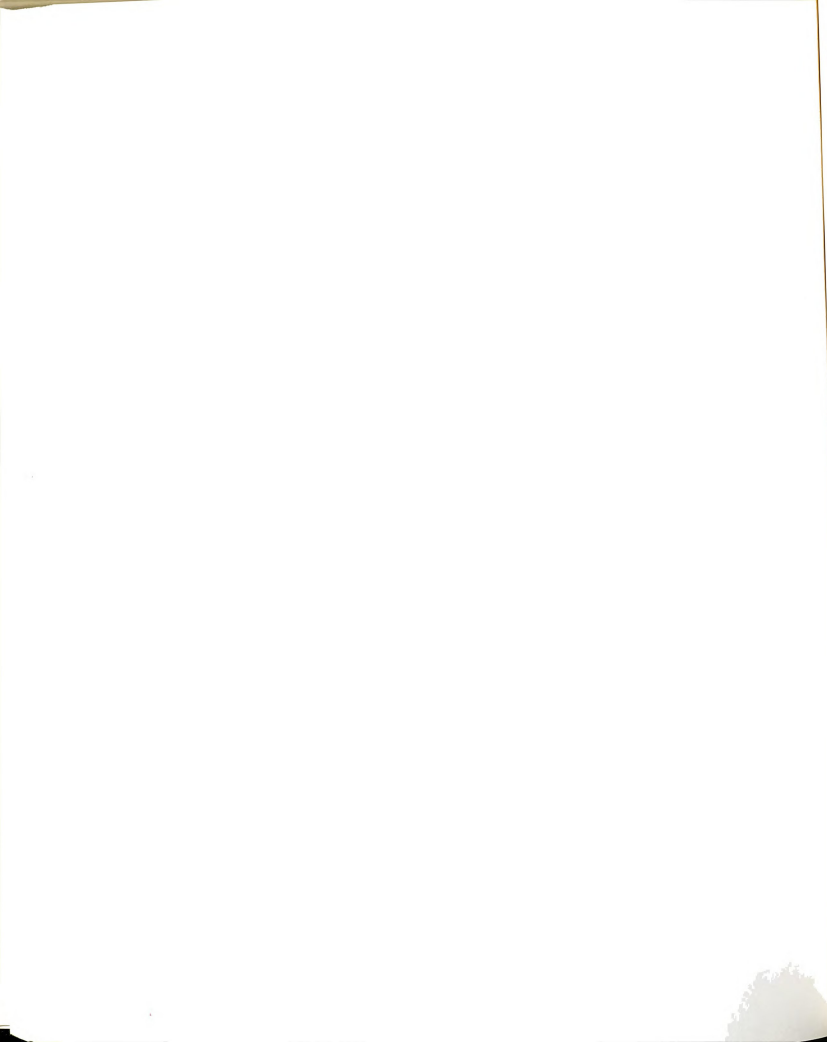




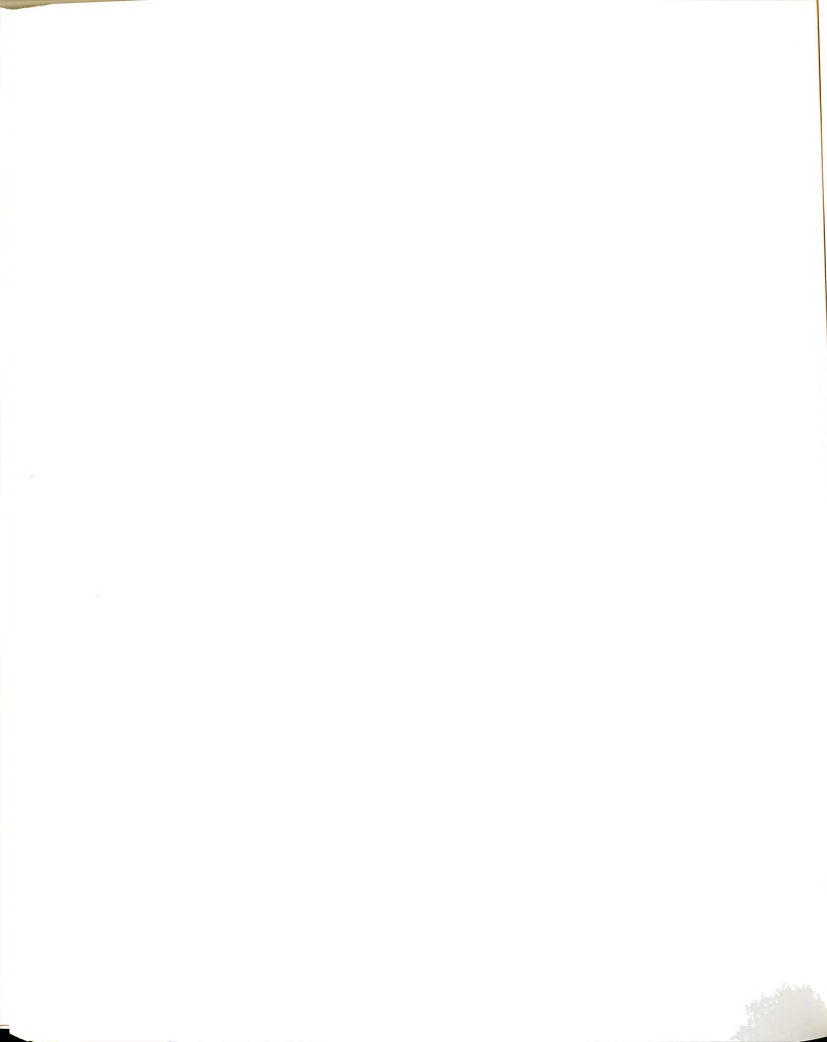
Table 4.09.--Number, Means, Standard Deviation and Ranks  
for the Supervisors' Perceptions on the  
Preference of Andragogical Approaches

Andragogical Approach	N	Mean	S.D.	Rank
A self-directed learner	20	1.500	0.340	4
Teacher-centered inservice programs	20	1.557	0.258	5
Improving teachers' self-knowledge	20	1.775	0.343	6
Trust in the program purpose	20	1.483	0.315	3
Small group work	20	1.475	0.302	2
Teacher-initiated inservice programs	20	1.000	0.000	1
All		1.465	0.260	

Note: The mean ratings were interpreted as follows:

- 1.00 - 1.99 : Most preferred (strongly agree)
- 2.00 - 2.99 : Preferred (agree)
- 3.00 - 3.99 : Neutral (agree/disagree)
- 4.00 - 5.00 : Not preferred (disagree/strongly disagree)

As shown in Table 4.09, as with the teachers, the supervisors considered **Teacher-Initiated Inservice Program** (mean=1.000) to be highly preferred and, thus, should be practiced. Mean ratings and ranks for the other andragogical learning approaches are as follows: **Small Group Work** (mean=1.475, rank=2), **Trust in the Program Purpose** (mean=1.483, rank=3) and **Self-Directed Learner** (mean=1.500, rank=4), **Teacher-Centered**



**Inservice Programs** (mean=1.557, rank=5) and **Improving Teachers' Self-Knowledge** (mean=1.775, rank=6).

Respondents' Perceptions Concerning  
Treatment of Teachers as Professionals and Adults

**Research Question 5:** To what extent do teachers feel they are treated as professional adults in the inservice programs in Jordan?

Teachers were asked to rate their perceptions on the items: (a) Teachers should be treated as adults at inservice programs and (b) Teachers should be treated as professionals at inservice programs. For the expected practice, a Likert-type scale ranging from (1) Strongly agree to (5) Strongly disagree, frequencies and percentages were computed for each level of response. Similarly, for the actual practice, a Likert-type scale ranging from (1) Always to (5) Never, frequencies and percentages were computed for each level of response.

Table 4.10 shows the frequencies and percentage for each of the response levels on whether teachers are (or should be) treated as adults at inservice teacher education programs.

As shown in Table 4.10, there is a general feeling among the teachers that they are not treated as they expect

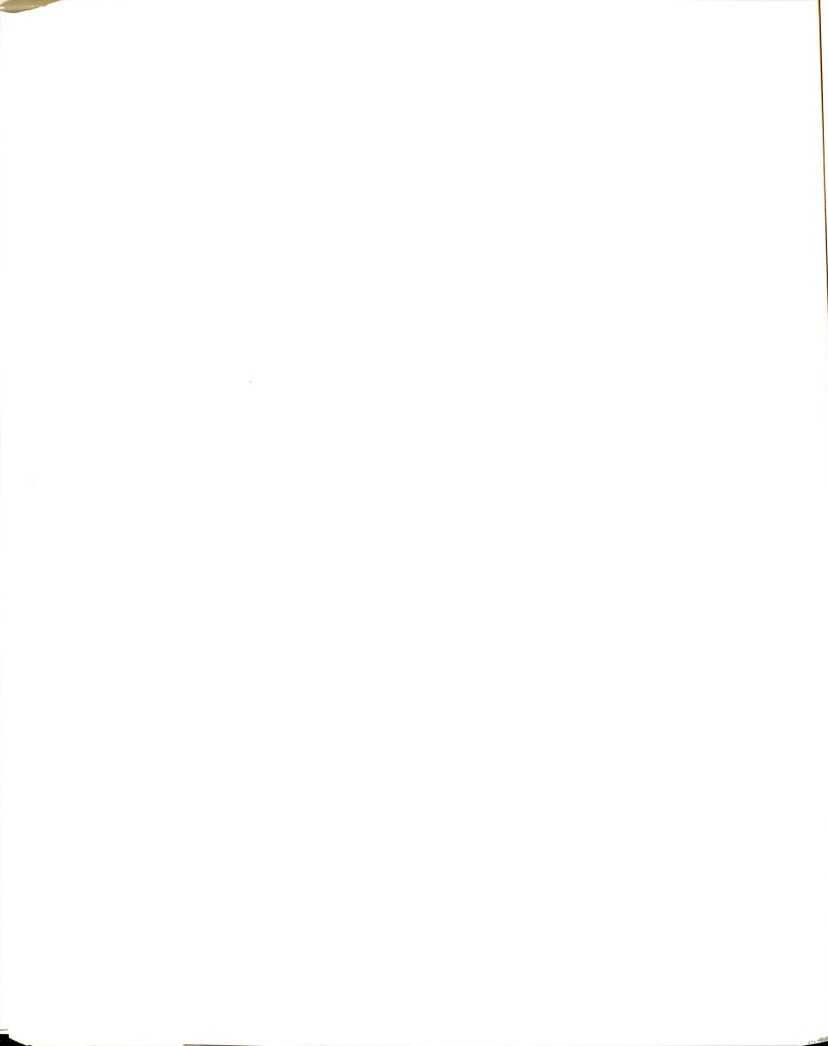


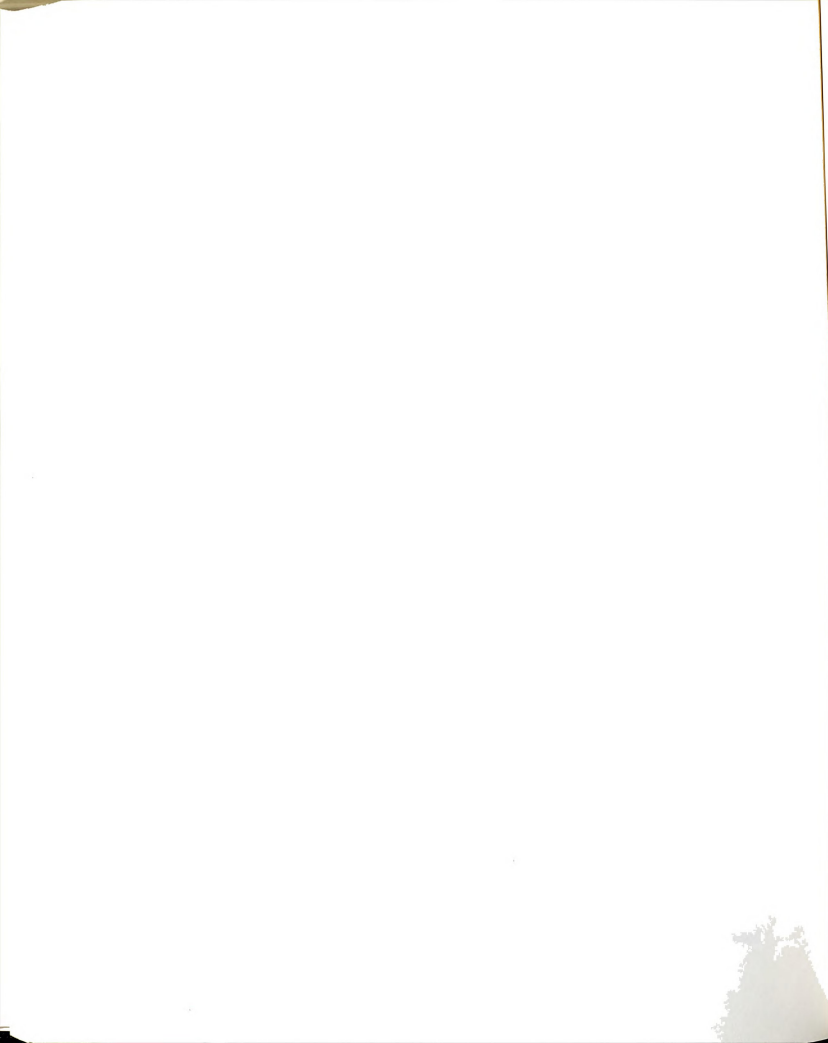
Table 4.10.--Number and Percentage on the Perceptions of Teachers on Whether They Are Treated as Adults and Professionals at Inservice Teacher Education Programs

Treatment	Response Level	Expected Practice		Response Level	Actual Practice	
		N	%		N	%
As Adults	SA	80	33.5	A	-	-
	A	134	56.0	F	12	5.0
	A-D	25	10.5	S	46	19.2
	D	-	-	R	142	59.2
	SD	-	-	N	40	16.6
	Mean	1.770			3.875	
As Professionals	SA	76	31.8	A	-	-
	A	134	56.1	F	5	2.1
	A-D	29	12.1	S	49	20.4
	D	-	-	R	123	51.2
	SD	-	-	N	63	26.3
	Mean	1.803			4.017	

KEY:

SA: Strongly agree  
 A: Agree  
 A-D: Agree/disagree  
 D: Disagree  
 SD: Strongly disagree

A: Always  
 F: Frequently  
 S: Sometimes  
 R: Rarely  
 N: Never



in the inservice teacher education programs. The data presented in Table 4.10 indicated that of the 240 teachers who participated in the study, 214 (or 89.5%) agree or strongly agree that teachers should be treated as adults in the inservice teacher education programs while only 12 (or 5%) agree that they are indeed treated as adults in inservice teacher education programs. On the other hand, while none of the teachers disagreed or strongly disagreed that teachers should be treated as adults, 182 (or 75.8%) indicated that they are rarely or never treated as adults in the inservice teacher education programs.

Like the treatment of teachers as adults in the inservice teacher education programs, teachers who participated in this study generally feel that they are not treated as professionals in the inservice teacher education programs. As shown in Table 4.10, out of 240 who participated in the study, 210 (or 87.9%) agree or strongly agree that they should be treated as professionals, while 186 (or 77.5%) feel that they are rarely or never treated as professionals in the inservice teacher education programs. Therefore, on average, the data presented in this study indicated that teachers expect to be treated as adults (mean=1.770) and professionals (mean=1.803) and yet, they perceive that they are rarely treated as adults (mean=3.875) and rarely or never treated as professionals (mean=4.017).

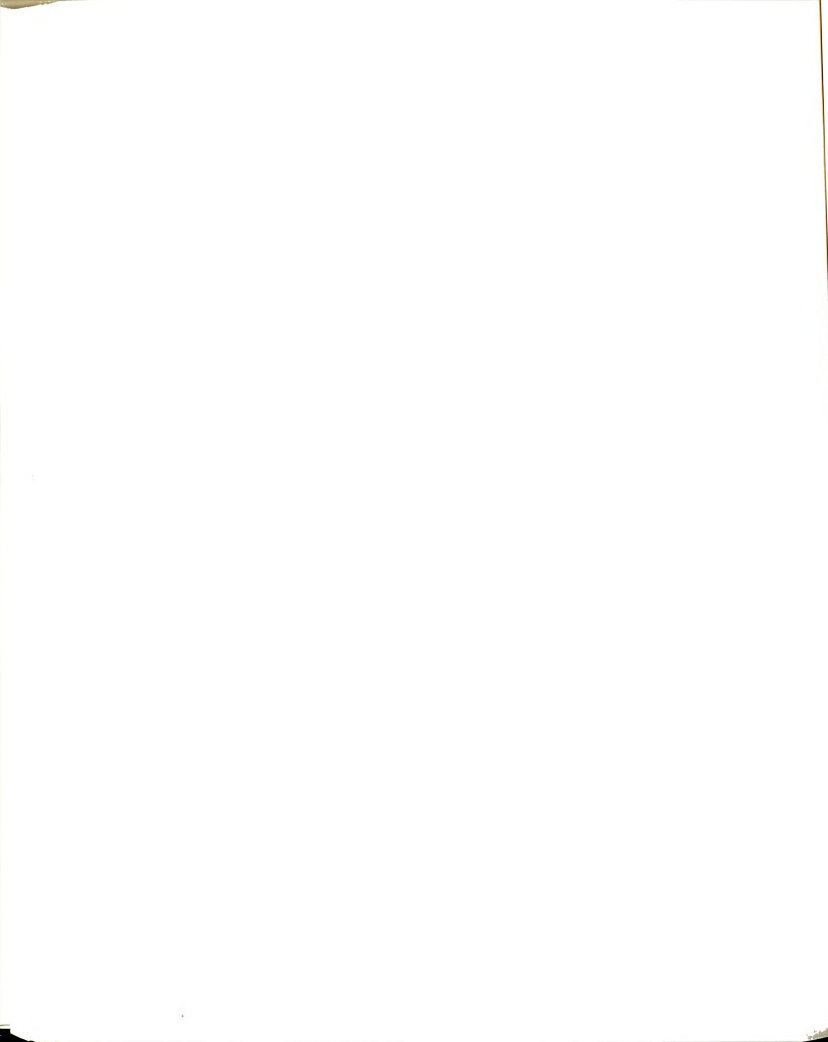




Table 4.11 also shows the perceptions of teachers concerning how they expected and whether they are treated as adults and professionals in the inservice teacher education programs by school levels. As shown in Table 4.11, the expected and actual treatment teachers are given as adults and professionals in the inservice teacher education programs do not vary with school levels. All teachers at all levels expect to be treated as adults and professionals and they feel they are rarely or never treated as adults or professionals.

Relationship of Respondents' Perceptions Concerning  
Andragogical Approaches and Demographic Variables

**Research Question 6.1:**      What is the relationship of gender on the teachers' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

A one-way analysis of variance (ANOVA) was used to determine whether or not there exists significant differences in teachers' perceptions regarding andragogical learning approaches between male and female teachers. Table 4.12 shows the means, standard deviations, the observed F-value and its corresponding significant level for the six learning approaches.

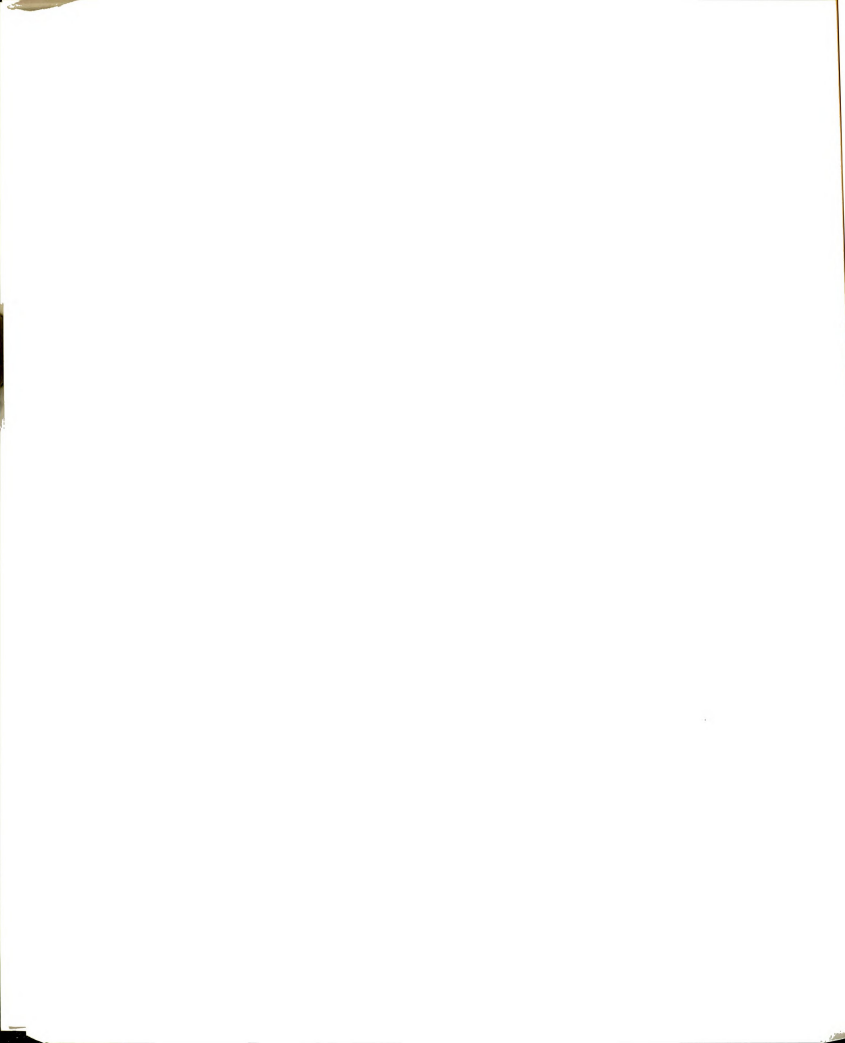


Table 4.11.--Means and Standard Deviations of Teachers' Perceptions on Whether They Are Treated as Adults and Professionals at Inservice Education Programs

Treatment	School Level	Expected Practice			Actual Practice		
		N	Mean	S.D.	N	Mean	S.D.
As Adults	ES	100	1.790	0.608	100	3.790	0.715
	IS	80	1.737	0.590	80	3.875	0.663
	SS	60	1.780	0.696	60	4.017	0.854
	All	240	1.770		240	3.900	
As Professionals	ES	100	1.880	0.640	100	3.870	0.717
	IS	80	1.688	0.608	80	4.000	0.675
	SS	60	1.831	0.647	60	4.117	0.865
	All	240	1.800		240	3.996	
As Adults and Professionals	ES	100	1.835	0.560	100	3.880	0.640
	IS	80	1.713	0.538	80	3.936	0.570
	SS	59	1.805	0.573	60	4.067	0.692
	All	339	1.787	0.556	240	3.946	0.633

KEY:

ES: Elementary School  
 IS: Intermediate School  
 SS: Secondary School

The mean ratings are interpreted as follows:

<u>Mean</u>	<u>Actual Practice</u>	<u>Expected Practice</u>
1.00 - 1.99	Always	Strongly agree
2.00 - 2.99	Frequently	Agree
3.00 - 3.99	Sometimes	Agree/disagree
4.00 - 5.00	Rarely/never	Disagree/strongly disagree

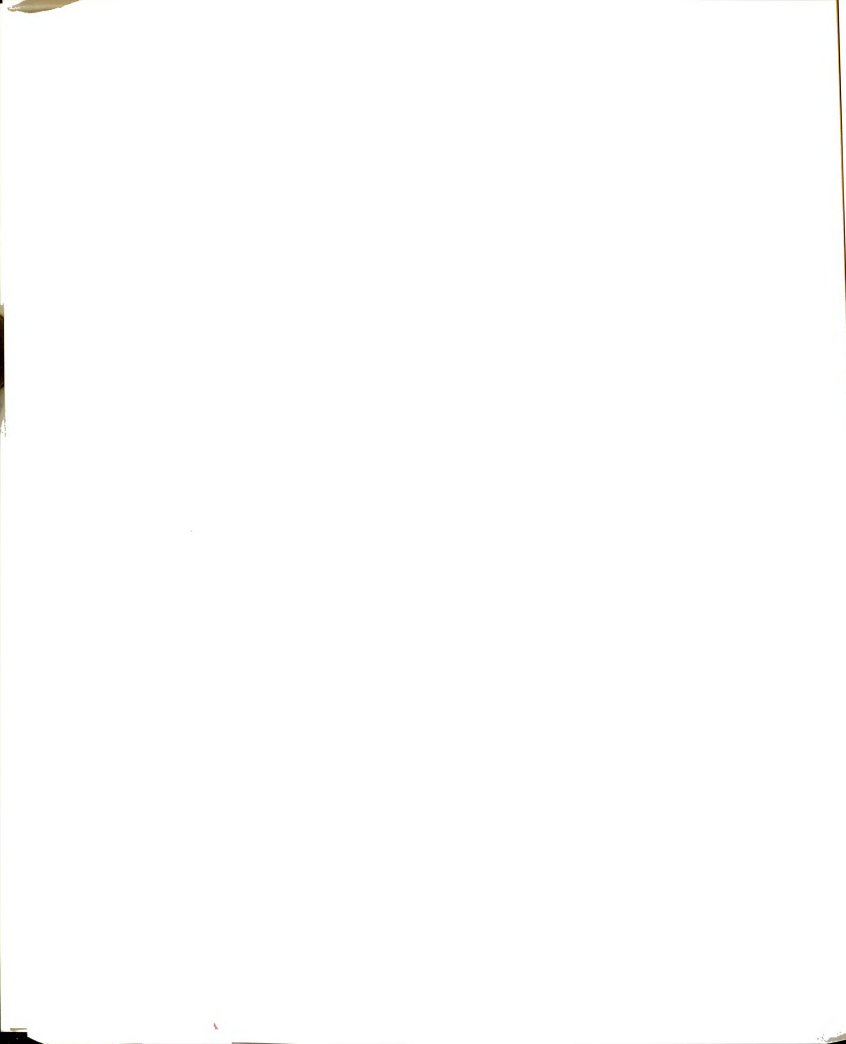
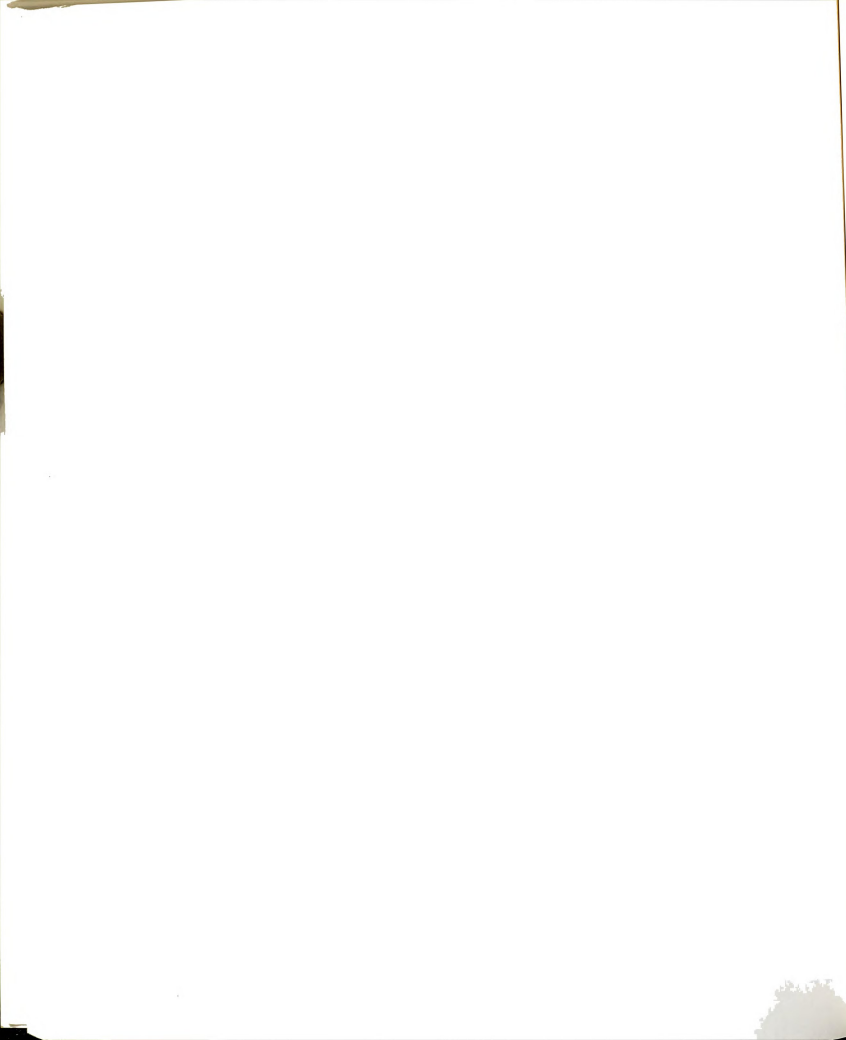


Table 4.12.--ANOVA Results for the Difference in the Perceptions of Andragogical Approaches Between Male and Female Teachers

Andragogical factor	Male		Female		F-value	P-value
	mean	sd	mean	sd		
A self-directed learner	1.658	0.431	1.547	0.331	4.525	0.034 *
Teacher-centered inservice programs	1.674	0.331	1.600	0.268	3.235	0.073
Improving teacher self-knowledge	1.731	0.392	1.625	0.357	4.437	0.036 *
Trust in the program purpose	1.518	0.389	1.599	0.381	.139	0.709
Small group work	1.667	0.450	1.495	0.418	8.774	.003 *
Teacher-initiated in-service program	1.225	0.390	1.106	0.206	7.500	.007 *

\* denotes significance at 0.05 level



As shown in Table 4.12, there were statistically significant differences at the 0.05 level in the perceptions of male and female teachers regarding the andragogical learning approaches: **A Self-Directed Learner** ( $F=4.525$ ,  $p < 0.05$ ), **Improving Teachers' Self-Knowledge** ( $F=4.437$ ,  $p < 0.05$ ), **Small Group Work** ( $F=8.774$ ,  $p < 0.05$ ) and **Teacher-Initiated Inservice Programs** ( $F=7.500$ ,  $p < 0.05$ ). For all these four andragogical learning approaches the mean for female teachers was significantly lower than the mean for males, which indicated that female teachers feel more strongly about these andragogical learning approaches than male teachers.

**Research Question 6.2:** What is the relationship of age on the teachers' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

A one-way analysis of variance (ANOVA) was used to determine whether or not there exists significant differences in teachers' perceptions regarding andragogical learning approaches among the age groups 20-29, 30-39 and 40 years and over. Table 4.13 shows the means, standard deviations, the observed F-value and its corresponding significance level for the six andragogical learning approaches.

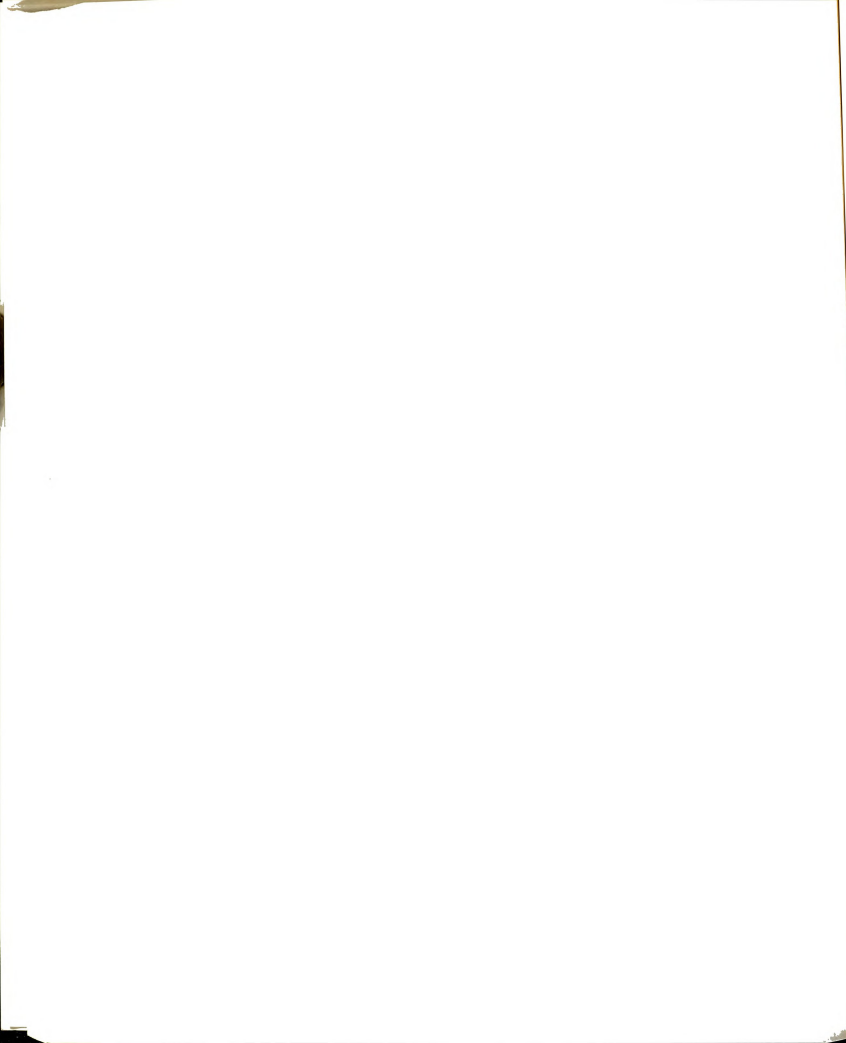




Table 4.13.--ANOVA Results for the Difference in Perceptions of Andragogical Approaches  
Among Teachers of Different Age Groups

Andragogical approaches	Age groups in years						F-Value	P-value
	20-29		30-39		40 and over			
	mean	s.d	mean	s.d	mean	s.d		
A self-directed learner	1.442	0.304	1.628	0.382	1.685	0.438	5.788	0.004 *
Teacher-centered inservice program	1.581	0.291	1.646	0.303	1.675	0.325	1.311	0.272
Improving teacher' self-knowledge	1.614	0.330	1.705	0.386	1.713	0.397	1.122	0.327
Trust in the program purpose	1.576	0.376	1.615	0.389	1.631	0.384	0.299	0.742
Small group work	1.477	0.388	1.578	0.420	1.685	0.490	3.381	0.036 *
Teacher-initiated in-service program	1.148	0.297	1.196	0.353	1.171	0.332	0.348	0.706

\* denotes significance at 0.05 level

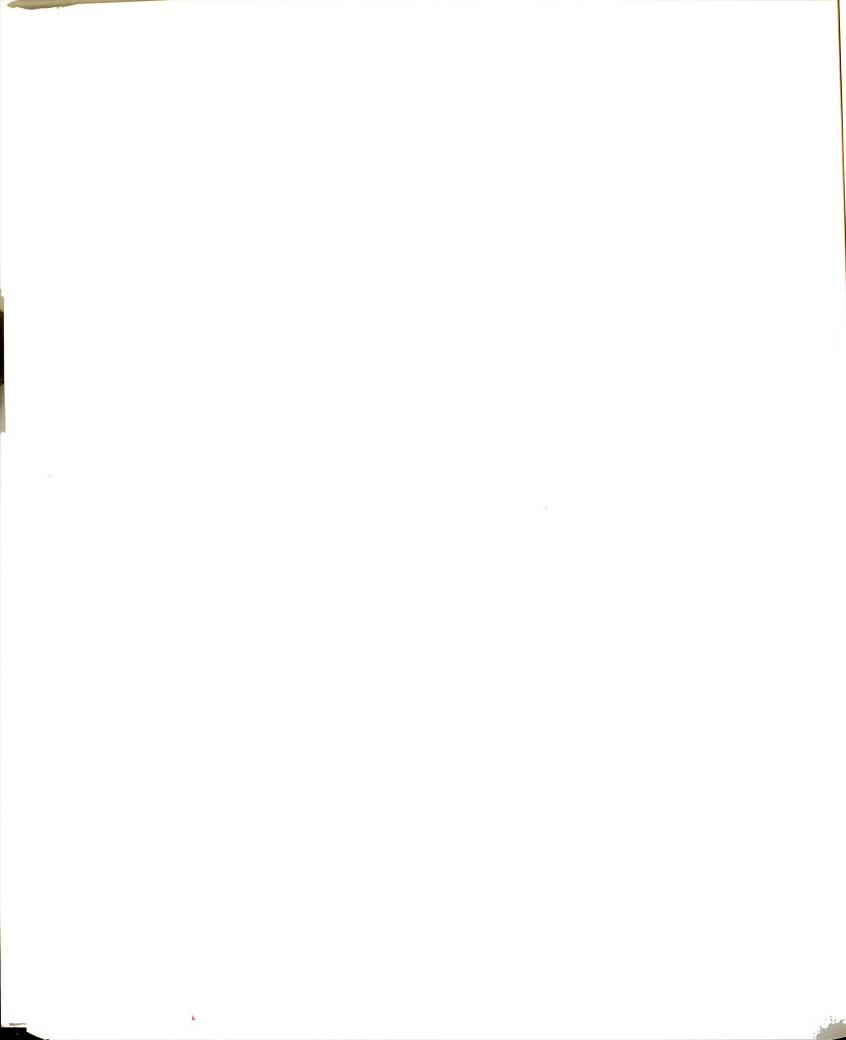


Table 4.13 shows that there were statistically significant differences at 0.05 level in the perceptions of teachers who were 20-29, 30-39 and over 39 years old, in the andragogical learning approach, a **Self-Directed Learner**, ( $F=5.788$ ,  $p < 0.05$ ), and **Small Group Work**, ( $F=3.381$ ,  $p < 0.05$ ). For the andragogical learning approach, **A Self-Directed Learner**, the younger teachers (20-29 years old) felt more strongly about this andragogical learning approach than the older teachers (30-39 and 40 years and over). For the andragogical learning approach, **Small Group Work**, the average perception in all the age groups was significantly different with the younger teachers (20-29) having the strongest feelings (mean=1.477), followed by the middle age group (30-39) whose mean was 1.578 and the older age group (40 years and over) with a mean of 1.685.

**Research Question 6.3:** What is the relationship of school level on the teachers' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

A one-way analysis of variance (ANOVA) was used to determine whether or not there exists significant differences in teachers' perceptions regarding andragogical learning approaches among the school levels: elementary, intermediate and secondary. Table 4.14 shows the analysis of variance results for the differences in perceptions of

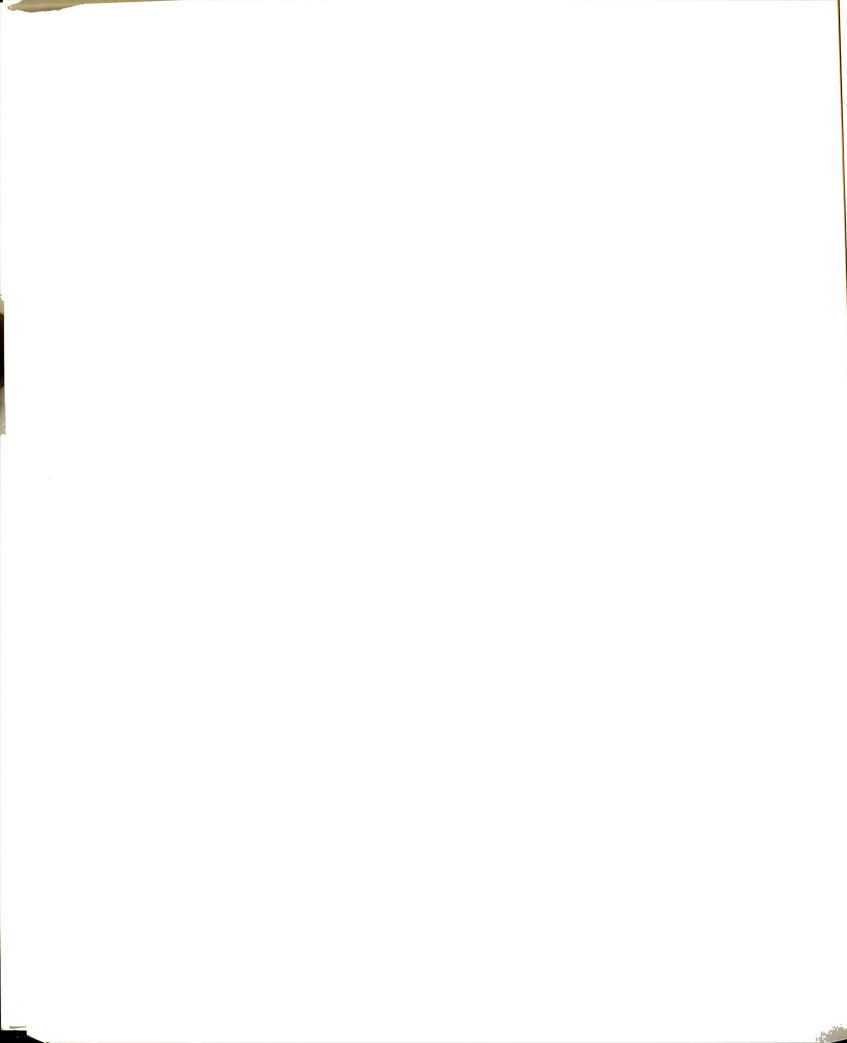
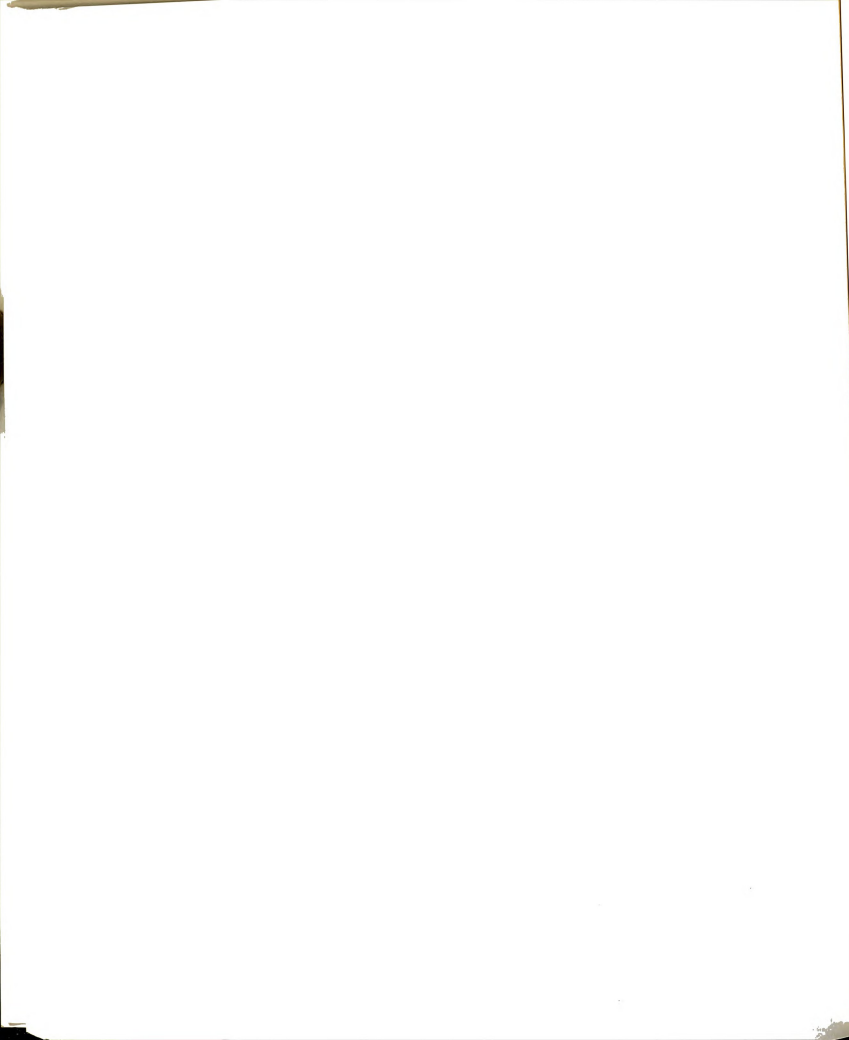


Table 4.14.--ANOVA Results for the Differences in Perceptions of the Preferences of  
Andragogical Approaches Among Teachers at Different School Levels

Andragogical approaches	School Levels						F-Value	P-value
	Elementary		Intermediate		Secondary			
	mean	s.d	mean	s.d	mean	s.d		
A self-directed learner	1.542	0.334	1.600	0.377	1.756	0.484	5.667	0.004 *
Teacher-centered inservice program	1.679	0.300	1.575	0.246	1.684	0.380	3.057	0.049 *
Improving teacher's self-knowledge	1.670	0.339	1.680	0.384	1.733	0.444	0.525	0.592
Trust in the program purpose	1.577	0.379	1.658	0.375	1.605	0.408	1.011	0.365
Small group work	1.560	0.391	1.557	0.424	1.720	0.536	2.979	0.053
Teacher-initiated in-service program	1.070	0.174	1.138	0.225	1.416	0.506	25.304	0.000 *
* denotes significance at 0.05 level								

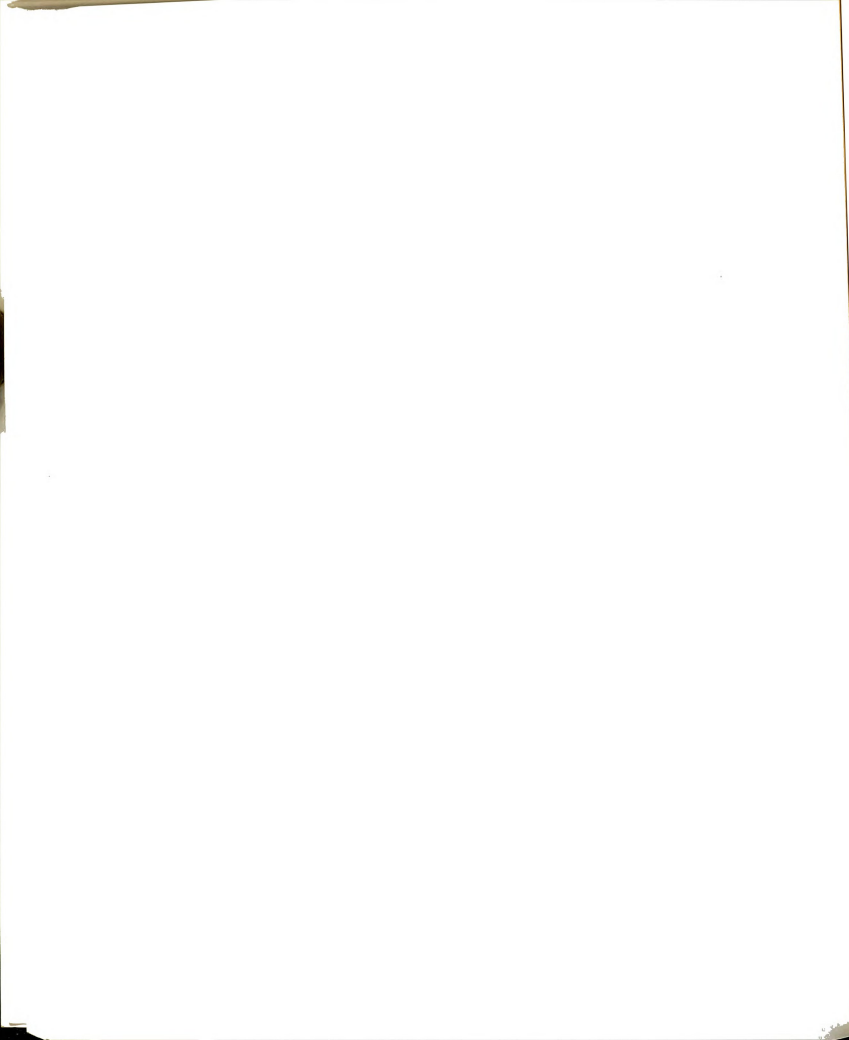
\* denotes significance at 0.05 level



andragogical approaches among the teachers at different school levels.

From Table 4.14, it is shown that there were statistically significant differences at the 0.05 level in the teachers' perceptions regarding the following andragogical learning approaches: **A Self-Directed Learner** ( $F=5.667$ ,  $p < 0.05$ ), **Teacher-Centered Inservice Programs** ( $F=3.057$ ,  $p < 0.05$ ) and **Teacher-Initiated Inservice Programs** ( $F=25.304$ ,  $p < 0.05$ ). In both the andragogical learning approaches, **A Self-Directed Learner** and **Teacher-Initiated Inservice Programs**, significant differences were found to exist between elementary and secondary school teachers where the mean of the approaches was observed to be significantly higher among secondary school teachers than among the elementary school teachers.

In **Teacher-Initiated Inservice Programs**, there was no statistically significant differences between the perception of the elementary school teachers (mean=1.070) and the intermediate school teachers (mean=1.138). Similarly, in the andragogical approach, **A Self-Directed Learner**, there were significant differences between elementary school teachers (mean=1.542) and intermediate school teachers (mean=1.600), though both intermediate and elementary school teachers differed significantly from





secondary school teachers (mean=1.756). However, no statistically significant differences were observed among teachers in different school levels regarding the andragogical learning approaches, **Improving Teachers' Self-Knowledge** ( $F=3.057$ ,  $p > 0.05$ ), **Trust in Program Purpose** ( $F=1.011$ ,  $p > 0.05$ ) and **Small Group Work** ( $F=2.970$ ,  $p > 0.05$ ).

**Research Question 6.4:** What is the relationship of years of teaching experience on the teachers' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

A one-way analysis of variance (ANOVA) was used to determine whether or not there exist significant differences in teachers' perceptions regarding andragogical learning approaches among the teachers with varying teaching experience (1-5 years, 6-10 years, 11-15 years and 15 years and over). Out of 238 teachers who reported their level of experience, 44 have been in the profession for less than five years, 94 have been in the profession between six and 10 years, 80 for 11-15 years and 20 for over 15 years. Table 4.15 presents the means, standard deviations and the observed F-value and corresponding significance level for the six andragogical learning approaches.

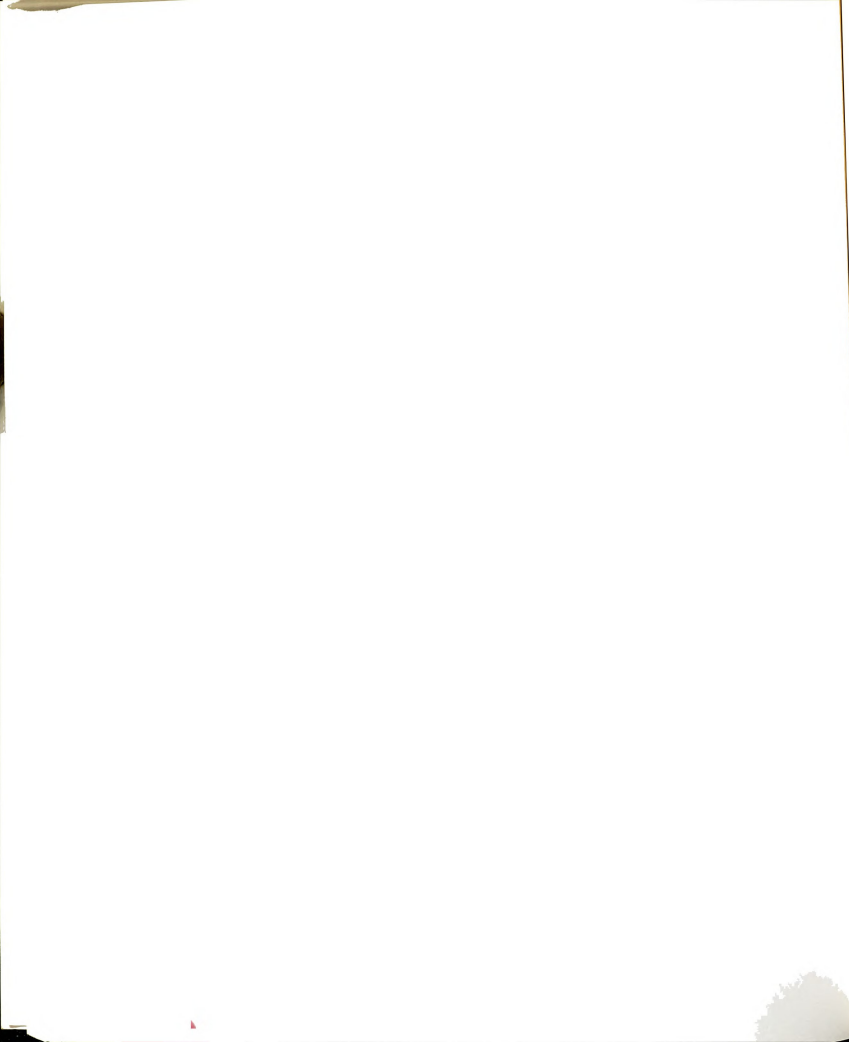


Table 4.15.--ANOVA Results for the Differences in Perceptions of the Preference of Andragogical Approaches Among Teachers with Different Levels of Experience

Andragogical approaches	Years of teaching Experience						F-Value	P-value
	1 - 5 years		6 - 10 years		over 10 years			
	mean	s.d	mean	s.d	mean	s.d		
A self-directed learner	1.482	0.384	1.651	0.366	1.626	0.418	2.957	0.054
Teacher-centered inservice program	1.615	0.302	1.641	0.304	1.555	0.311	0.263	0.769
Improving teacher' self-knowledge	1.619	0.351	1.718	0.390	1.680	0.364	1.062	0.348
Trust in the program purpose	1.614	0.425	1.599	0.387	1.606	0.354	0.022	0.978
Small group work	1.489	0.411	1.617	0.430	1.617	0.464	1.519	0.221
Teacher-initiated in-service program	1.171	0.304	1.213	0.377	1.450	0.296	1.020	0.362

\* denotes significance at 0.05 level



From the results shown in Table 4.15, no statistically significant differences at the 0.05 level were observed in any of the andragogical learning approaches among teachers of varying levels of teaching experience. Thus, the data presented in this study indicated that the level of teaching experience has no influence on the teachers' perceptions regarding the andragogical learning approaches in the inservice teacher education programs in Jordan.

**Research Question 6.5:**    What is the relationship of the teachers' level of education on their perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

A one-way analysis of variance (ANOVA) was used to determine whether or not there exists significant differences in teachers' perceptions regarding andragogical learning approaches among the teachers with different levels of education (high school, professional trained and those with the bachelor's degree or higher). Among the 240 teachers who participated in this study, eight had high school certificates only, 129 were professionally trained teachers, 100 had bachelor's degrees and three had master's degrees. Table 4.16 presents the means, standard deviations, observed F-value and corresponding significance level for each of the six andragogical learning approaches

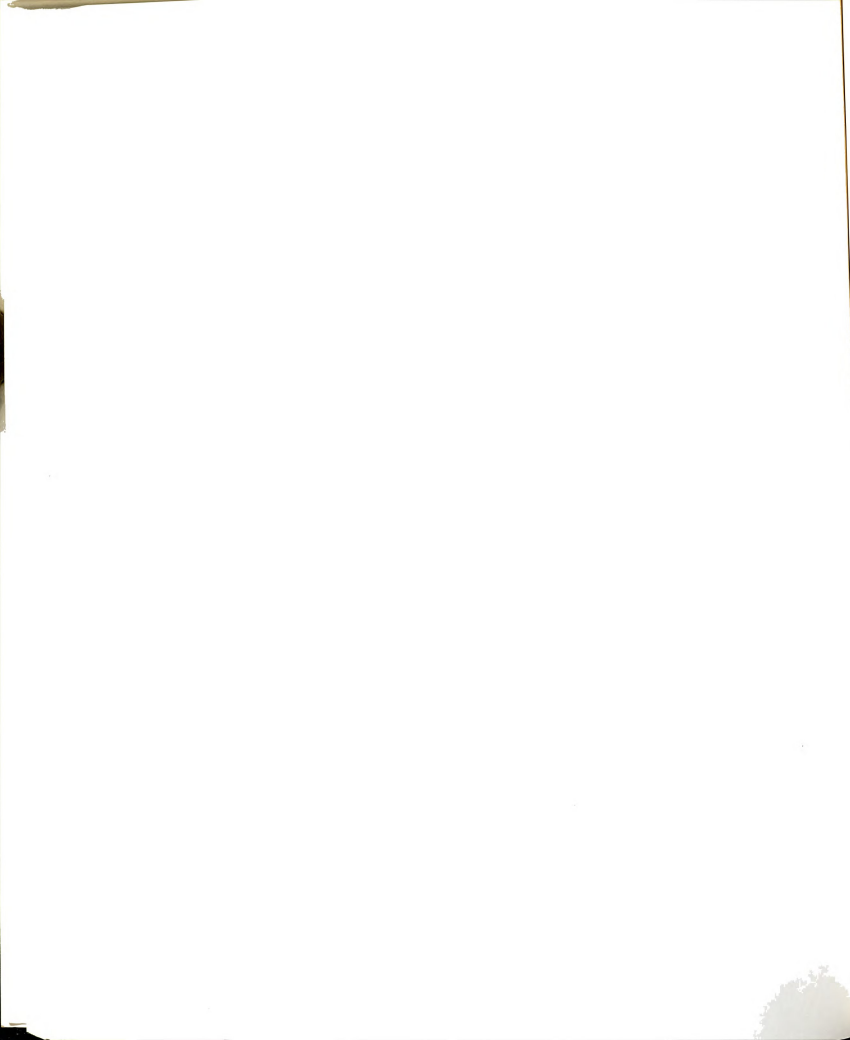
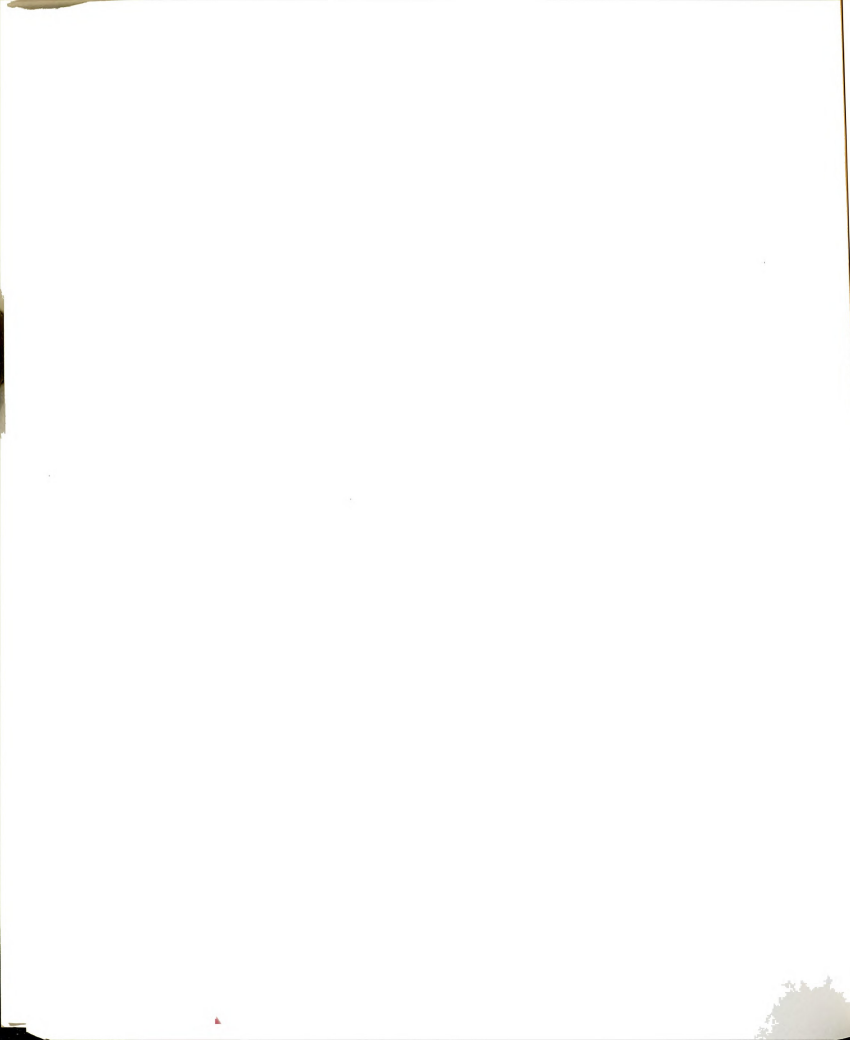


Table 4.16.--ANOVA Results for the Differences in Perceptions of the Preference of Andragogical Approaches Among Teachers with Different Levels of Education

Andragogical approaches	Level of Education						F-Value	P-value
	High school		Trained teachers		Bachelors			
	mean	s.d	mean	s.d	mean	s.d		
A self-directed learner	1.750	0.298	1.546	0.332	1.690	0.461	4.366	0.014 *
Teacher-centered in-service program	1.732	0.208	1.653	0.304	1.627	0.322	0.543	0.582
Improving teacher' self-knowledge	1.688	0.372	1.669	0.373	1.715	0.394	0.416	0.660
Trust in the program purpose	1.708	0.452	1.612	0.375	1.601	0.395	0.287	0.751
Small group work	1.500	0.463	1.545	0.393	1.673	0.497	2.534	0.082
Teacher-initiated in-service program	1.125	0.232	1.105	0.255	1.277	0.401	8.126	0.000 *

\* denotes significance at 0.05 level





as perceived by high school, professionally-trained and graduate teachers.

As shown in Table 4.16, statistically significant differences at the 0.05 level were observed for the andragogical learning approaches, **A Self-Directed Learner** ( $F=4.366$ ,  $p < 0.05$ ) and **Teacher-Initiated Inservice Programs** ( $F=8.126$ ,  $p < 0.05$ ). For the andragogical learning approaches, **A Self-Directed Learner**, the mean among the high school teachers was significantly higher than that of professionally-trained teachers. However, the mean for the teachers holding bachelor's and master's degrees was not statistically significant from that of professionally-trained teachers. For the andragogical learning approach, **Teacher-Initiated Inservice Programs**, the mean perceptions among teachers with the bachelor's or master's degrees was significantly higher than that of teachers with high school certificates or those who had been professionally trained. In each case, the perceptions regarding these andragogical approaches were generally weaker among the more highly-educated teachers than among the teachers with only high school certificates and, to some extent, the professionally-trained teachers. No statistically significant differences were observed at the 0.05 level for the andragogical learning approaches, **Teacher-Centered Inservice Programs** ( $F=0.543$ ,  $p > 0.05$ ),



**Improving Teachers' Self-Knowledge** ( $F=0.416$ ,  $p > 0.05$ ),  
**Trust in Program Purpose** ( $F=0.287$ ,  $p > 0.05$ ) and  
**Small Group Work** ( $F=2.534$ ,  $p > 0.05$ ).

**Research Question 6.6:** What is the relationship of gender on the supervisors' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

Means and standard deviations were computed for male and female supervisors' regarding their perceptions concerning the andragogical approaches. Table 4.17 presents the means

Table 4.17.--Means and Standard Deviations for the Supervisors on the Preference of the Andragogical Approaches by Gender

Andragogical Approach	Male		Female	
	Mean	S.D.	Mean	S.D.
<b>A self-directed learner</b>	1.489	0.293	1.600	0.849
<b>Teacher-centered inservice programs</b>	1.540	0.266	1.714	0.000
<b>Improving teachers' self-knowledge</b>	1.778	0.320	1.750	0.707
<b>Trust in the program purpose</b>	1.500	0.308	1.333	0.471
<b>Small group work</b>	1.472	0.320	1.500	0.000
<b>Teacher-initiated inservice programs</b>	1.000	0.000	1.000	0.000

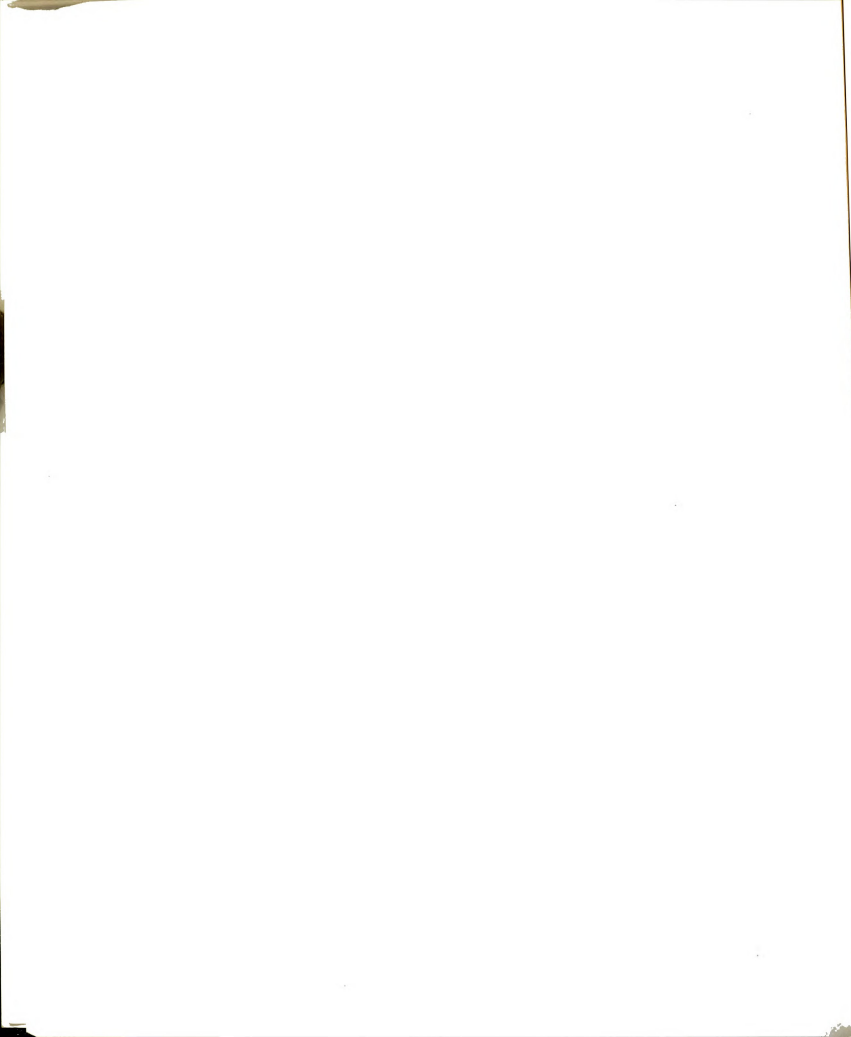


and standard deviations for the six andragogical learning approaches as perceived by male and female supervisors.

From Table 4.17, the mean perception of supervisors regarding the extent to which the six andragogical learning approaches should be practiced ranged from 1.000 to 1.778. The lowest mean rating was observed for the andragogical learning approach, **Teacher-Initiated Inservice Programs** (mean=1.000) by both male and female supervisors. This was followed by **Trust in Program Purpose** (mean=1.333) by female supervisors and **Small Group Work** (mean=1.472) by male supervisors. The highest mean rating was observed for andragogical learning approaches, **Improving Teachers' Self-Knowledge** (mean=1.778, 1.750) by both male and female supervisors. The mean rating for the other andragogical learning approaches for male and female supervisors were, **A Self-Directed Learner**, (mean=1.489, 1.600) and **Teacher-Centered Inservice Programs**, (mean=1.540, 1.714).

**Research Question 6.7:** What is the relationship of age on the supervisors' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

Means and standard deviations were computed for the supervisors' perceptions regarding the six andragogical learning approaches according to the following age groups:



20-29, 30-39 and over 39 years. Table 4.18 presents the mean ratings and standard deviations for each of the six andragogical learning approaches as perceived by supervisors in the three age groups.

Table 4.18.--Means and Standard Deviations for the Supervisors on the Preference of the Andragogical Approaches by Age

Andragogical Approach	Age Groups in Years					
	20-29		30-39		40 and over	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
<b>A self-directed learner</b>	1.000	-	1.640	0.385	1.486	0.311
<b>Teacher-centered inservice programs</b>	1.714	-	1.543	0.186	1.551	0.290
<b>Improving teachers' self-knowledge</b>	1.250	-	1.850	0.224	1.786	0.365
<b>Trust in the program purpose</b>	1.000	-	1.667	0.408	1.452	0.248
<b>Small group work</b>	1.500	-	1.300	0.274	1.536	0.308
<b>Teacher-initiated inservice programs</b>	1.000	-	1.000	0.000	1.000	0.000

Table 4.18 shows that the mean ratings ranged from the lowest 1.000 to the highest 1.850. In general, data presented in Table 4.18 indicates that the mean rating

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among the 30-39 year old supervisors was higher than the mean ratings for the older (40 years and over) supervisors. Due to the low number of responses for the 20-29 year old group, the mean ratings for this age group was not taken into account in the interpretation of the results for Research Question 6.6.

**Research Question 6.8:** What is the relationship of years of supervisory experience on the supervisors' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

Two levels of experience (six to 10 years and 10 years and over) were considered in addressing Research Question 6.8. Means and standard deviations were computed for each of the supervisory experience levels for the supervisors' perceptions regarding the andragogical learning approaches. Table 4.19 shows the means and standard deviations for each of the six andragogical learning approaches as perceived by the supervisors.

From Table 4.19, it is shown that the mean ratings ranged from 1.00 to 1.844 with the lowest mean observed for the andragogical learning approach, **Teacher-Initiated Inservice Programs** (mean=1.00), by supervisors of each experience level. The mean rating for the andragogical learning approach, **Improving Teachers' Self-Knowledge**

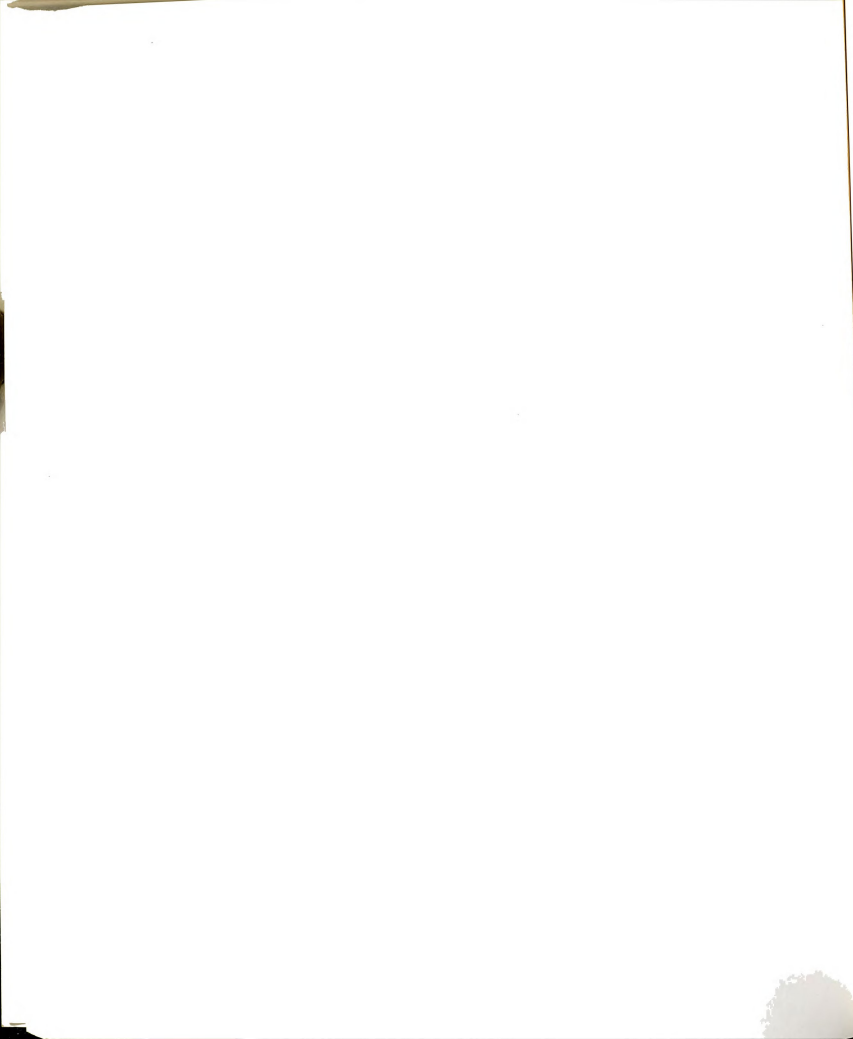
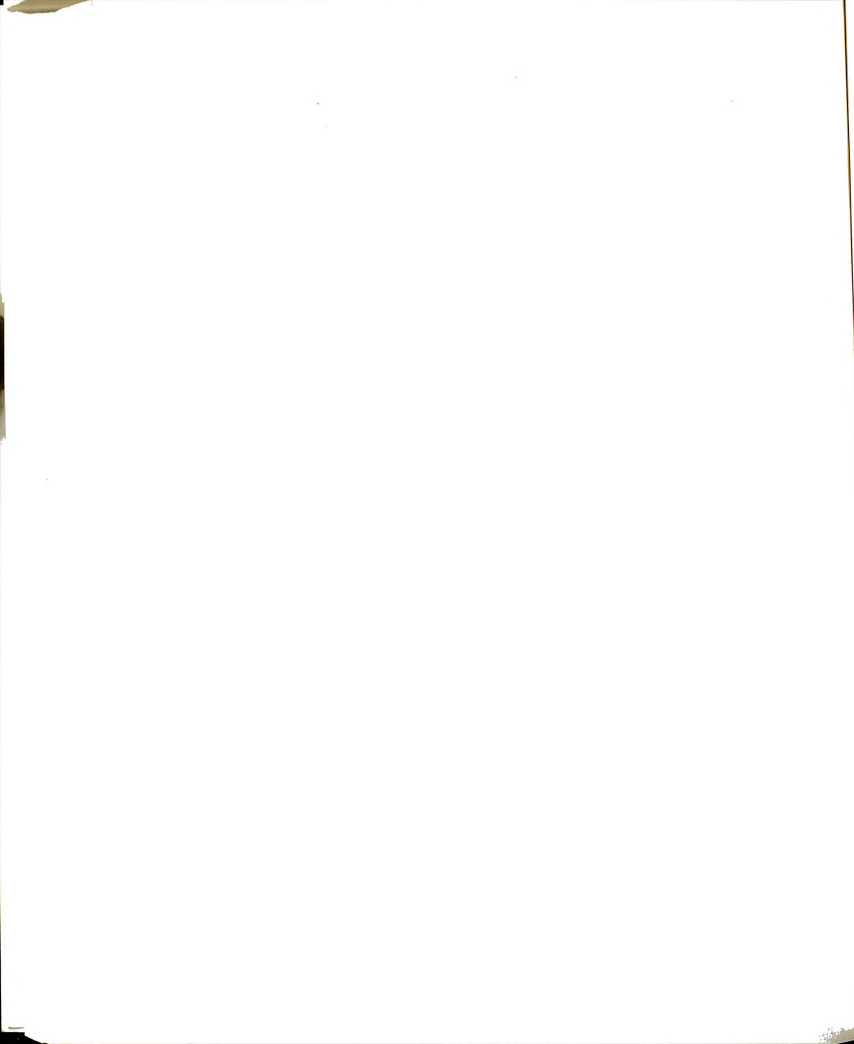


Table 4.19.--Means and Standard Deviations for the Supervisors on the Preference of the Andragogical Approaches by Years of Supervisory Experience

Andragogical Approach	Years of Supervisory Experience			
	6 - 10		11 and over	
	Mean	S.D.	Mean	S.D.
<b>A self-directed learner</b>	1.525	0.400	1.473	0.326
<b>Teacher-centered inservice programs</b>	1.518	0.228	1.571	0.293
<b>Improving teachers' self-knowledge</b>	1.844	0.326	1.705	0.368
<b>Trust in the program purpose</b>	1.459	0.434	1.485	0.229
<b>Small group work</b>	1.438	0.177	1.455	0.350
<b>Teacher-initiated inservice programs</b>	1.000	0.000	1.000	0.000
(mean=1.844, 1.707), was the highest observed for supervisors of each experience level.				

**Research Question 6.9:** What is the relationship of the level of education on the supervisors' perceptions regarding andragogical learning approaches in the inservice education programs in Jordan?

The highest level of education attained by supervisors who were involved in this study was either the bachelor's or the master's degree. For the six andragogical learning

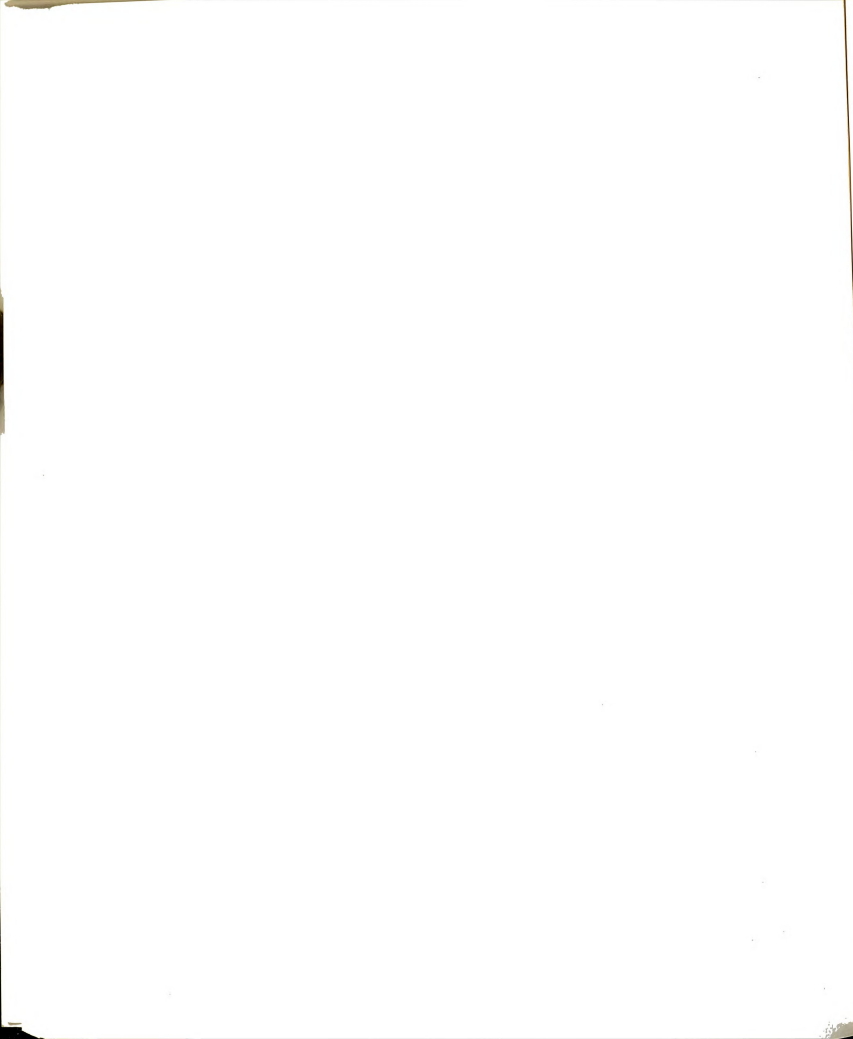


approaches considered in this study, means and standard deviations were computed for the supervisors who had attained both the bachelor's and the master's degree. Table 4.20 presents the means and standard deviations for each of the andragogical learning approaches by the supervisors' highest education level.

From Table 4.20, the mean ratings for the six andragogical learning approaches ranged from 1.00 to 1.778. The andragogical learning approach, **Teacher-**

Table 4.20.--Means and Standard Deviations for the Supervisors on the Preference of the Andragogical Approaches by Level of Education

Andragogical Approach	Level of Education			
	Bachelor's		Master's	
	Mean	S.D.	Mean	S.D.
<b>A self-directed learner</b>	1.455	0.370	1.556	0.313
<b>Teacher-centered inservice programs</b>	1.507	0.281	1.619	0.226
<b>Improving teachers' self-knowledge</b>	1.773	0.395	1.778	0.292
<b>Trust in the program purpose</b>	1.424	0.262	1.556	0.373
<b>Small group work</b>	1.455	0.270	1.500	0.354
<b>Teacher-initiated inservice programs</b>	1.000	0.000	1.000	0.000



Initiated Inservice Programs (mean=1.00), had the lowest mean both for supervisors whose highest education level was the bachelor's as well as the master's degree. The mean rating for the andragogical approach, **Improving Teachers' Self-Knowledge** (mean=1.773, 1.778) was rated highest for both groups of supervisors, indicating a low perception among supervisors regarding this andragogical approach. The mean ratings for the other andragogical learning approaches was as follows:

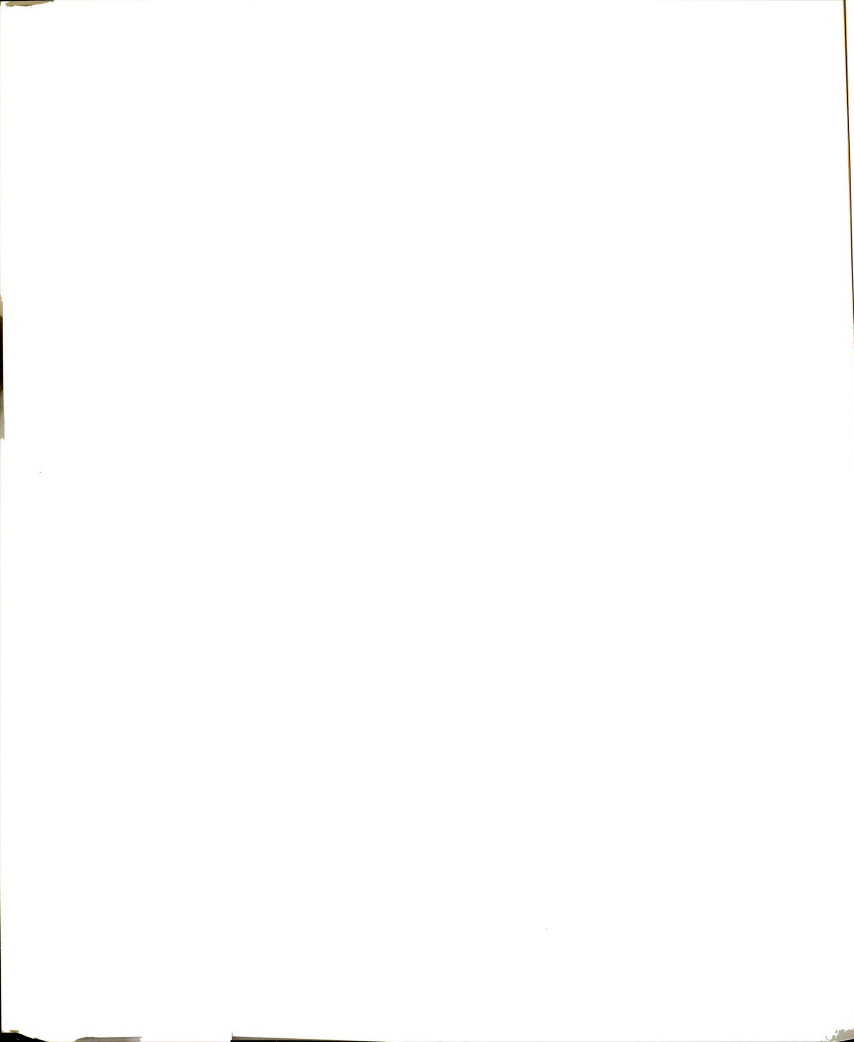
**Small Group Work** (mean=1.455, 1.500)

**Trust in the Program Purpose** (mean=1.424, 1.556) and

**Teacher-Centered Inservice Program** (mean=1.507, 1.619).

### Summary

The results of the data analysis were presented in tabular and narrative form in this chapter. A summary of the study, major findings, conclusions, based on the study findings, and recommendations for further research are included in Chapter V.





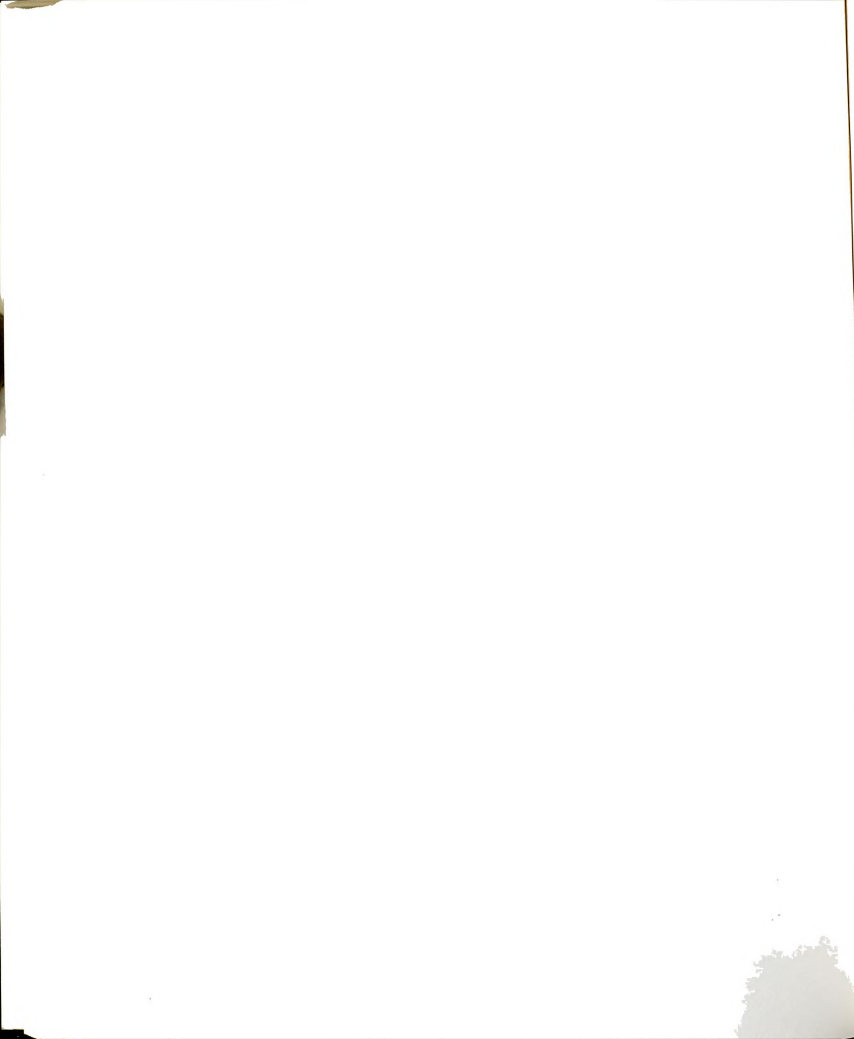
## CHAPTER V

### SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

This study assessed the perceptions of teachers as adult learners and their supervisors regarding inservice teacher education programs in Jordan. To achieve this perspective, the study was designed to explore the extent to which certain andragogical learning approaches are being practiced in Jordan's inservice education programs as perceived by teachers and their supervisors. The study also investigated the perception of teachers and their supervisors regarding the extent to which these selected andragogical learning approaches should be practiced in Jordan's teacher education programs. Specifically, the study was designed to address the following research questions:

1. To what extent are andragogical learning approaches being practiced in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?



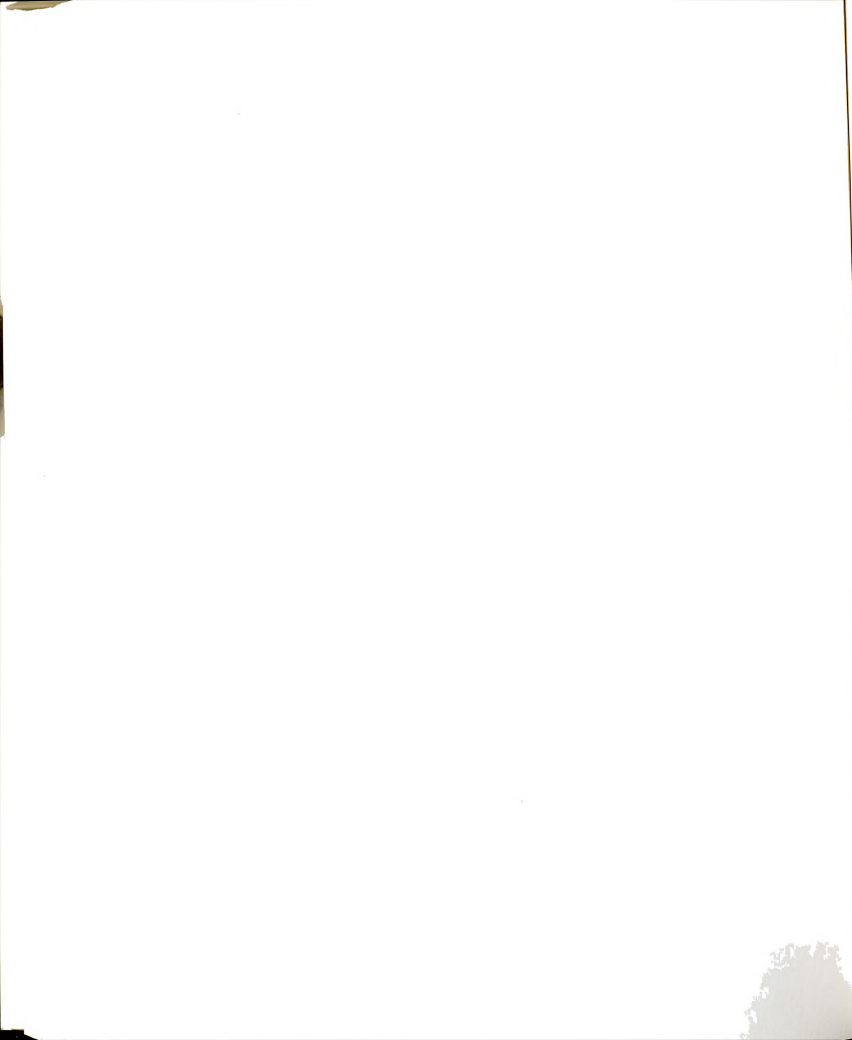
2. To what extent are andragogical learning approaches being practiced in the inservice education programs in Jordan as perceived by supervisors?

3. To what extent are andragogical learning approaches preferred in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?

4. To what extent are andragogical learning approaches preferred in the inservice education programs in Jordan as perceived by supervisors?

5. To what extent do teachers feel they are being treated as professionals and adults in the inservice education programs in Jordan?

6. What is the relationship of gender, age, level of education, school level and years of experience on the perceptions of teachers and supervisors regarding the preference of andragogical learning approaches in the inservice education programs in Jordan?



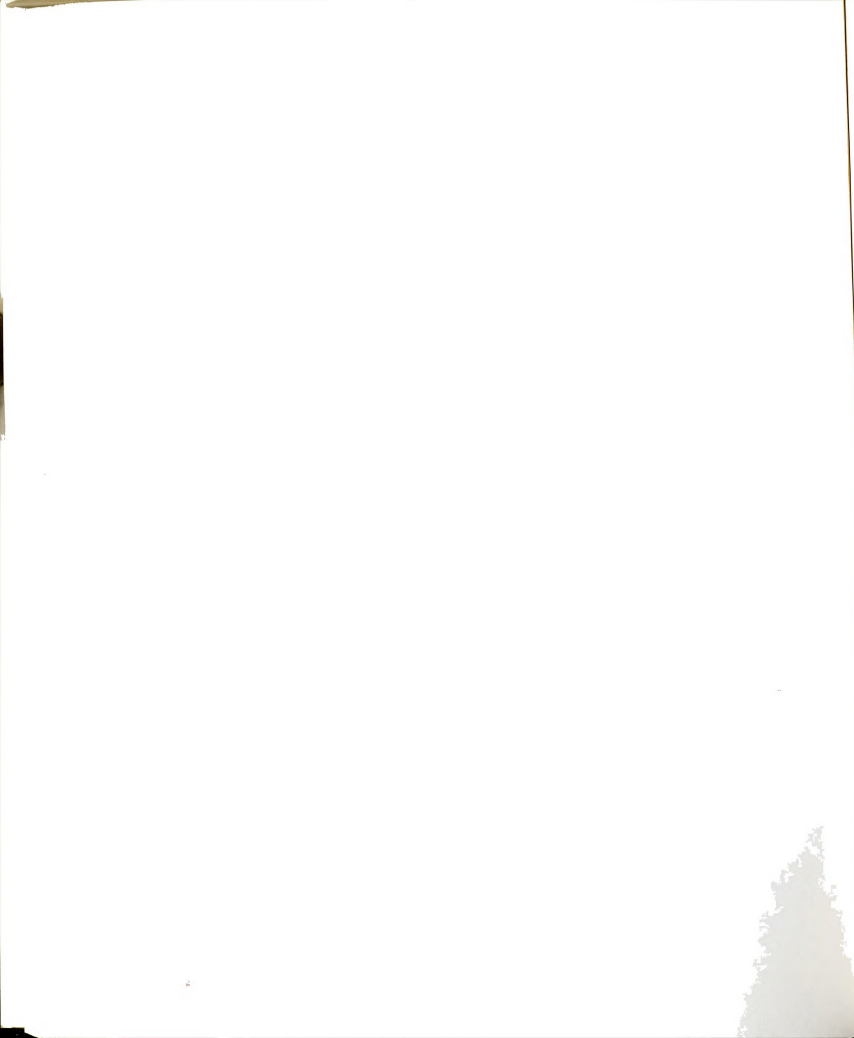
### Study Population and Sample

The target population for this study was comprised of elementary, intermediate and secondary school teachers and supervisors in the Mafrag City District in Northeast Jordan. The Mafrag district school system has a total of 253 public schools in all three levels (elementary, intermediate and secondary) with 1241 teachers and 20 supervisors. Of the 1241 teachers, 698 were elementary, 336 intermediate and 207 secondary school teachers. The sample consisted of 100 elementary, 80 intermediate and 60 secondary school teachers. Due to the small number of supervisors, all 20 school district supervisors were included in the study.

### Methodology

The survey instrument used was a questionnaire designed for both teachers and supervisors. The questionnaire consisted of 23 statement items related to the following six andragogical approaches:

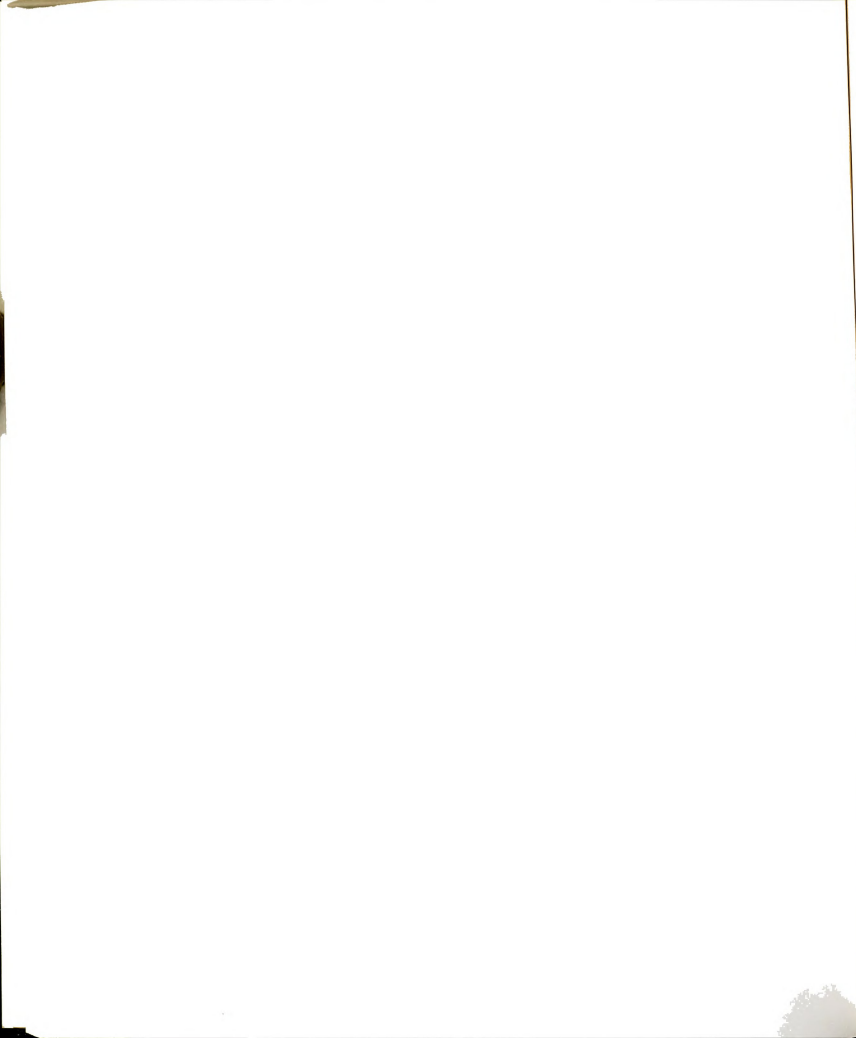
1. Beliefs of a self-directed learner
2. Characteristics associated with teacher-centered inservice education programs
3. Improving teachers' self-knowledge
4. Trust in the program purpose



5. Small group work
6. Teacher's desire to have teacher-initiated inservice education programs.

In addition to the 23 statement items related to the andragogical approaches, the instrument also consisted of two items designed to ascertain the extent to which teachers felt they were treated as professionals and adults in the inservice teacher education programs. Several items designed to gather information about the respondents' demographic information were also included in the questionnaire.

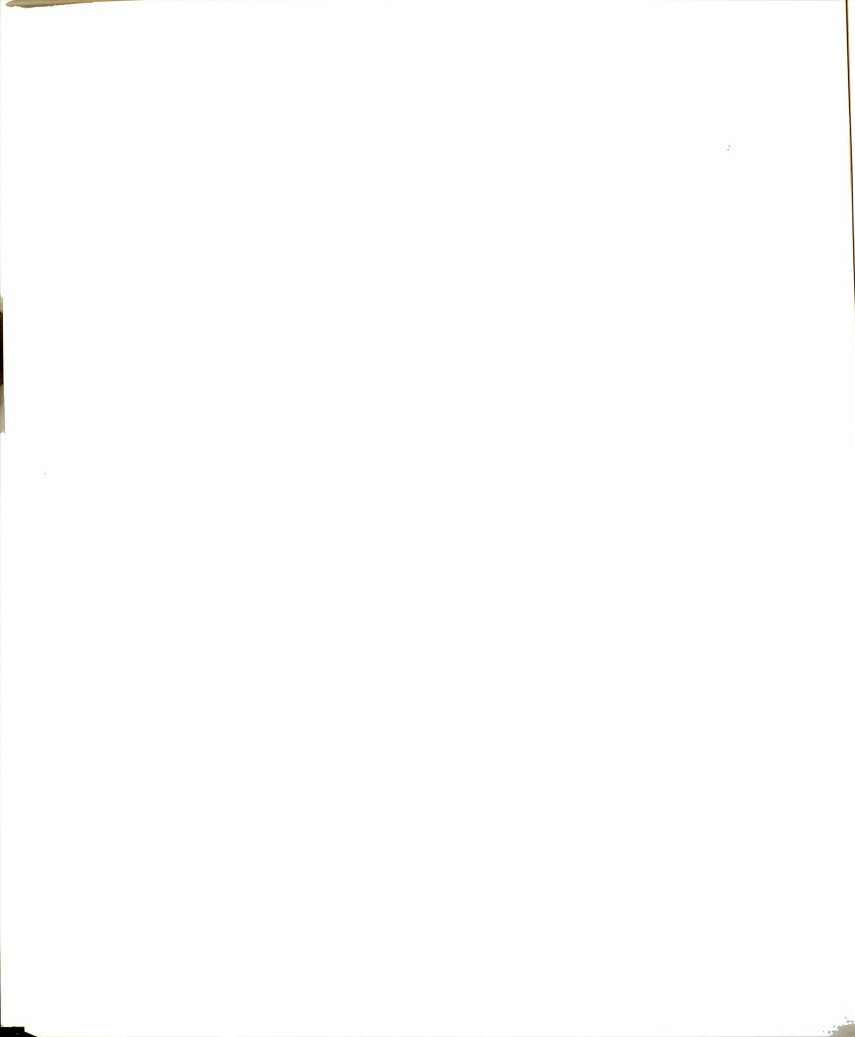
Simple descriptive statistics which included means, standard deviation, frequencies, percentages and ranks were utilized in addressing some of the research questions. A one-way analysis of variance (ANOVA) was used to determine whether or not there exists significant differences in teachers' perceptions regarding the andragogical learning approaches between and among different levels of demographic variables. The statistical package for the social sciences (SPSS-X) available in the MSU IBM mainframe computers was used in the computation and analysis of this research.





Characteristics of Respondents

A total of 260 respondents participated in this study. Of the 260 respondents, 240 (or 92%) were teachers while 20 (or 8%) were supervisors. Of the total 240 teachers who participated in this study, 146 (or 61%) were male while 94 (or 39%) were female teachers. On the other hand, of the 20 supervisors who participated in this study, 18 (or 90%) were males and only 2 (or 10%) were female. While the majority of teachers (64%) were younger than 40 years, most of the supervisors (70%) were 40 years or over. The levels of experience of teachers ranged from one to over 15 years. Of the total 240 teachers, 44 (or 18.5%) had been in the profession for one to five years, 94 (or 39.5%) six to 10 years, 80 (or 33.6%) 11 to 15 years and 20 (or 8.4%) over 15 years. The school levels were fairly represented with 100 (or 41%) elementary, 80 (or 33.7%) intermediate and 60 (or 25.6%) secondary school level teachers. In terms of the highest educational level attained by teachers and supervisors, there were four levels for teachers and two levels for supervisors. Of the total 240 teachers who indicated their highest educational level, eight (or 3.3%) had a high school level education, 129 (or 53.8%) were trained teachers, 100 (or 41.7%) had the bachelor of arts degree and three (or 1.2%) had a master's degree. On the other hand, of the 20 supervisors, 11 (or 55%) had the



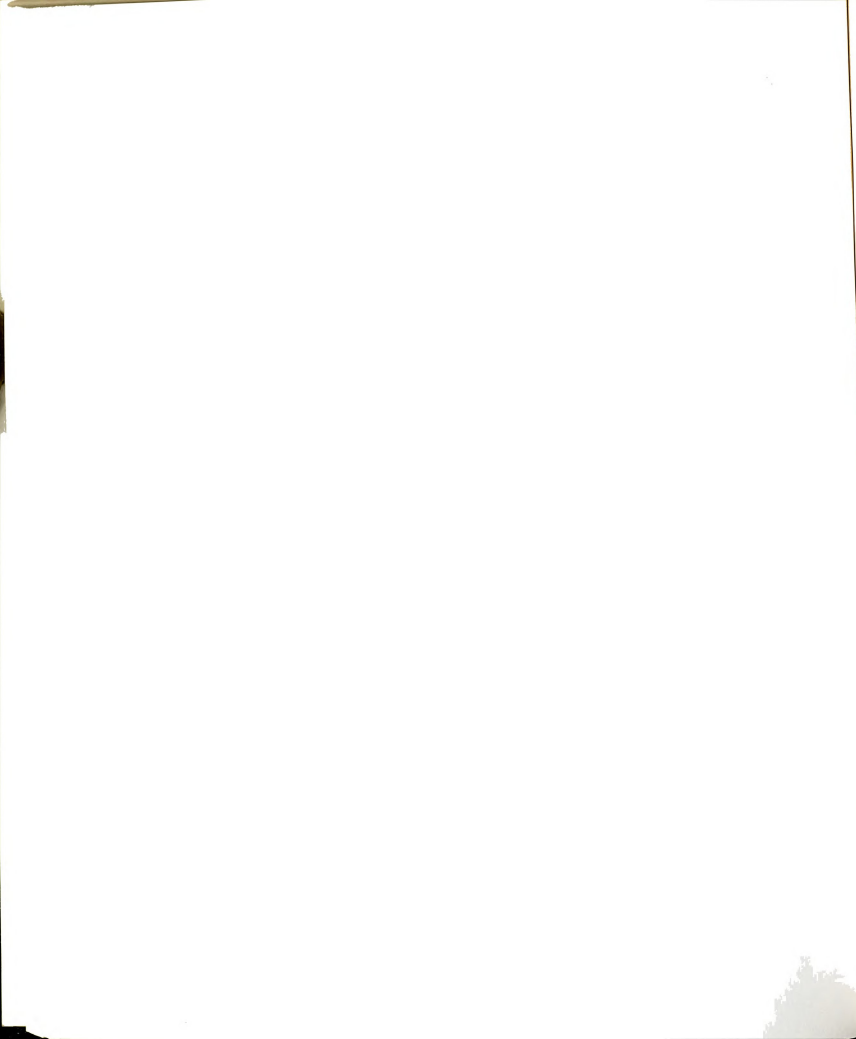
bachelor of arts degree, while nine (or 45%) had a master's degree.

### Summary of Findings

Major findings in relation to the research questions are discussed in this section.

**Research Question 1:** To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?

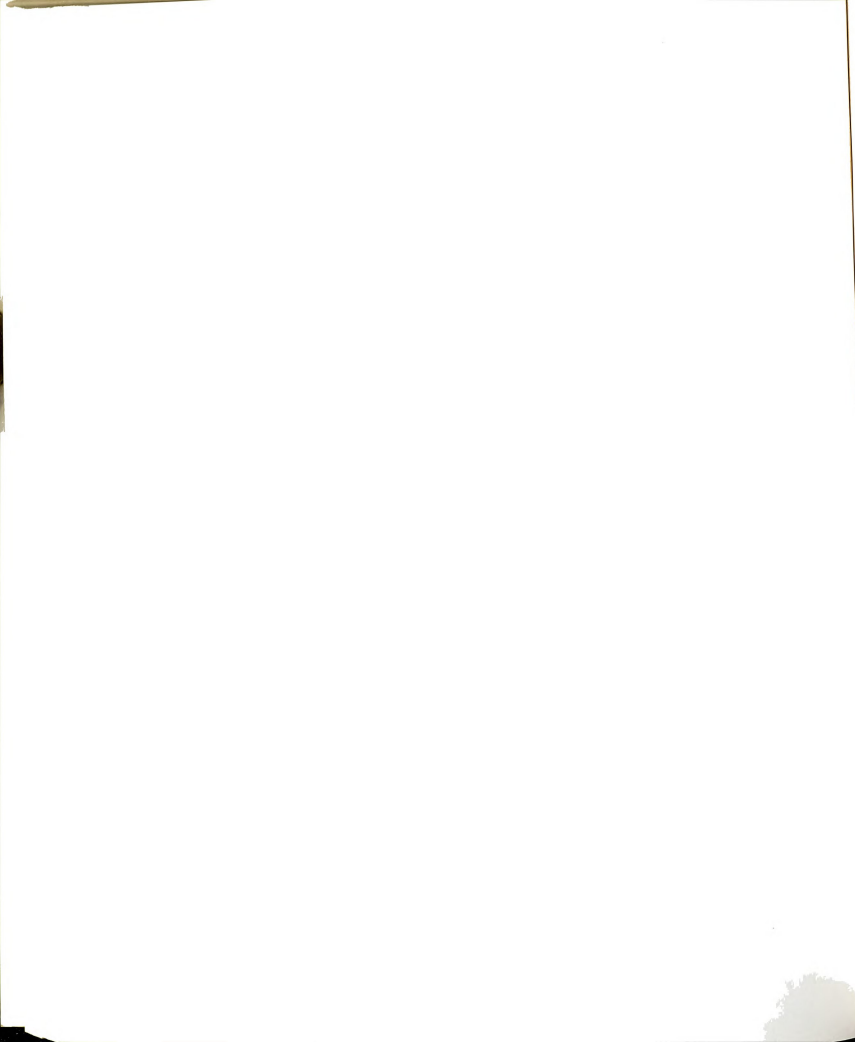
**Major findings.** Overall, all the six andragogical approaches were perceived as being practiced sometimes or rarely/never by teachers. Of all six andragogical learning approaches, two were perceived as rarely or never practiced while four were perceived as being practiced sometimes. The andragogical approaches, **Teacher-Centered Inservice Education Programs** and **Small Group Work**, were perceived as being rarely or never practiced in the inservice teacher education programs. The remaining four andragogical approaches: **A Self-Directed Learner**, **Improving Teachers' Self-Knowledge**, **Trust in the Program Purpose** and **Teacher-Initiated Inservice Programs** were perceived as being practiced sometimes. Based on the aggregate means, none of the andragogical learning



approaches were perceived as being practiced frequently or always.

There were slight variations in the teachers' perceptions regarding the extent to which andragogical approaches were being practiced among elementary, intermediate and secondary school teachers. Elementary school teachers perceived all the andragogical approaches as being practiced sometimes except **Teacher-Centered Inservice Programs** which they perceived as rarely or never practiced. Intermediate school teachers perceived all andragogical approaches as rarely or never practiced except **Teacher-Initiated Inservice Programs** which they perceived as being practiced sometimes. On the other hand, secondary school teachers perceived all the andragogical approaches as rarely or never practiced except **Improving Teachers' Self-Knowledge** and **Teacher-Initiated Inservice Programs** which they perceived as being practiced sometimes. However, teachers at all three levels agreed that the andragogical approach, **Teacher-Centered Inservice Program**, was being rarely or never practiced and the andragogical approach, **Teacher-Initiated Inservice Programs**, as being practiced sometimes.

Summary. Though there was slight variation among elementary, intermediate and secondary school teachers in perceptions regarding the extent to which andragogical

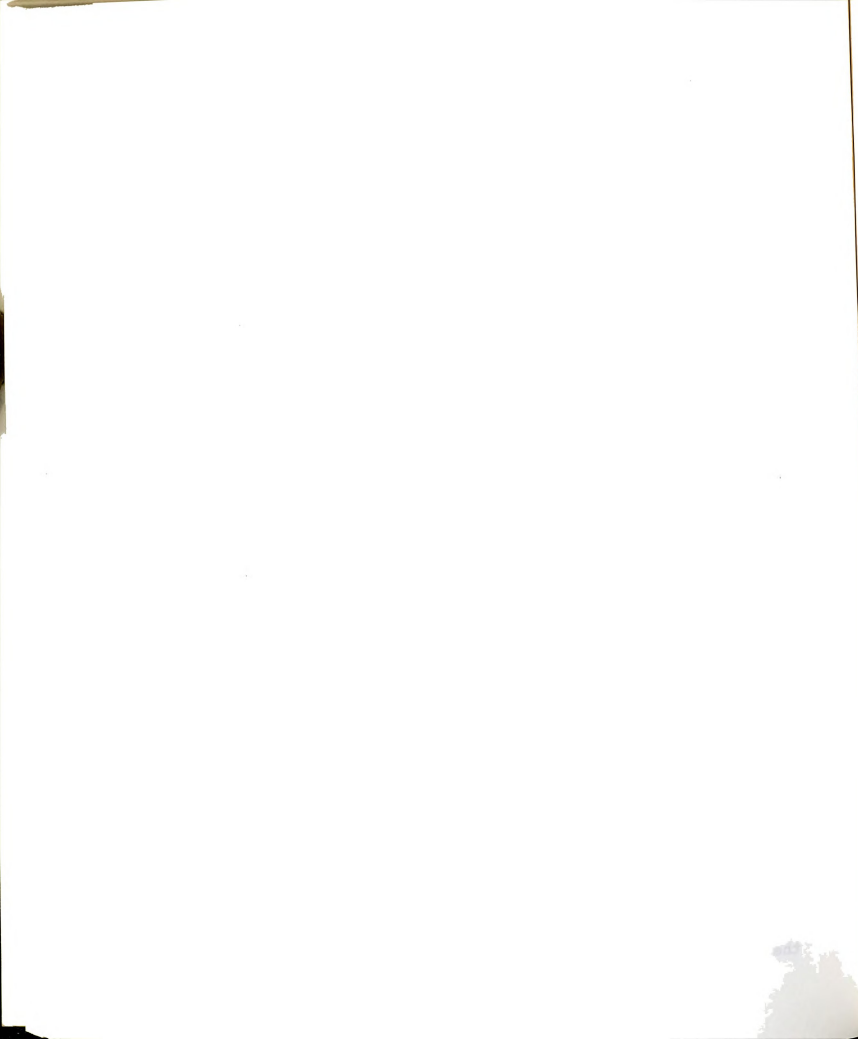


approaches are being practiced, the data showed that the teachers' general perception was that the andragogical approaches were not being practiced sufficiently in the inservice teacher education programs in Jordan.

**Research Question 2:** To what extent are andragogical approaches being practiced in the inservice education programs in Jordan as perceived by supervisors?

**Major findings.** Unlike the teachers, their supervisors perceived all of the andragogical learning approaches as being practiced sometimes. None of the andragogical approaches was perceived as rarely or never practiced at inservice teacher education programs. Like the teachers, however, the supervisors did not perceive any of the six andragogical approaches to be practiced frequently or always. It is important to note that the andragogical approach, **Teacher-Initiated Inservice Programs**, had the second lowest mean among supervisors and the lowest mean among teachers. On the other hand, the andragogical approach, **Teacher-Centered Inservice Program**, had the highest mean among supervisors and the second highest mean among teachers.

**Summary.** Although supervisors did not perceive any of the andragogical approaches as rarely or never practiced in the inservice teacher education programs, there was





clear agreement with teachers that none of the andragogical approaches were being practiced frequently or always at inservice teacher education programs in Jordan.

**Research Question 3:** To what extent are andragogical approaches preferred in the inservice education programs in Jordan as perceived by elementary, intermediate and secondary school teachers?

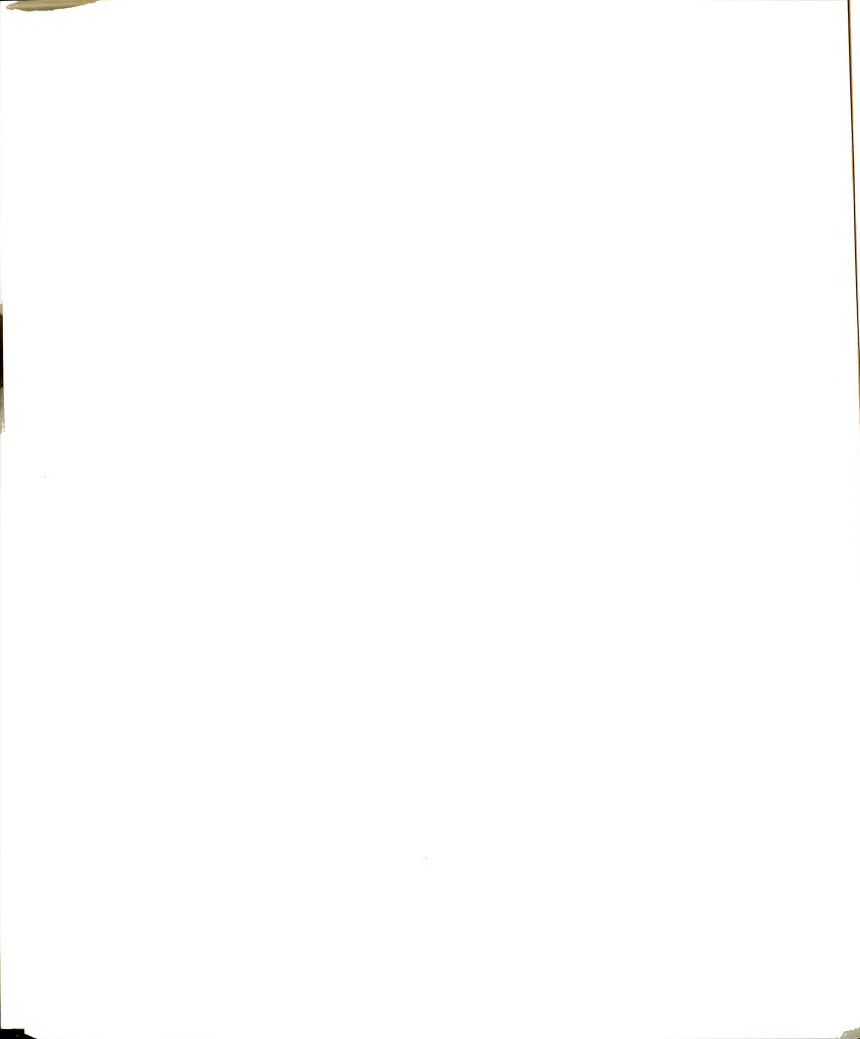
**Major findings.** According to the perception of the teachers as demonstrated by the aggregate means and standard deviations, all the six andragogical learning approaches should be practiced in the inservice teacher education programs in Jordan. On average, teachers strongly agree that all the six andragogical learning approaches should be practiced at the inservice teacher education programs in Jordan. Such perceptions were strongest in the andragogical approach, **Teacher-Initiated Inservice Programs**, which had the lowest mean among elementary (mean=1.070), intermediate (mean=1.138) and secondary (mean=1.417) school teachers. **Teacher-Centered Inservice Programs** (mean=1.679) had the highest mean among elementary school teachers while **Improving Teachers' Self-Knowledge** (mean=1.680) and **A Self-Directed Learner** (mean=1.756) had the highest mean among intermediate and secondary school teachers respectively.



Summary. Despite a slight variation among elementary, intermediate and secondary school teachers in perceptions regarding the preference of andragogical learning approaches, it was quite evident from the aggregate means that all of the six andragogical learning approaches are highly preferred by teachers in the inservice education programs in Jordan. Teachers at all school levels generally strongly agree that all the andragogical approaches should be practiced in the inservice education programs in Jordan.

Research Question 4: To what extent are andragogical approaches preferred in the inservice education programs in Jordan as perceived by supervisors?

Major findings. Like teachers, supervisors perceived all the six andragogical learning approaches to be preferred at inservice teacher education programs. All 20 supervisors strongly agreed that the andragogical learning approach, **Teacher-Initiated Inservice Programs**, remained the most preferred approach among supervisors and teachers at all school levels. It was also interesting to note that the andragogical learning approach, **Improving Teachers' Self-Knowledge**, had the highest mean rating among both supervisors (mean=1.775) and intermediate school teachers (mean=1.680). Overall, the aggregate mean ratings regarding the preference of all six

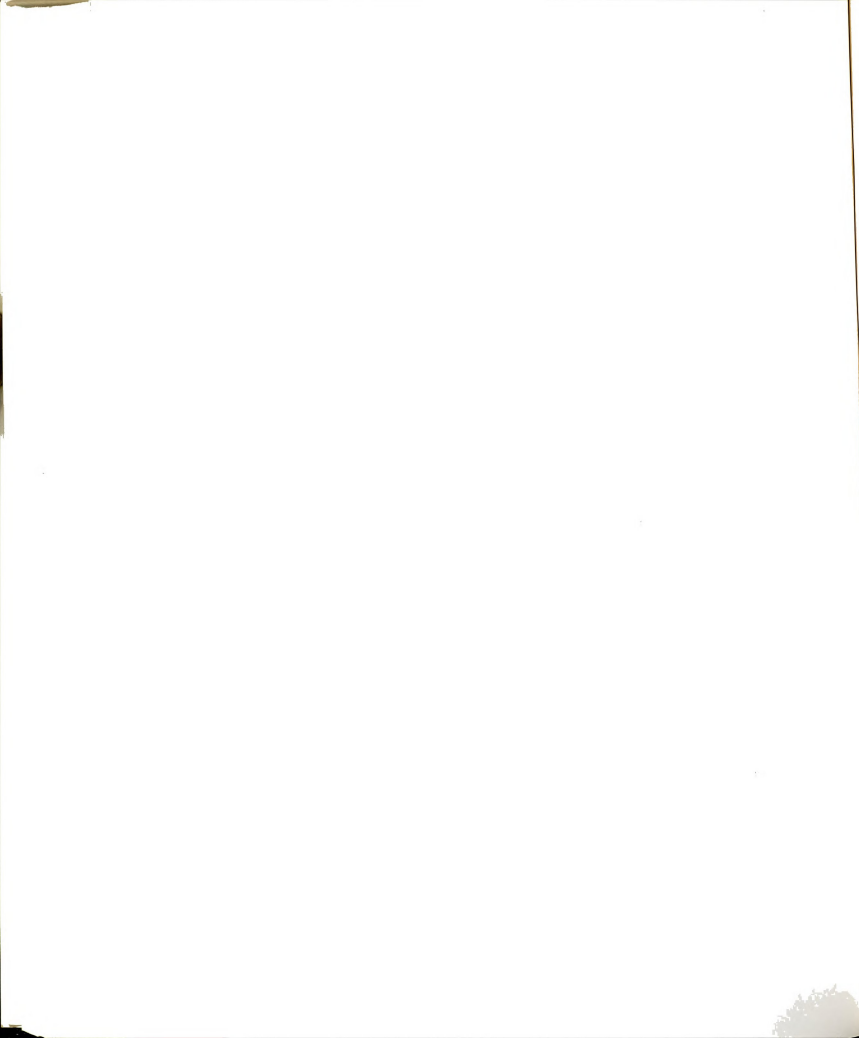


andragogical learning approaches as perceived by supervisors was 1.465 with a standard deviation of 0.260 implying a strong agreement among supervisors that all the six andragogical approaches should be practiced in the inservice teacher education programs in Jordan.

Summary. Like teachers, supervisors strongly agree that all the six andragogical approaches are important and should be practiced at the inservice teacher education programs in Jordan. The issue seemed to be most crucial for the andragogical approach, **Teacher-Initiated Inservice Education Programs**, which all supervisors and most teachers perceive to be highly preferred in the inservice teacher education programs.

Research Question 5: To what extent do teachers feel they are treated as professionals and adults in the inservice programs in Jordan?

Major findings. Based on the counts and percentages of the teacher responses, the data demonstrated that, while none of the teachers disagree or strongly disagree that teachers should be treated as adults and professionals in the inservice education programs, none of the teachers strongly agreed that they are being treated as adults and professionals in the inservice teacher education programs. Based on the five-point Likert-type scale used in this

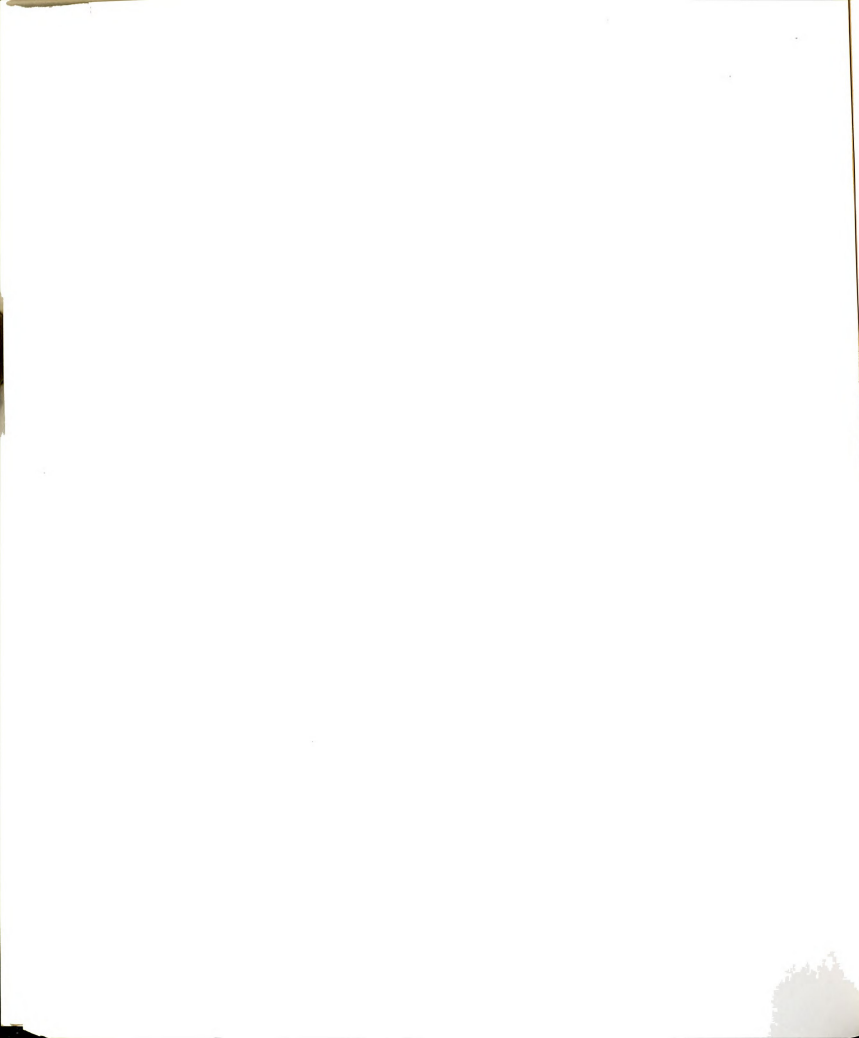


study, a high mean (near 5.00) will indicate a complete non-treatment of teachers as adults or professionals and a low mean (near 1.00) would indicate a complete treatment of teachers as adults or professionals. The mean rating for the expected treatment was 1.803 while the actual treatment was 4.017 for the treatment as professionals. On the other hand, the mean rating for the expected treatment as adults was 1.770, while the corresponding mean rating for the actual treatment was 3.875. This apparent dissatisfaction in the way teachers are being treated in the inservice teacher education programs was consistent among teachers at all school levels (elementary, intermediate and secondary).

Summary. The study demonstrated that teachers perceive that they are not treated according to their expectations in the inservice teacher education programs. The actual treatment of teachers as both adults and professionals was found to be below teachers' expectations regardless of their school level.

Research Question 6:

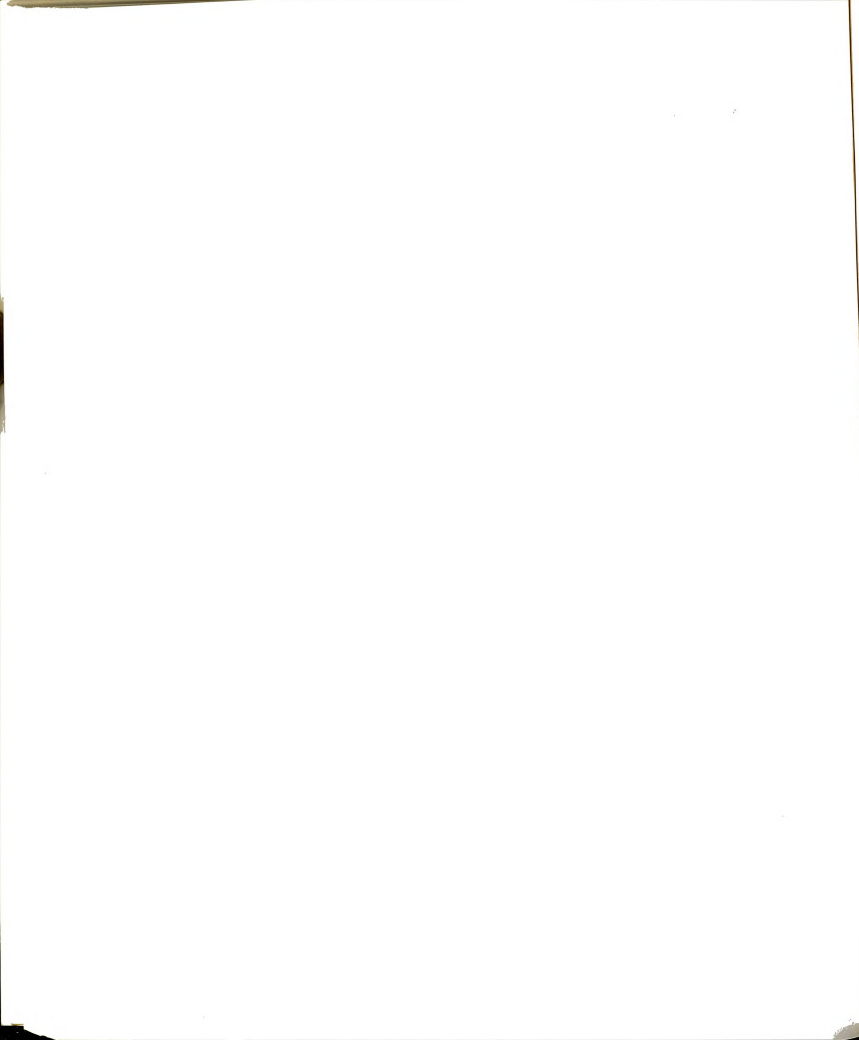
What is the relationship of selected personal and demographic variables such as gender, age, school level, level of education and years of experience and the perceptions of all teachers and supervisors regarding andragogical learning approaches in the inservice education programs in Jordan?





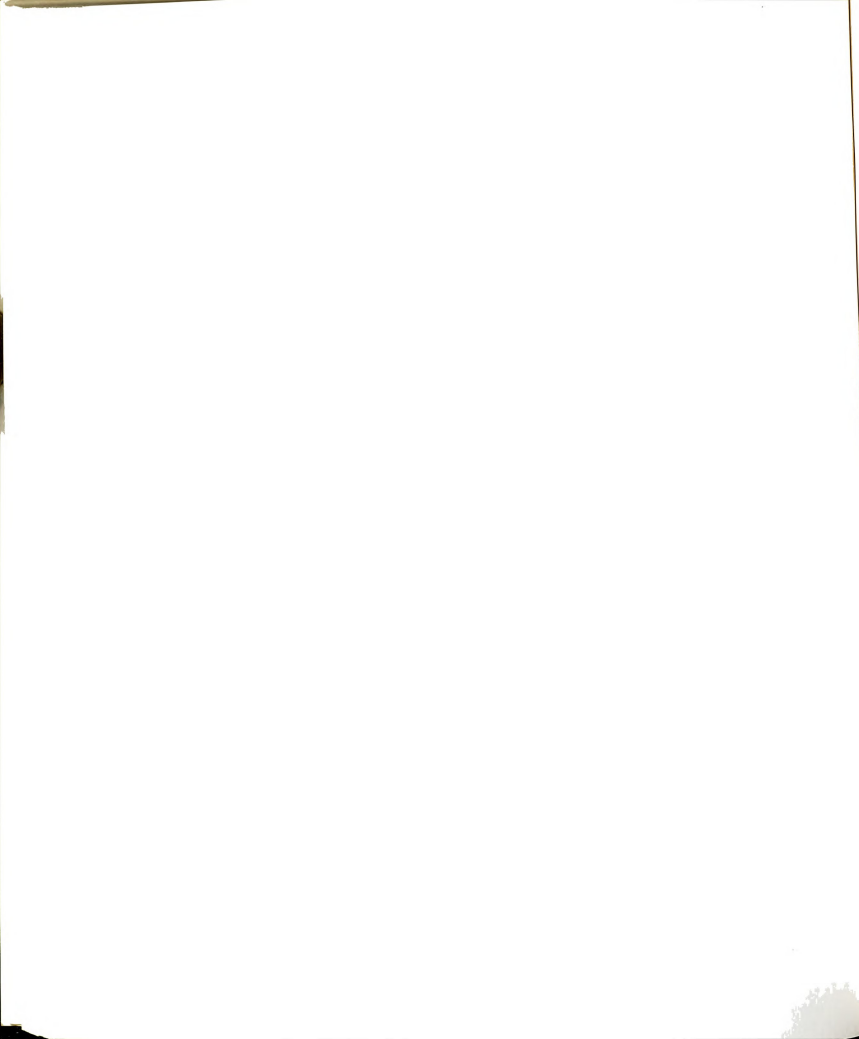
Major findings. Statistically significant differences in teachers' perceptions regarding the extent to which andragogical approaches were preferred in the inservice teacher education programs were observed between male and female teachers. The mean rating among male teachers was significantly higher than female teachers at 0.05 level for the andragogical approaches, **A Self-Directed Learner, Improving Teacher Self-Knowledge, Small Group Work and Teacher-Initiated Inservice Program.** For these four andragogical approaches, the data indicated that female teachers prefer these approaches more than male teachers. Though statistical tests were not performed on the gender differences among supervisors regarding the preference of these andragogical approaches, means and standard deviations seem to indicate that no differences in perception exist between male and female supervisors.

Statistically significant differences in teachers' perceptions regarding the extent to which andragogical approaches were preferred in the inservice teacher education programs were also observed between young (20-29 years old) and older (30-39 or 40 years and over) teachers. The mean ratings for the younger teachers was significantly lower than the mean rating for the older teachers for the andragogical approaches, **A Self-Directed Learner and Small Group Work.** Therefore, the data



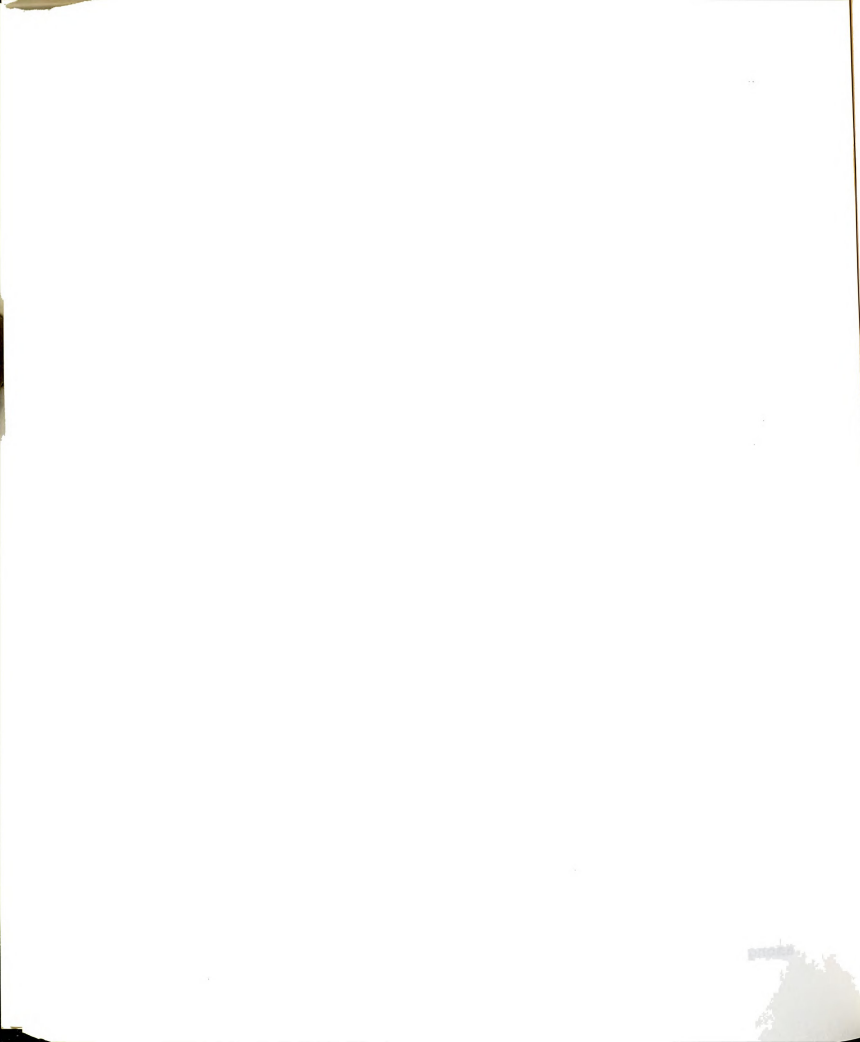
suggests that younger teachers prefer these andragogical approaches more than older teachers. However, there were no statistically significant differences in teacher' perceptions of the preference of these andragogical approaches between the age groups 30-39 and 40 years and over. Due to an insufficient sample in the 20-29 age category among supervisors, no comparisons in perception were done to compare the age groups. However, the mean ratings among 30-39 years and 40 years and over supervisors did not seem to indicate any differences in their perceptions.

With regard to the effect of school level on the teachers perceptions on the preference of andragogical approaches, there were statistically significant differences in the perceptions of elementary and intermediate or secondary school teachers in the andragogical approach, **A Self-Directed Learner**. No statistically significant differences were observed regarding the perceptions of this approach between intermediate and secondary school teachers. Similarly, statistically significant differences were observed between intermediate and secondary or elementary school teachers regarding the andragogical approaches, **Teacher-Centered Inservice Program** and **Teacher-Initiated Inservice Program**. In **Teacher-Initiated Inservice Programs**, the mean rating of elementary and intermediate school



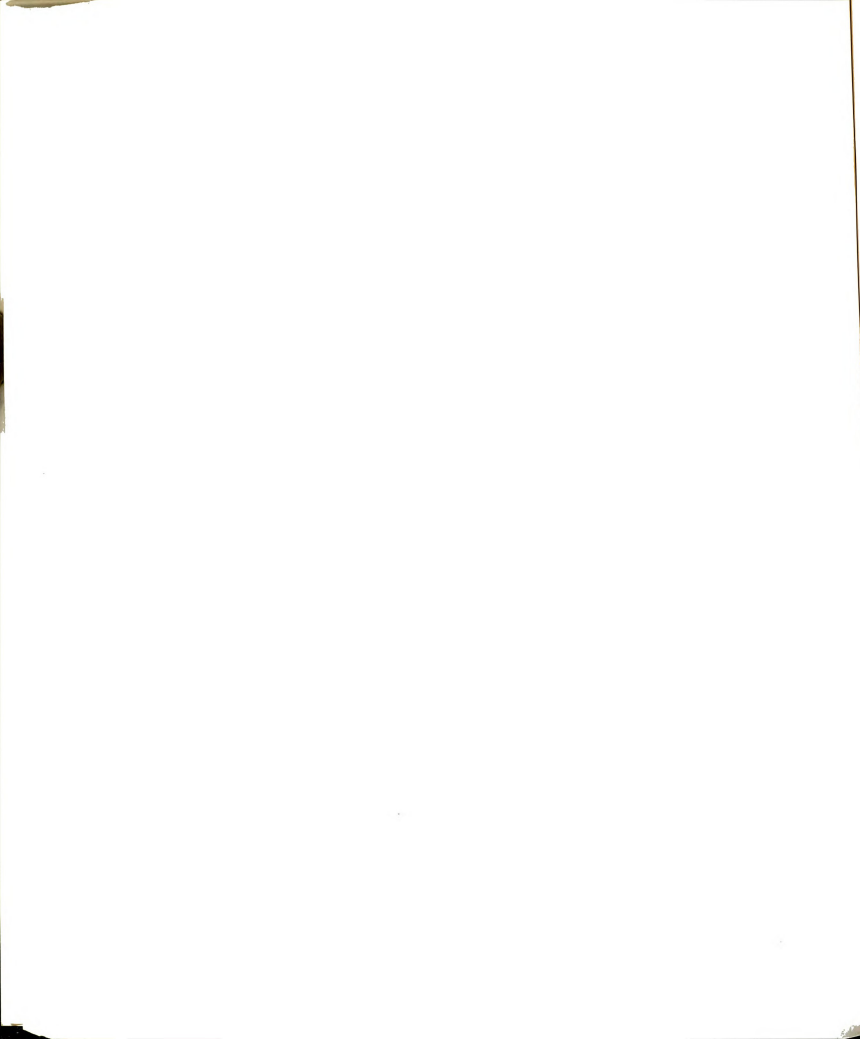
teachers was significantly lower than the mean rating of secondary school teachers. No statistically significant differences in teachers' perceptions regarding the preference of andragogical approaches were observed for teachers with different levels of experience. However, the mean rating for the perceptions regarding the preference of the andragogical approach, **Improving Teachers' Self-Knowledge**, among supervisors seemed higher than the mean rating among teachers of all levels of experience. This finding suggests that supervisors do not prefer the approach, **Improving Teachers' Self-Knowledge**, as strongly as teachers do.

The level of education seems to play a role in the perceptions of teachers regarding the preference of the andragogical approaches, **A Self-Directed Learner** and **Teacher-Initiated Inservice Programs**. Indeed, statistically significant differences in teachers' perceptions regarding the preference of these andragogical approaches were observed between high school, trained and teachers with the bachelor of arts degree. For the approach, **A Self-Directed Learner**, the mean ratings among high school and teachers with the bachelor's degree were significantly higher than the mean rating among trained teachers. For the andragogical approach, **Teacher-Initiated Inservice Programs**, the mean ratings among high school and trained teachers were significantly



lower than the mean ratings among teachers with the bachelor of arts degree. Though no statistical tests were performed to investigate whether or not there exist significant differences in the supervisors perceptions regarding the preference of andragogical approaches, the mean ratings of supervisors' perceptions seemed to suggest that supervisors with the bachelor of arts degree prefer all the andragogical approaches more than supervisors with the master's degree except on the andragogical approach, **Teacher-Initiated Inservice Programs**, which all supervisors perceive to be highly preferred.

Summary. Though the overall mean ratings for the teachers' and supervisors' perceptions regarding the preference of the six andragogical approaches were generally lower, suggesting a strong preference for these approaches, the study also showed variations in perceptions according to the respondents' demographic characteristics. Younger and female teachers, together with elementary school teachers, perceived the andragogical approaches of **A Self-Directed Learner, Improving Teachers' Self-Knowledge, Small Group Work and Teacher-Initiated Inservice Programs** to be more preferred than male, older, intermediate and secondary school teachers. On the other hand, supervisors perceived the andragogical approach, **Teacher-Initiated Inservice Programs**, more than any other andragogical approach. Contrary to expectations,





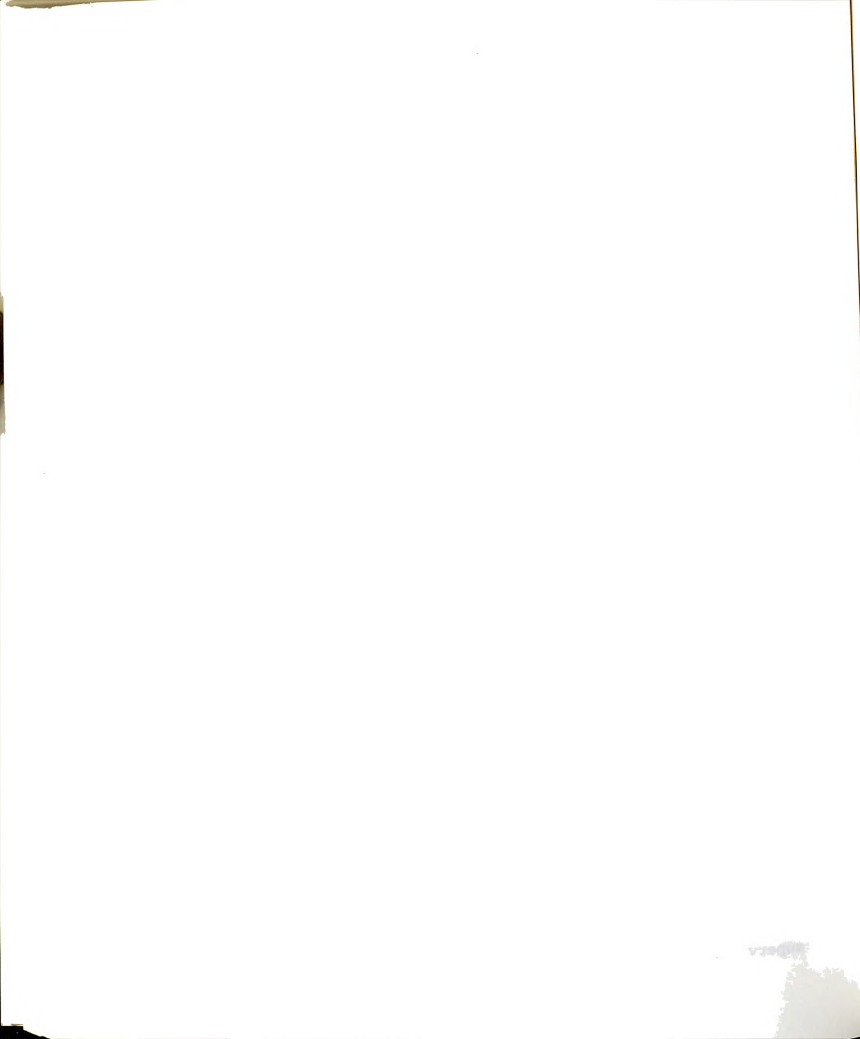
less educated teachers did not perceive the andragogical approach, **Improving Teachers' Self-Knowledge**, to be more preferred than the more educated teachers.

### Overall Summary

Though the purpose of this study was not to examine whether or not there exists significant differences between the perceptions of the preference and actual practice of andragogical approaches in the inservice teacher education programs in Jordan, the significance of these differences was obvious. The T-test results for the differences between the Actual Practice (presence or absence) and the Expected Practice (preference) of the six andragogical approaches are shown in Appendix D. From these results, it is quite evident that, while the perceived preference of the andragogical approaches average near 1.00 indicating strong agreement that they should be practiced, the perceived presence of these approaches averaged near 4.00--indicating that the approaches are rarely or never actually practiced. Similar results were observed for the perceptions of supervisors.

### Conclusions

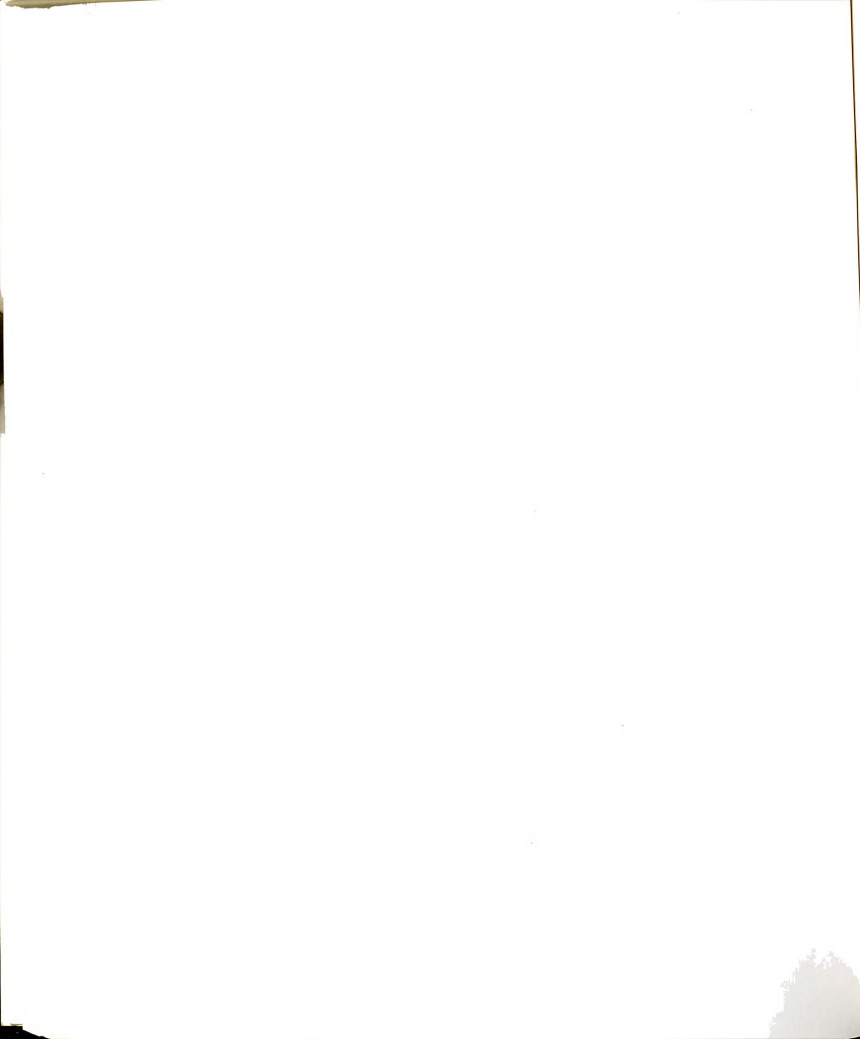
1. Despite the fact that both teachers and their supervisors recognize the importance of practicing the



andragogical approaches in the inservice teacher education programs in Jordan, the andragogical learning approaches are not being practiced frequently enough. Therefore, there is a clear deficiency between the need and the practice of all the andragogical learning approaches utilized in teacher inservice programs in Jordan.

2. Planning for inservice teacher education programs should take into consideration the real needs of teachers as defined by thorough assessments and analysis. Ample consideration should be given to the active involvement of teachers as adult learners in defining the existing problems and identifying current needs they have. Teachers should also be given an opportunity to participate and be involved in the organization and execution of inservice teacher education programs.

3. Inservice education programs might be better able to be responsive to teachers through a more **Teacher-Initiated Inservice** approach. The data showed that the teachers and supervisors were in strong agreement with the **Teacher-Initiated Inservice Program** approach than with any of the other approaches. Therefore, inservice education planners might help teachers overcome organizational and personal barriers which constrain their self-initiated efforts.



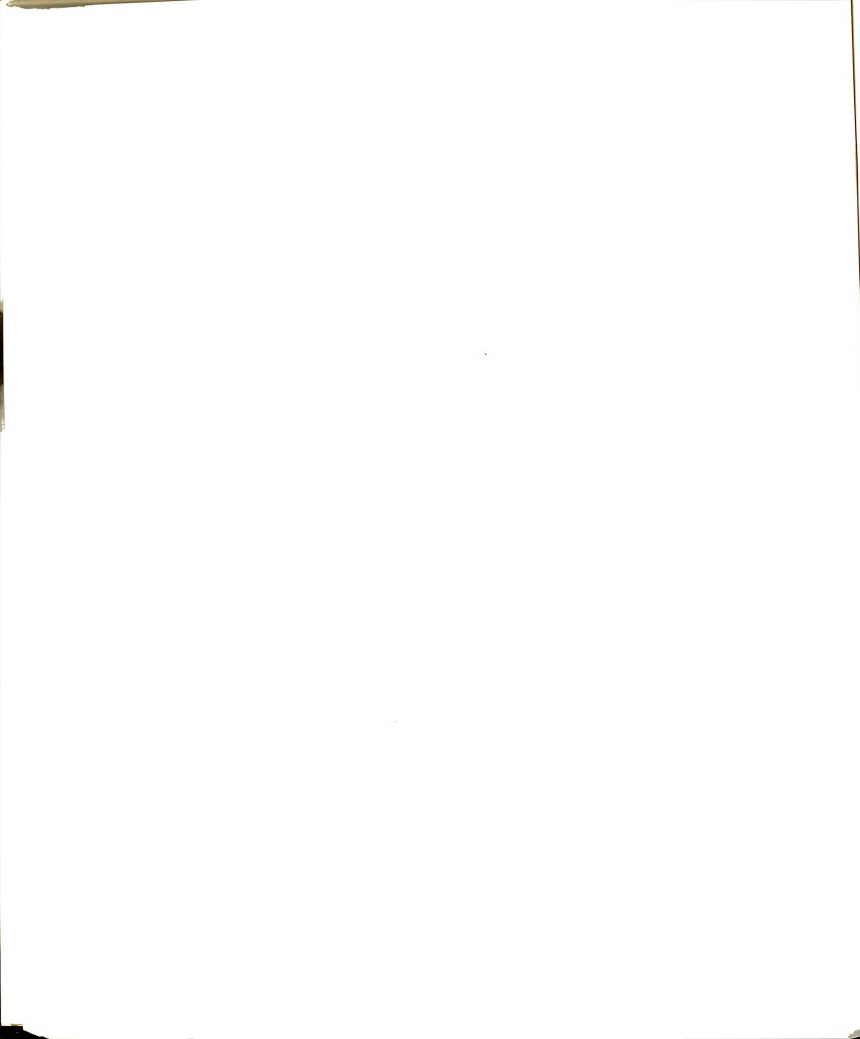
4. It was clear from the data collected in this study that teachers wished to be treated as professionals and adults. Therefore, teachers' attitudes toward inservice education programs might be improved if teachers were treated as professionals and adults.

5. Inservice education planners should provide as many options as possible from which teachers may choose, in order to select their own learning experiences.

6. Based on the findings of this study, it seemed as if the independent variables (gender, age, school level taught, years of learning experience, years of supervisory experience, level of education) would probably offer little help in identifying the andragogically-oriented teacher. Consequently, it is recommended that inservice planners not rely on these demographic variables as predictors of teacher andragogical orientations measured by the instruments utilized.

### Recommendations

1. The Ministry of Education should undergo immediate efforts to close the gap between what teachers and supervisors wish to accomplish through inservice education programs in their schools and what is really being accomplished. Although the Ministry of Education has

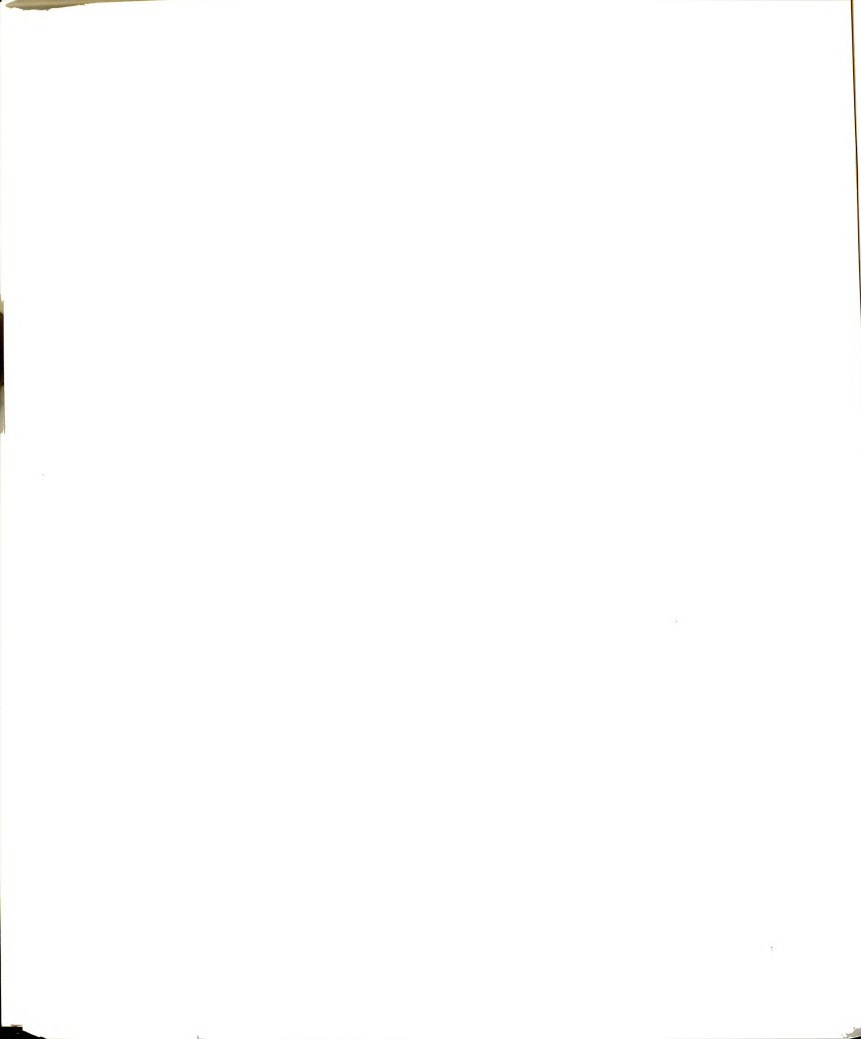


already made commendable efforts to improve the quality of education in Jordan, such as the recent changes in curricula, it is essential that inservice education for teachers be well planned and well organized, incorporating andragogical learning approaches.

2. Planning for inservice teacher education programs should take into account rural, as well as urban, teachers.

3. At present, supervisors are the only form of inservice assistance available to teachers in the country on a regular basis. Unfortunately, supervisors usually go to the classroom as evaluators of a teacher's performance and detectors of mistakes. In many cases, their mission ends by completing an evaluative report about the teacher's performance. Therefore, classroom supervision needs to undergo a major overhaul, in which a sense of collaboration between the supervisor and the teacher, mutual understanding and fruitful discussion and agreement upon possible solutions to existing problems should be emphasized.

4. Incentives should be emphasized. It is true that the question of commitment to continued professional development goes deeper than the question of released time or financial reimbursement. However, incentives remain the best alternative for compulsory participation in inservice



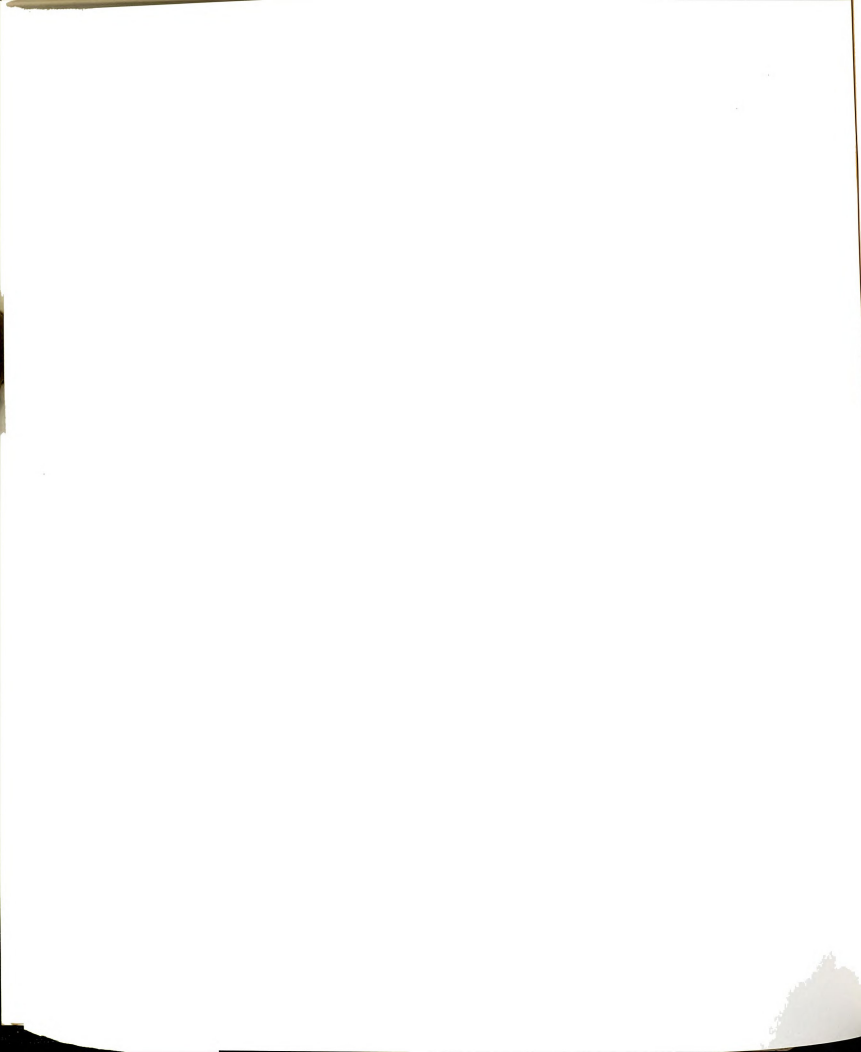


education programs. In Jordan, for some teachers, or perhaps many, incentives may be the mainspring for further learning. Therefore, to obtain the maximum positive results out of further inservice training programs for teachers, incentives should be provided. These might take the form of promotions, recognition and merit salary increases.

5. The Ministry of Education should encourage supervisors to allow teachers, as adult learners, to participate actively in the learning process in inservice education programs, recognizing that these learners have a rich background of experience that is a valuable learning resource.

6. It seemed that inservice education programs might help teachers become more self-directed learners, if self-directed learning processes were incorporated into inservice education programs.

7. More attention should be given to defining the purpose of inservice teacher education programs and then clearly conveying the purpose to the participants. Hopefully, this should improve teacher understanding and strengthen commitment to inservice education programs.



8. The avoidance of too much didactic lecture type presentations by inservice presenters might help teachers to gain more from their inservice experience. Small group work, seminars, workshops and group discussions should be developed to guide teachers in self-directed learning.

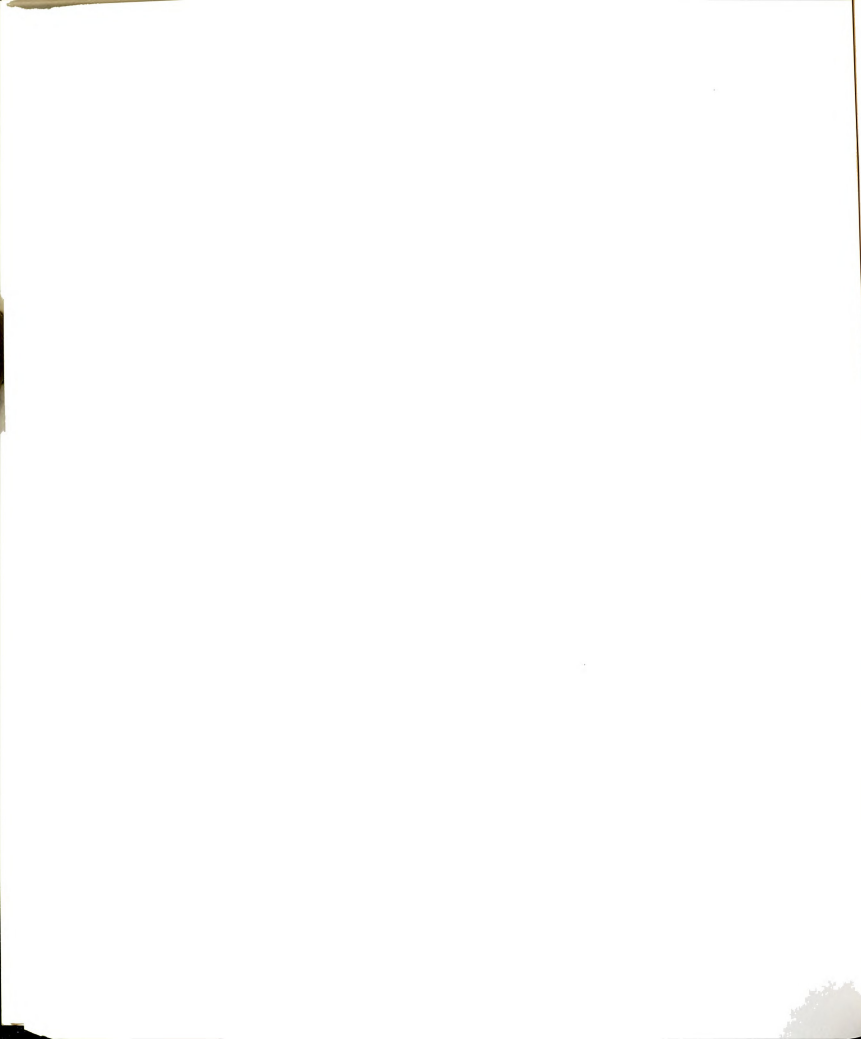
9. Teachers should be given an opportunity to become involved in diagnosing their own needs for learning in inservice education programs.

10. Through college instructors and university professors, Jordanian universities and colleges of education should play major roles in conducting on-campus and in-school inservice activities for teachers.

#### Recommendations for Further Research

Based on the findings of this study, further research is recommended in the following areas:

1. This study was conducted within the boundaries of the northeast district of Jordan. Therefore, the need remains for a replication of this study on a nationwide basis, where teachers as adult learners and supervisors in all educational districts in the country would be involved in identifying inservice education program needs for teachers.

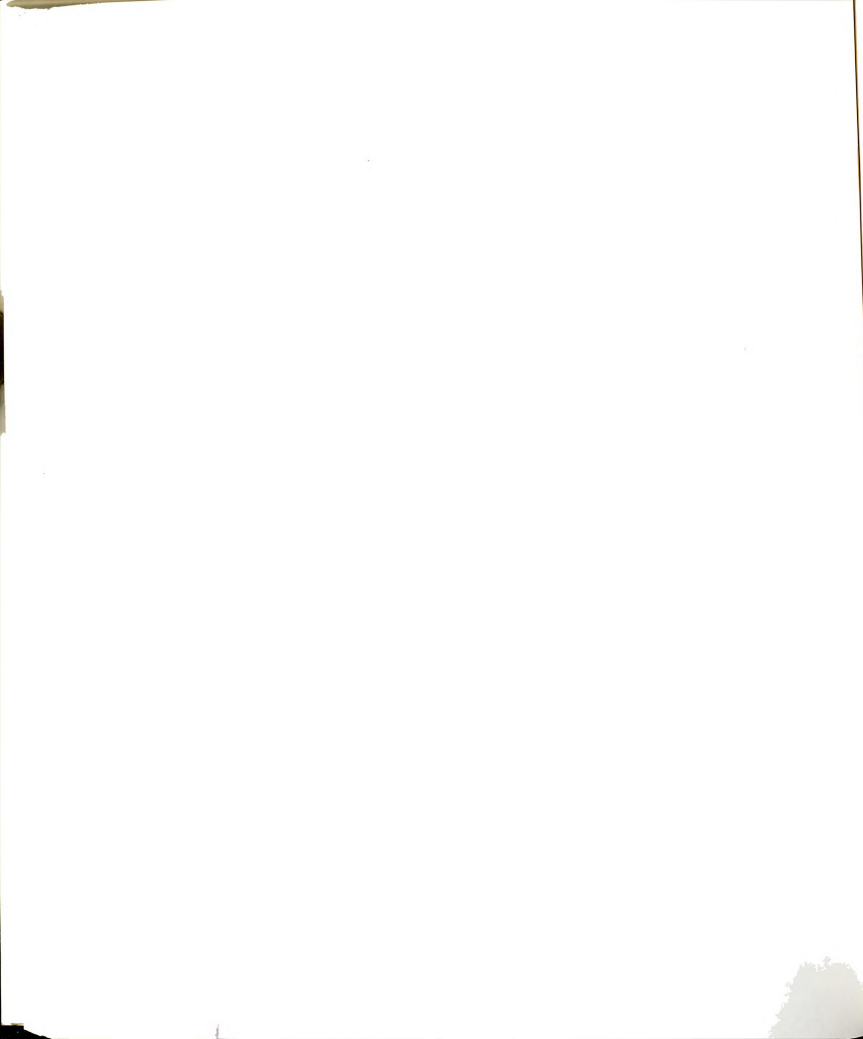


2. Further studies should also seek the perceptions of educational administrators such as school principals, superintendents, assistant superintendents, with regard to their perceptions of the needs of teachers as adult learners and practices of the inservice education programs in the country and the role they can play in such a process.

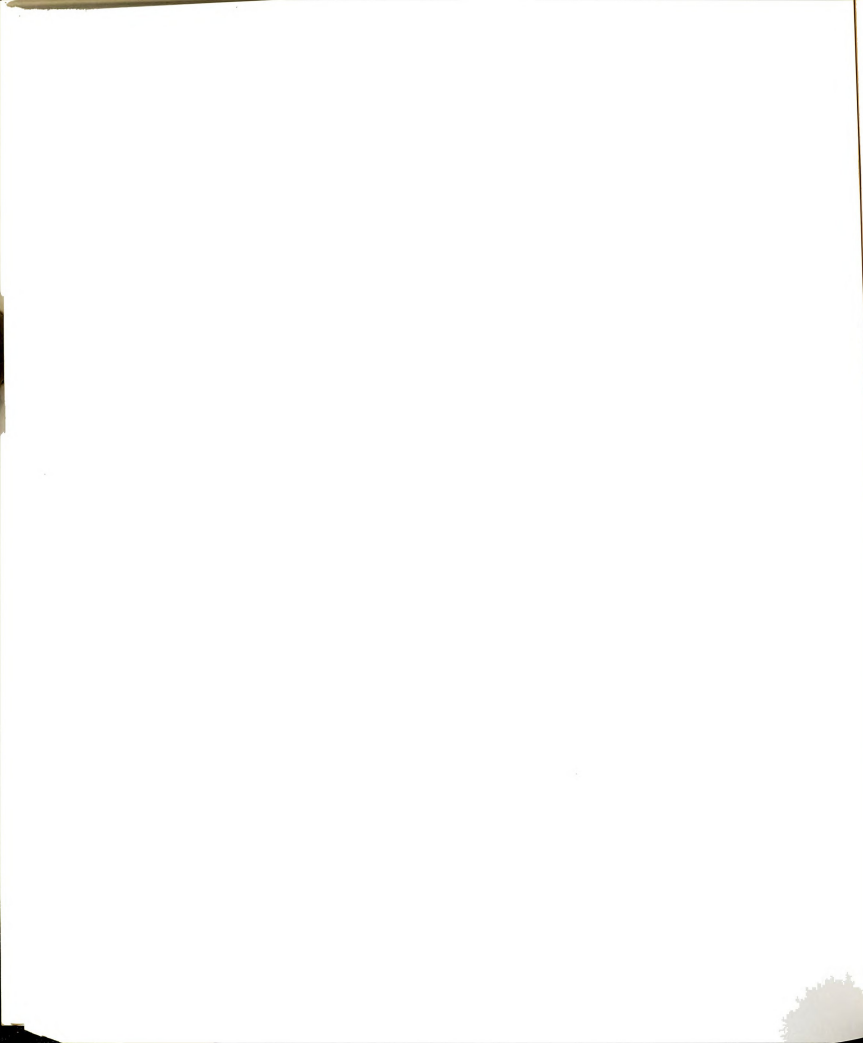
3. Further studies should utilize the procedure of in-depth interviews and not rely solely on the procedure of questionnaire administration as the only source of information for data collection.

4. Research is also needed to determine the best and most effective ways by which inservice education programs in Jordan could be administered, especially for school teachers in remote and rural areas where inservice education activities have never been provided.

5. Successful inservice education practices in the neighboring Arab or non-Arab countries should be thoroughly studied.



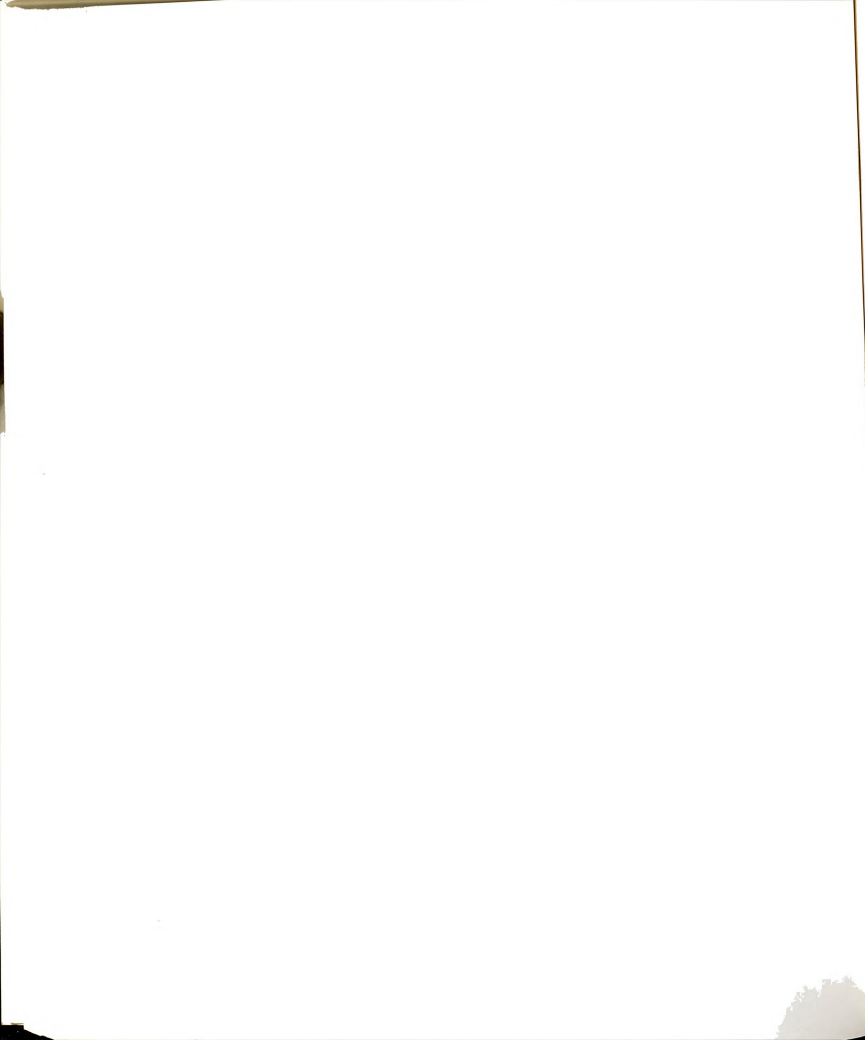
## APPENDICES





**APPENDIX A**

**QUESTIONNAIRE**



Questionnaire Cover Letter  
(English Version)

May 15, 1989

Dear Teacher:

As you surely know, inservice education of teachers is a process by which teachers could be improved. However, inservice program activities can only be best if they are geared to the needs of teachers as adult learners as perceived by teachers themselves and by those who are directly involved with the work of teachers, namely, the supervisors.

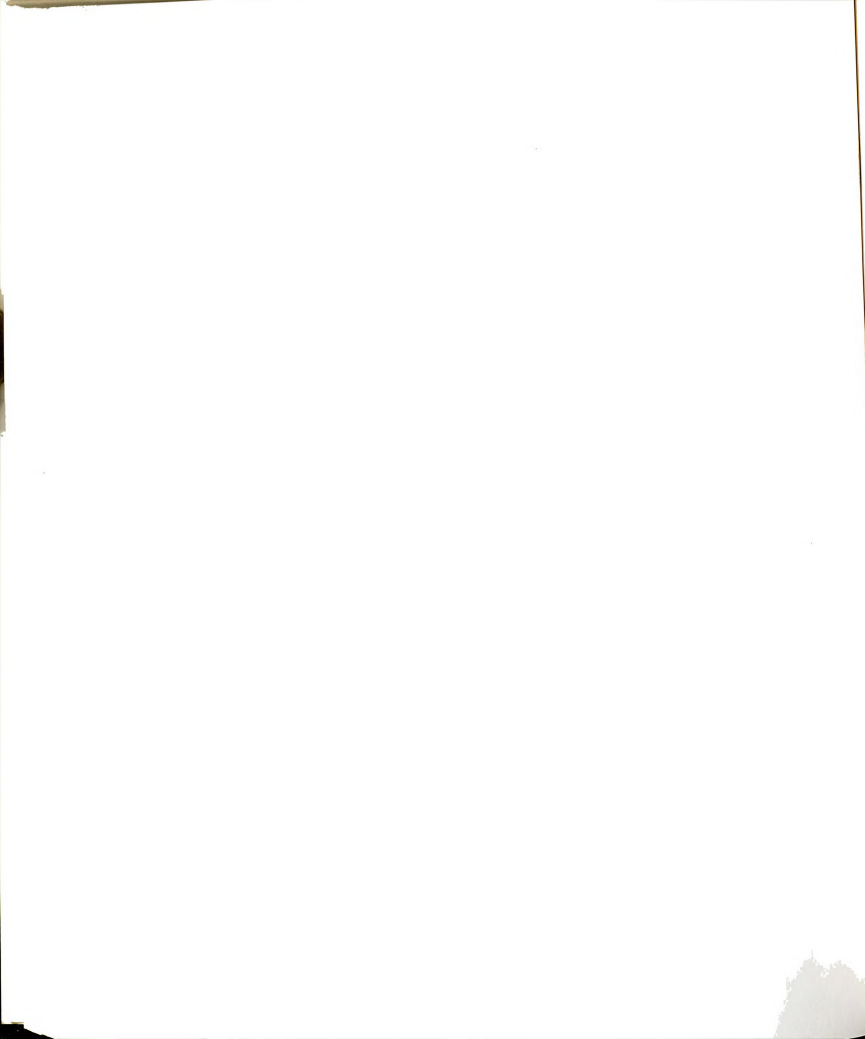
Your participation in completing this survey is strictly voluntary. You may decide not to participate at all, or not answer certain questions without any penalty. The survey will take about 15 minutes to complete. Do not write your name anywhere on the document.

You will notice that the first part of the questionnaire asks for information about you. The second part includes 25 statements which represent varieties of andragogical learning approaches in inservice education programs. In any event, you will not be personally identified. Your answer will be strictly confidential.

Your patience and cooperation are greatly appreciated.

Yours sincerely,

Yahya M. Affash  
Ph.D. Candidate  
Michigan State University



## Part I

Demographic and Personal Data

Please answer all questions. Indicate your answer by using (✓) in the appropriate place.

## 1. Gender:

- 1. ☐ Male
- 2. ☐ Female.

## 2. What is your age?

- 1. ☐ 20 - 29 years
- 2. ☐ 30 - 39 years
- 3. ☐ 40 - 49 years
- 4. ☐ Over 50 years

## 3. What is your present responsibility?

- 1. ☐ Teacher
- 2. ☐ Supervisor.

## 4. In what school level do you work now?

- 1. ☐ Elementary School
- 2. ☐ Intermediate School
- 3. ☐ Secondary School.

## 5. How many years of teaching experience do you have?

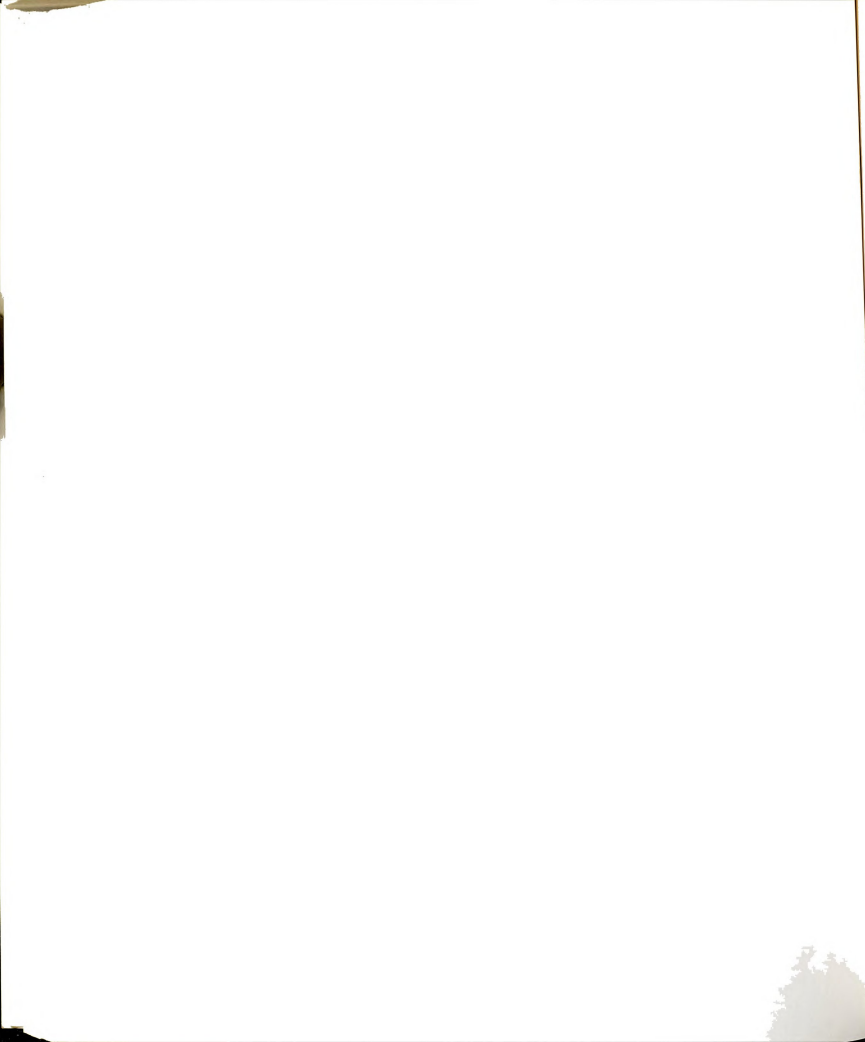
- 1. ☐ 1 - 5 years
- 2. ☐ 6 - 10 years
- 3. ☐ 11 - 15 years
- 4. ☐ Over 15 years

## 6. How many years of supervision experience do you have?

- 1. ☐ 1 - 5 years
- 2. ☐ 6 - 10 years
- 3. ☐ 11 - 15 years
- 4. ☐ Over 15 years

## 7. What is your highest level of educational achievement?

- 1. ☐ High School
- 2. ☐ Teacher Training (2 years)
- 3. ☐ Bachelor's Degree
- 4. ☐ Master's Degree
- 5. ☐ Other (please specify) \_\_\_\_\_

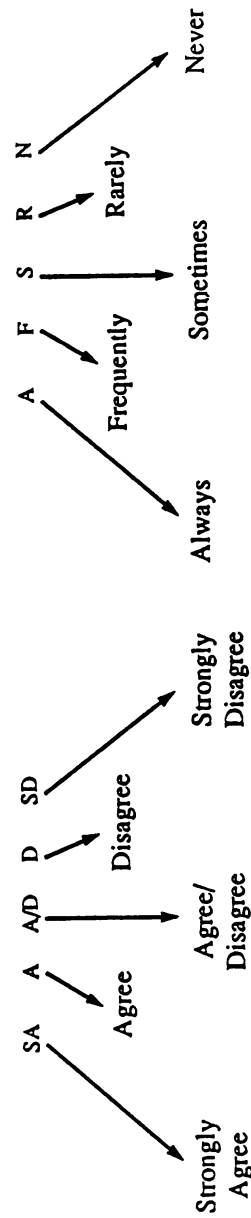


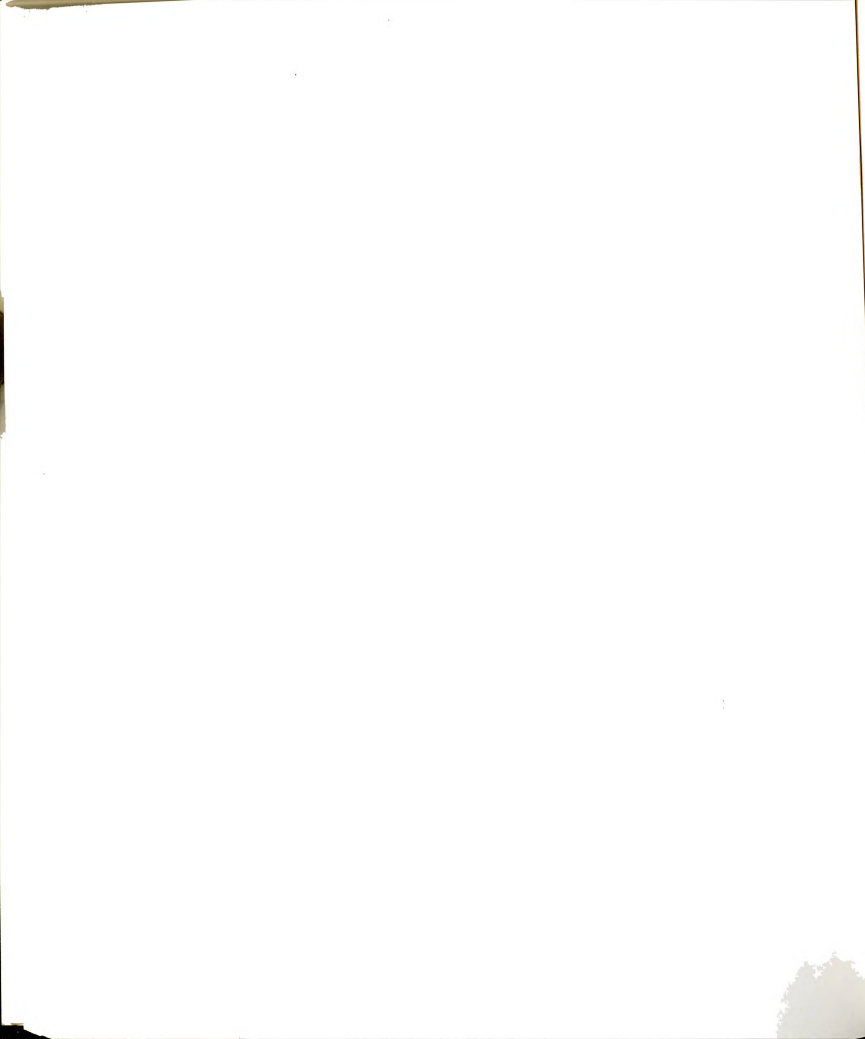
## Part II

In-service education programs have long been established means of conserving education for teachers in Jordan and abroad. For each of the following items, circle the appropriate number in the first column of which statement describing the extent to which you feel the statement should be practiced is in-service education program in Jordan. In the second column, circle the number indicating the degree to which you feel the statement regarding in-service was actually practiced through in-service education program.

For example:

	(1)					(2)				
	Extent of Agreement					Frequency of Occurrence				
	SA	A	A/D	D	SD	A	F	S	R	N
<u>In-service Education Program</u>										
I believe in-service program should be boring.	1	2	3	4	5	1	2	3	4	5



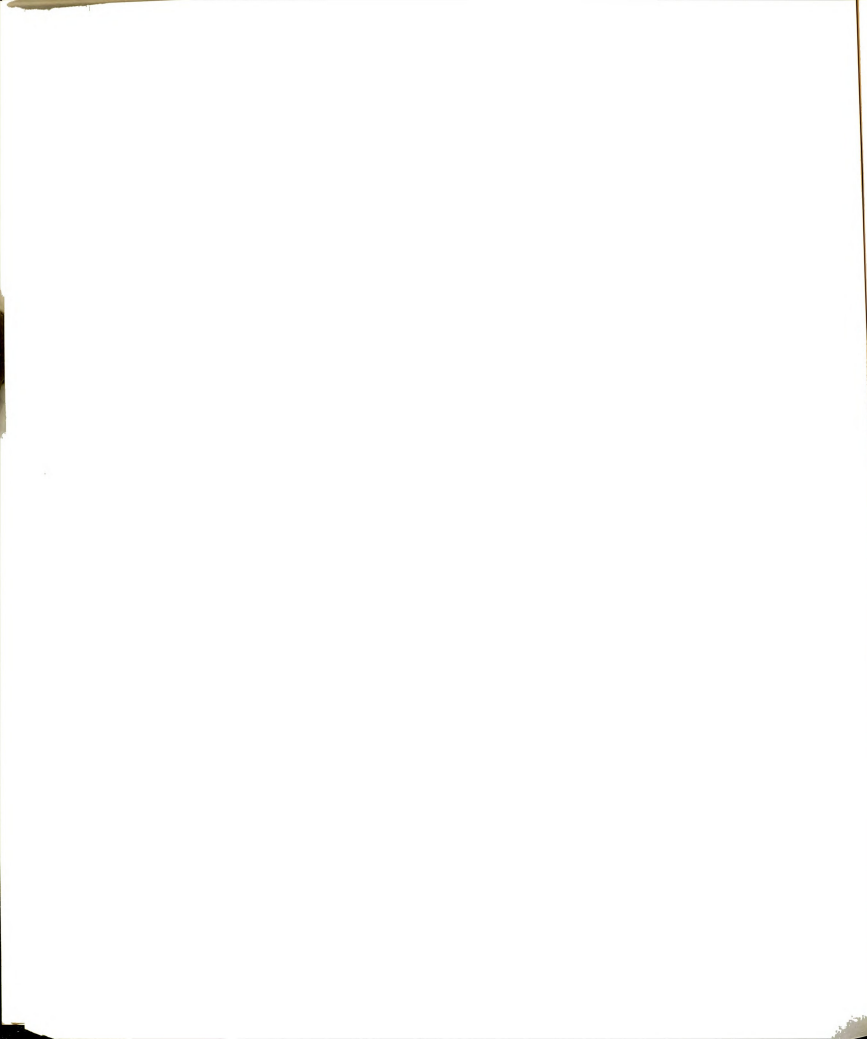




(1)

(2)

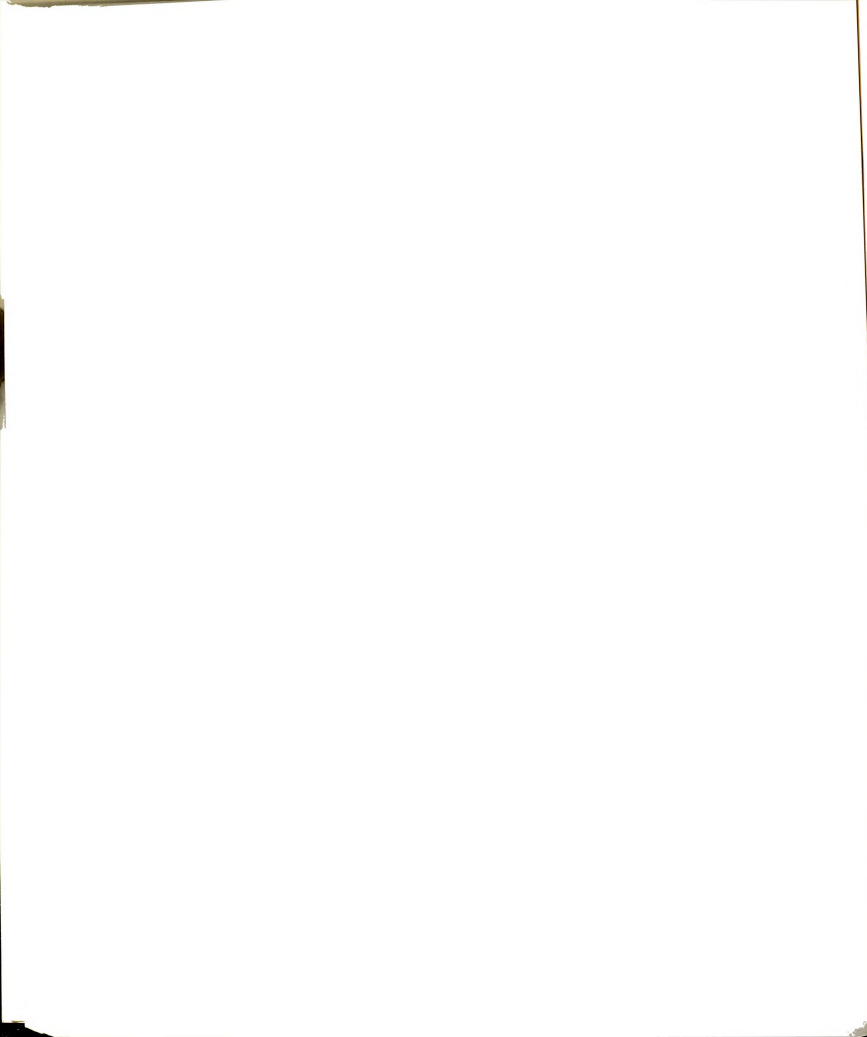
<u>Inservice Education Program</u>	<u>Extent of Agreement</u>					<u>Frequency of Occurrence</u>				
	SA	A	A/D	D	SD	A	F	S	R	N
1. Teachers should be permitted to design their own inservice programs.	1	2	3	4	5	1	2	3	4	5
2. The experiences of the teachers taking part in an inservice program should be utilized as sources of information.	1	2	3	4	5	1	2	3	4	5
3. I am capable of directing my own professional development.	1	2	3	4	5	1	2	3	4	5
4. Inservice programs should provide options for teachers who do not want to follow the planned program.	1	2	3	4	5	1	2	3	4	5
5. Each teacher should be responsible for his/her professional development.	1	2	3	4	5	1	2	3	4	5
6. A feeling of trust should exist between inservice planners and teachers.	1	2	3	4	5	1	2	3	4	5
7. Teachers should be helped by inservice programs to free themselves of patterns of thought that block their growth.	1	2	3	4	5	1	2	3	4	5
8. Teachers should be allowed to set their own goals at inservice programs.	1	2	3	4	5	1	2	3	4	5
9. Inservice programs should have a clear purpose.	1	2	3	4	5	1	2	3	4	5



(1)

(2)

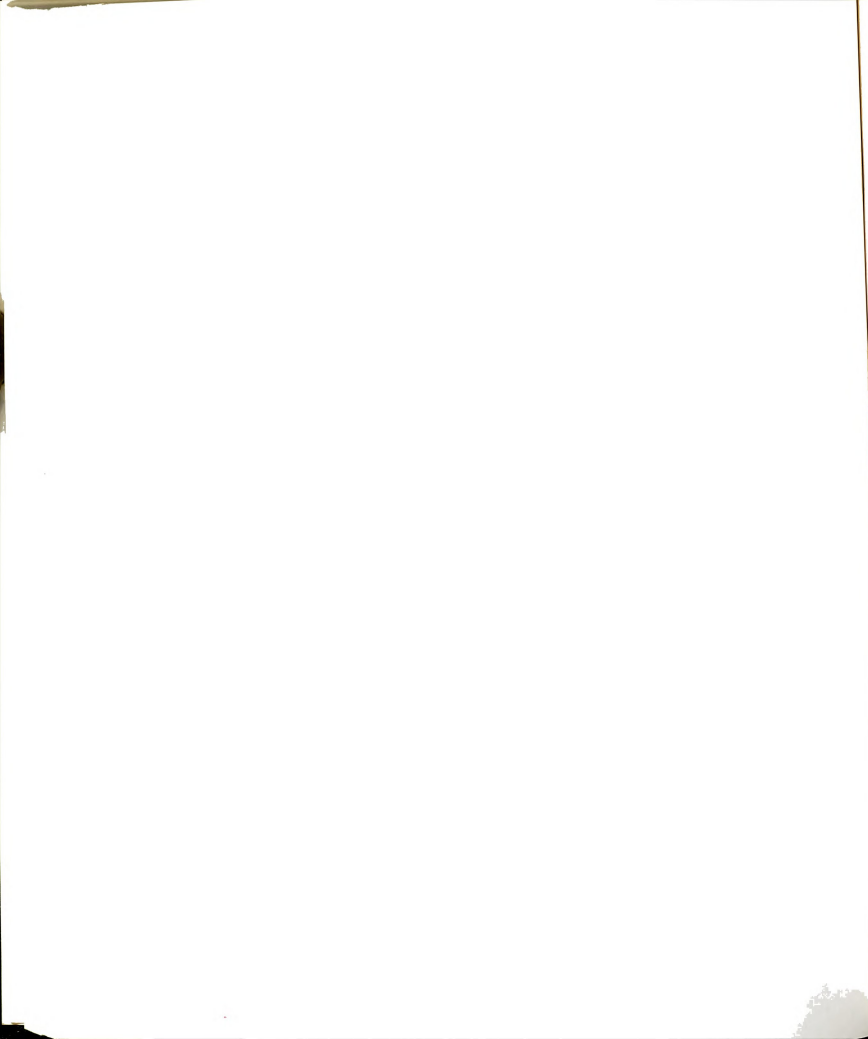
<u>Inservice Education Program</u>	<u>Extent of Agreement</u>					<u>Frequency of Occurrence</u>				
	SA	A	A/D	D	SD	A	F	S	R	N
10. Teachers should be treated as mature adults at inservice programs.	1	2	3	4	5	1	2	3	4	5
11. Teachers should be treated as professionals at inservice programs.	1	2	3	4	5	1	2	3	4	5
12. I prefer working with small groups of teachers to listening to lectures.	1	2	3	4	5	1	2	3	4	5
13. Inservice programs should help teachers learn about themselves.	1	2	3	4	5	1	2	3	4	5
14. Theories presented at inservice programs should be directly related to the teachers' personal experiences.	1	2	3	4	5	1	2	3	4	5
15. I should be permitted to direct my own learning experiences.	1	2	3	4	5	1	2	3	4	5
16. Self-evaluation should be an integral part of inservice programs.	1	2	3	4	5	1	2	3	4	5
17. The "best" inservice programs should help me learn new processes for dealing with my concerns.	1	2	3	4	5	1	2	3	4	5
18. Inservice settings should be scheduled at convenient times for teachers.	1	2	3	4	5	1	2	3	4	5



(1)

(2)

<u>Inservice Education Program</u>	<u>Extent of Agreement</u>					<u>Frequency of Occurrence</u>				
	SA	A	A/D	D	SD	A	F	S	R	N
19. Solving problems that are of interest to the classroom teacher should be emphasized at inservice meetings.	1	2	3	4	5	1	2	3	4	5
20. Small groups should be created to solve problems at inservice programs.	1	2	3	4	5	1	2	3	4	5
21. Teachers should group themselves according to their interests and needs at inservice meetings.	1	2	3	4	5	1	2	3	4	5
22. Teachers should be encouraged to examine their own feelings, attitudes and behavior in inservice programs.	1	2	3	4	5	1	2	3	4	5
23. Inservice presenters should show teachers that the teachers' abilities and experience are valued and respected.	1	2	3	4	5	1	2	3	4	5
24. Inservice presenters should take time to develop a friendly and cooperative atmosphere.	1	2	3	4	5	1	2	3	4	5
25. Cooperation among teachers at inservice settings is an important aid to learning.	1	2	3	4	5	1	2	3	4	5



(1)

بسم الله الرحمن الرحيم

الأخوة المعلمون / المعلمات الأكارم

السلام عليكم ورحمة الله وبركاته .. وبعد :

أن الهدف الاساسي من برامج التأهيل التربوي هو تحيين اداء المعلم / المعلمة ، ولذلك فان أفضل نشاطات برامج التأهيل التربوي أثناء الخدمة هي التي تهتم باحتياجات المعلمين / المعلمات كما يراها المشاركون وكما يراها أولئك الذين على اتصال مستمر ومباشر معهم وهم المشرفون التربويون .

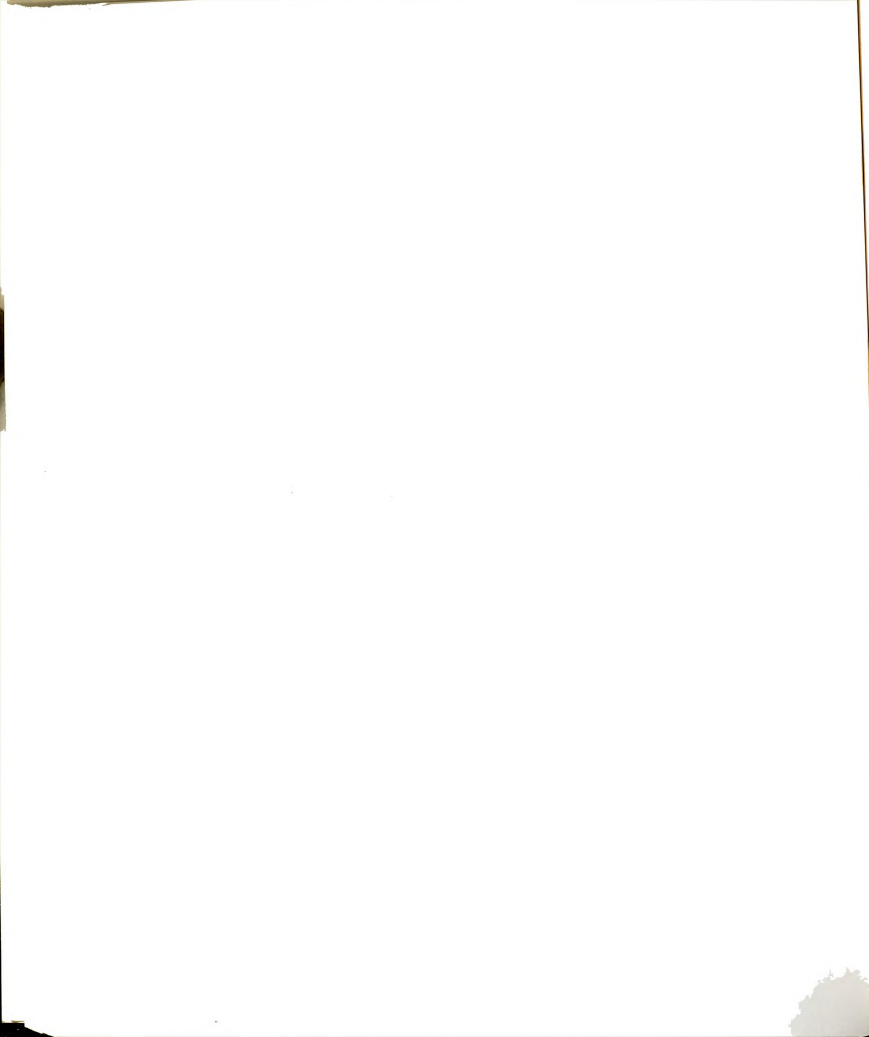
أن مشاركتك في الاجابه على هذا الاستبيان هو عمل تطوعي ولك الحرية بعدم الاجابه على بعض الاسئلة . أن الاجابة على هذه الاسئلة ستأخذ من وقتك خمس عشرة دقيقة وليس مطلوب منك أن تكتب اسمك على الاستفتاء .

يتألف الجزء الأول من سبع اسئلة للحمول على بعض المعلومات الشخصية ، وأما الجزء الثاني فهو مؤلف من خمس وعشرين عبارة تمثل بعض المهارات والقدرات التي يجب توفرها في برامج التأهيل التربوي أثناء الخدمة . وتأكد أن الاجابه ستكون محل عناية كبيره ولن تدل على الاطلاق على هويتك وأن اجابتك ستعامل بمنتهى السريه مع العلم أن الحمول على هذه المعلومات ستكون لاغراض البحث فقط .

شكرا على تعاونكم

الباحث

يحي محمد ارشيد عفتي



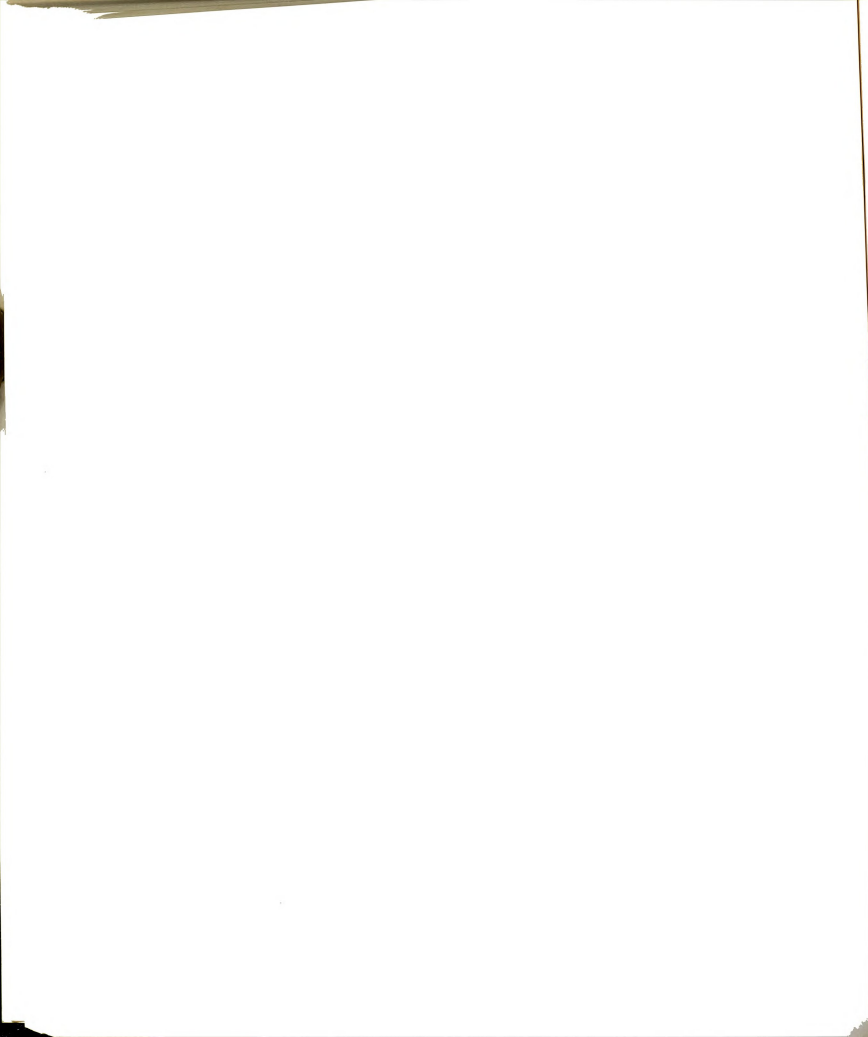


(٢)

**الجزء الأول**  
**( المعلومات الشخصية )**

الرجاء وضع علامة ( ✓ ) بجانب الإجابة التي تراها مناسبة :

- ١ - الجنس : — ذكر — أنثى
- ٢ - العمر ( السن ) :
  - ١ - ( ٢٠ - ٢٩ ) سنة —
  - ٢ - ( ٣٠ - ٣٩ ) سنة —
  - ٣ - ( ٤٠ - ٤٩ ) سنة —
  - ٤ - ( ٥٠ سنة فما فوق ) —
- ٣ - الوظيفة :
  - ١ - مدرس —
  - ٢ - موجه تربوي —
- ٤ - المرحلة الدراسية التي ( تعمل / تعملين ) بها :
  - ١ - المرحلة الابتدائية —
  - ٢ - المرحلة الإعدادية —
  - ٣ - المرحلة الثانوية —
- ٥ - عدد سنوات الخدمة في حقل التعليم :
  - ١ - ( ١ - ٤ ) سنوات —
  - ٢ - ( ٥ - ١٠ ) سنوات —
  - ٣ - ( ١١ - ١٤ ) سنوات —
  - ٤ - ( ١٥ سنة فما فوق ) —
- ٦ - عدد سنوات الخدمة في التوجيه التربوي :
  - ١ - ( ١ - ٤ ) سنوات —
  - ٢ - ( ٥ - ١٠ ) سنوات —
  - ٣ - ( ١١ - ١٤ ) سنوات —
  - ٤ - ( ١٥ سنة فما فوق ) —
- ٧ - المؤهل العلمي :
  - ١ - شهادة الدراسة الثانوية أو ما يعادلها —
  - ٢ - دبلوم كليات مجتمع ( معهد علميين ) —
  - ٣ - ليسانس / بكالوريوس —
  - ٤ - ماجستير —
  - ٥ - أي شهادة أخرى - حدد ذلك —



(٣)

## الاستبيان

## الجزء الثاني :

يعني التدريب والتأهيل التربوي استمرارية تعليم المعلم في الأردن وفي الخارج .

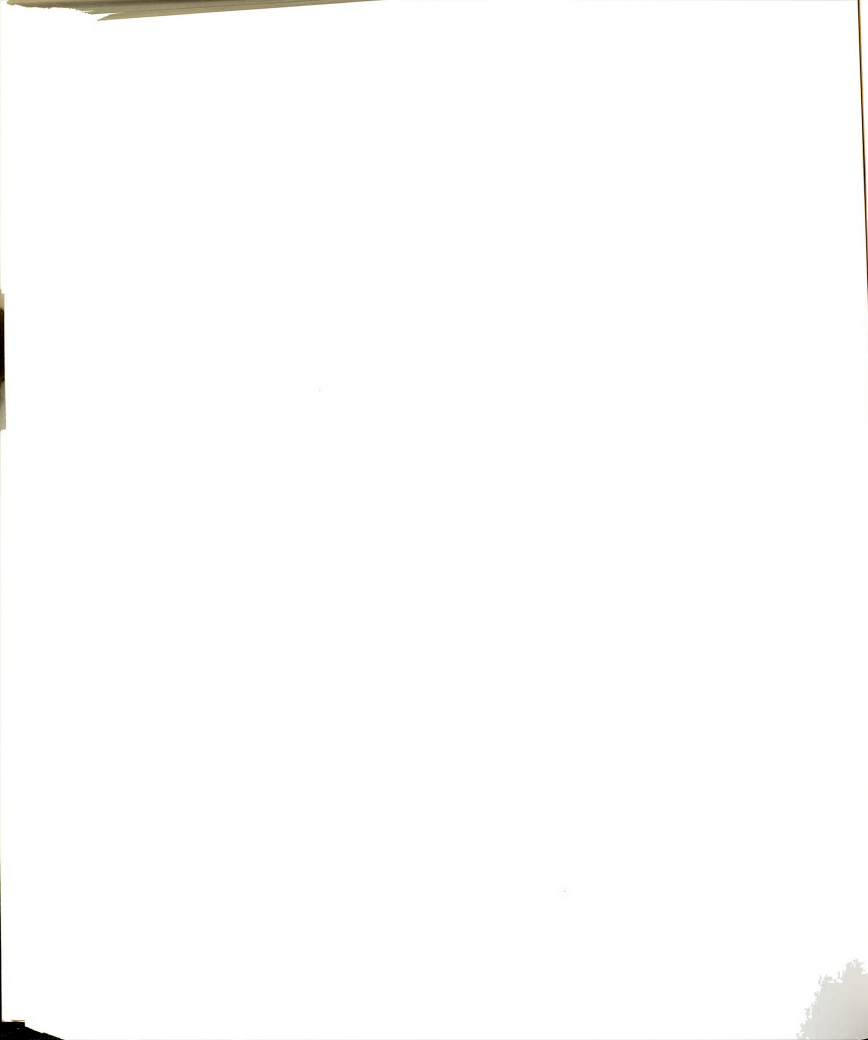
أقرأ نموذ الاستبيان المرفق وضع دائرة حول الرقم الذي تراه مناسباً في العمود الأول الذي يشير إلى الحد الذي يجب أن يطبق به برنامج التأهيل والتدريب التربوي .. وفي العمود الثاني ضع دائره حول الرقم الذي تراه مناسباً للحاله التي تصف الحد الذي تشعر أنه يطابق برنامج للتأهيل التربوي الممارس فعلياً .

- الرقم (١) في العمود الأول يعني (أوافق بشده) وفي العمود الثاني يعني (دائماً) .  
الرقم (٢) في العمود الأول يعني (أوافق) وفي العمود الثاني يعني (مراراً) .  
الرقم (٣) في العمود الأول يعني (لا أعلم) وفي العمود الثاني يعني (أحياناً) .  
الرقم (٤) في العمود الأول يعني (لا أوافق) وفي العمود الثاني يعني (نادراً) .  
الرقم (٥) في العمود الأول يعني (أعارض بشده) وفي العمود الثاني يعني (لا يحدث أبداً) .

مثال :

الرقم ١					الرقم ٢				
التأهيل والتدريب التربوي					تكرار الحدوث				
أوافق بشده	أوافق	لا أعلم	لا أوافق	أعارض بشده	دائماً	مراراً	أحياناً	نادراً	أبداً
١ - أعتقد أن برامج تأهيل المعلمين / المعلمات أثناء الخدمة لابد وأن تكون ممله .					١	٢	٣	٤	٥

إذا كنت تعارض فكره (يجب أن تكون برامج التأهيل ممله) فطنه يجب أن تضع دائره حول الرقم (٥) كذلك إذا كنت تظن أن كثيراً من برامج التأهيل المطبقه حالياً ممله فانك يجب أن تضع دائره حول الرقم (٢) كما هو موضح في المثال .



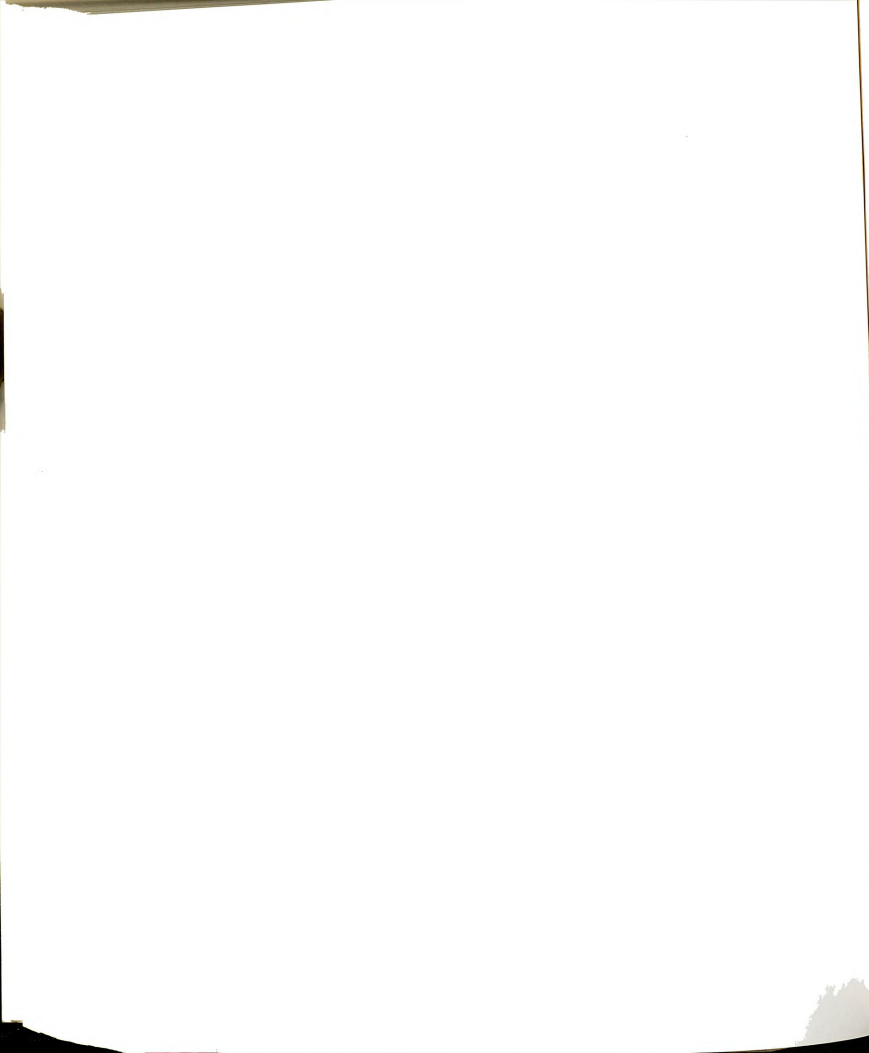
(٤)

" ٢ "

تكرار الحدوث				
لا يحدث أبداً	نادراً	أحياناً	بشكل متكرر	دائماً
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

درجه الموافقه					الرقم التأهيل والتدريب التربوي
أعاري بشده	لا أوافق	لا أعلم	أوافق	أوافق بشده	
٥	٤	٣	٢	١	١ - يجب أن يسمح للمعلمين/المعلمات بتصميم برامج التأهيل التربوي الخاصه بهم أثناء الخدمة .
٥	٤	٣	٢	١	٢ - خبرات المعلمين/ المعلمات في برامج التأهيل يجب أن تستخدم كمصدر للمعلومات .
٥	٤	٣	٢	١	٣ - اني قادر على توجيه نموي الوظيفي.
٥	٤	٣	٢	١	٤ - أعتقد أن برامج التأهيل أثناء الخدمة يجب أن توفر خيارات أخرى للذين لا يرغبون الالتحاق فسي برامج التأهيل .
٥	٤	٣	٢	١	٥ - كل معلم / معلمة يجب أن يكون مسؤولاً عن تحسين أدائه المهني .
٥	٤	٣	٢	١	٦ - يجب توفير الثقة بين المعلمين / المعلمات ومنظمي البرامج .
٥	٤	٣	٢	١	٧ - أعتقد أنه يجب على برامج التأهيل التربوي أثناء الخدمة أن تساعد المعلمين / المعلمات على التخلص من الأنماط التقليديه التي تعيق نموهم الوظيفي .



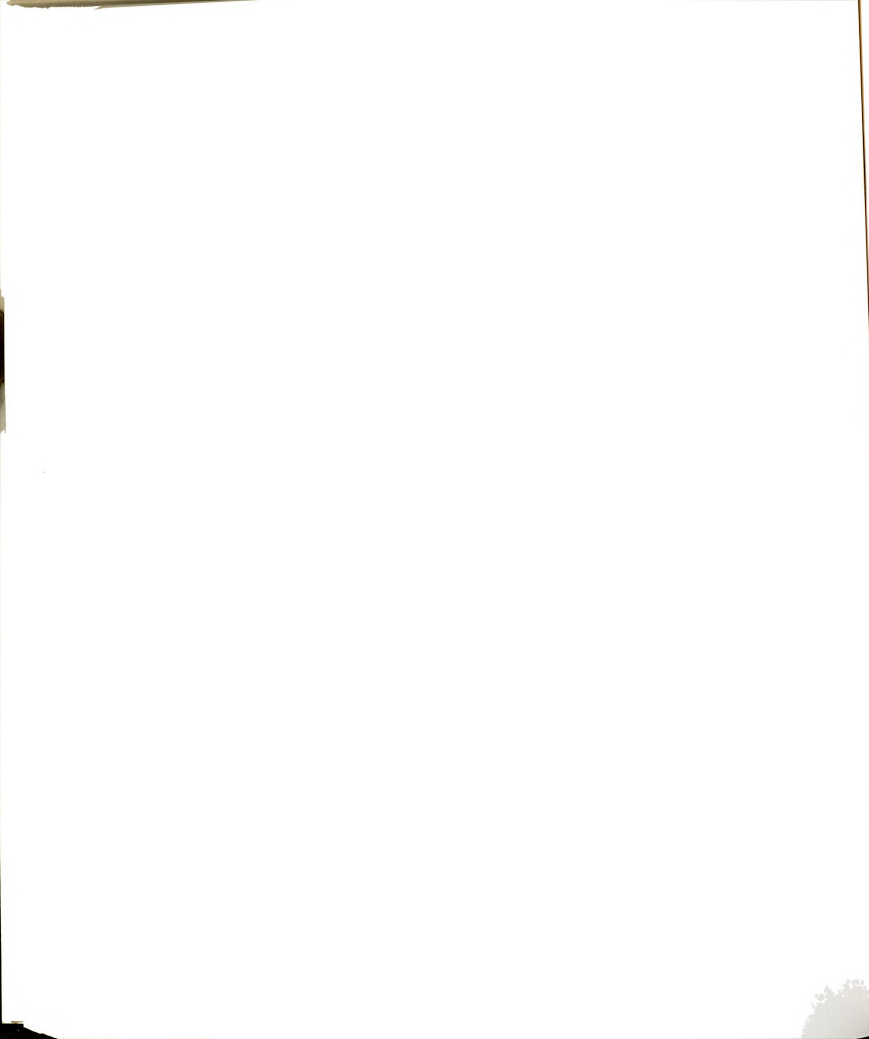
(٥)

" ٢ "

تكرار الحدوث				
لا يحدث أبداً	نادر	أحياناً	مراراً	دائماً
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي					درجه الموافقه				
					أوافق بشده	أوافق	لا أعلم	لا أوافق بشده	أعاري
٨ - يسمح للمعلمين / المعلمات بوضع أهدافهم الخاصة بهم في برامج التأهيل .					٥	٤	٣	٢	١
٩ - من الواجب أن يكون هناك هدفاً واضحاً لبرامج التأهيل .					٥	٤	٣	٢	١
١٠- يجب أن يعامل المعلمين/المعلمات كمتعلمين راشدين في برامج التأهيل التربوي أثناء الخدمة .					٥	٤	٣	٢	١
١١- يجب أن يعامل المعلمين/المعلمات كذوي خبرات تربويه في برامج التأهيل التربوي أثناء الخدمة .					٥	٤	٣	٢	١
١٢- أفضل أن أشارك في مجموعة تعليميه مغيره من المعلمين/ المعلمات على أن أستمع للمحاضرات .					٥	٤	٣	٢	١
١٣- برامج التأهيل أثناء الخدمة يجب أن تساعد المعلمين/ المعلمات على أن يتعرفوا على ذواتهم بطريقة أفضل.					٥	٤	٣	٢	١





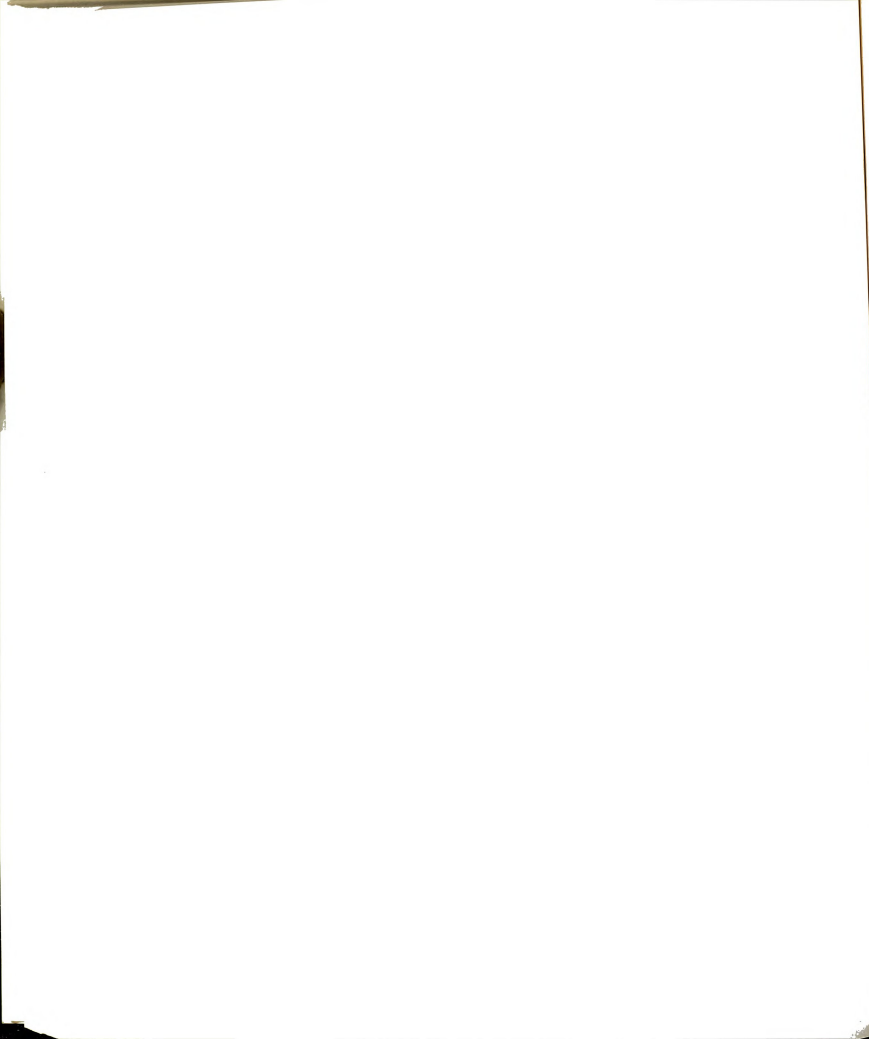
(٦)

" ٢ "

تكرار الحدوث				
لا يحدث أبداً	نادر الحدوث	أحياناً	بشكل متكرر	دائماً
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي					درجة الموافقة				
أوافق بشدة	أوافق	لا أعلم	لا أوافق	أعارض بشدة	أوافق بشدة	أوافق	لا أعلم	لا أوافق	أعارض بشدة
١	٢	٣	٤	٥	١	٢	٣	٤	٥
١٤- النظريات التي تقدم في برامج التأهيل أثناء الخدمة يجب أن تكون لها علاقة مباشرة بخبرات المعلمين / المعلمات الشخية .					١	٢	٣	٤	٥
١٥- يسمح لي بعرض خبراتي التعليميه في برامج التأهيل أثناء الخدمة .					١	٢	٣	٤	٥
١٦- التقويم الذاتي يجب أن يكون جزءاً مضمناً لبرامج التأهيل التربوي أثناء الخدمة .					١	٢	٣	٤	٥
١٧- أفضل برامج التأهيل أثناء الخدمة هي التي تساعدني على تعلم طرق جديده للتعامل مع اهتماماتي .					١	٢	٣	٤	٥
١٨- اجتماعات برامج التأهيل أثناء الخدمة يجب أن تعقد في أوقات تلائم المعلمين / المعلمات .					١	٢	٣	٤	٥
١٩- يجب أن يؤكد على حل المشاكل التي تهم المعلمين / المعلمات في صفوف الدراسيه في برامج التأهيل التربوي أثناء الخدمة .					١	٢	٣	٤	٥



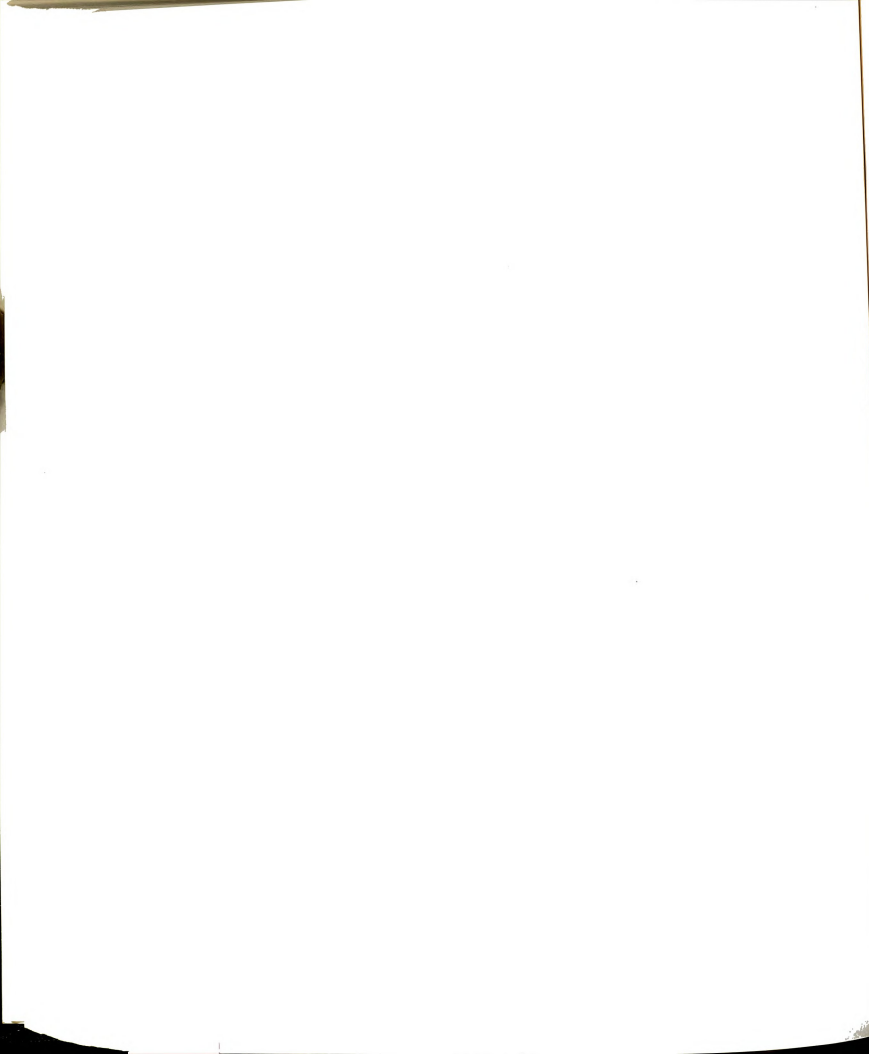
(٧)

" ٢ "

تكرار الحدوث				
لا يحدث أبداً	نادراً	أحياناً	مراراً	دائماً
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي					درجة الموافقة				
أوافق بشدة	أوافق	لا أعلم	لا أوافق	أعارض بشدة	أوافق بشدة	أوافق	لا أعلم	لا أوافق	أعارض بشدة
١	٢	٣	٤	٥	١	٢	٣	٤	٥
٢٠ - يجب تكوين مجموعات تعليمية مفيه لتحل المشاكل التعليمية في برامج التأهيل التربوي أثناء الخدمة .					١	٢	٣	٤	٥
٢١ - يجب على المعلمين/المعلمات أن ينظموا أنفسهم في مجموعات تعليمية بناءً على رغباتهم وحاجاتهم في برامج التأهيل .					١	٢	٣	٤	٥
٢٢ - يجب تشجيع المعلمين/المعلمات على إعادة النظر نحو مشاعرهم واتجاهاتهم وسلوكهم إزاء برامج التأهيل التربوي أثناء الخدمة .					١	٢	٣	٤	٥
٢٣ - على المشرفين على برامج التأهيل التربوي أثناء الخدمة أن يبينوا للمعلمين/المعلمات أن قدراتهم وخبراتهم مقدرة ومحترمة في البرنامج .					١	٢	٣	٤	٥



(٨)

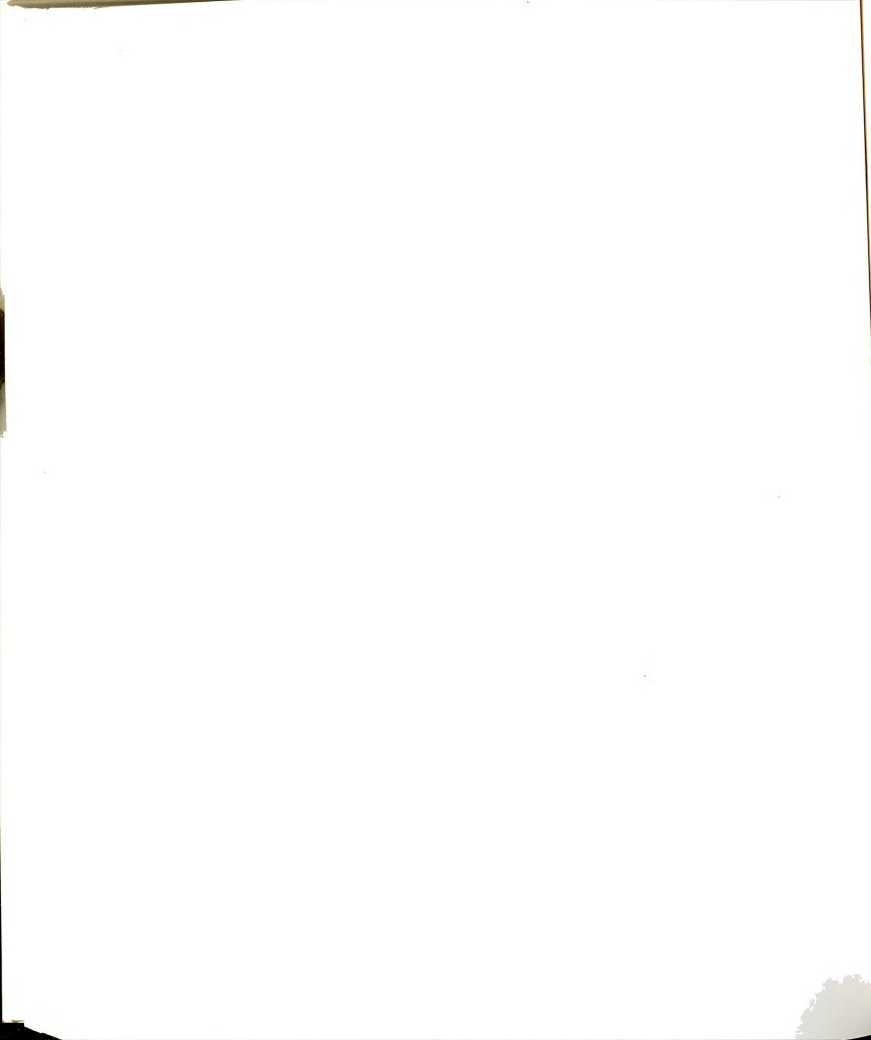
" ٢ "

تكرار الحدوث				
لا يحدث أبدا	نادرا	أحيانا	مرارا	دائما
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي					درجة الموافقة
					أعاري بشده
					لا أو القيق
					لا أعلم
					أو القيق بشده
٢٤ - على المشرفين على برامج التأهيل أثناء الخدمة أن يكونوا جوا من المداقه والتعاون مع المعلمين / المعلمات المشاركين في البرنامج .					٥ ٤ ٣ ٢ ١
٢٥ - التعاون بين المعلمين/المعلمات المشاركين في اجتماعات التأهيل التربوي أثناء الخدمة عامل مهم في التعليم .					٥ ٤ ٣ ٢ ١

شكرا جزيلا



Questionnaire Cover Letter  
(English Version)

May 15, 1989

Dear Supervisor:

As you surely know, inservice education of teachers is a process by which teachers could be improved. However, inservice program activities can only be best if they are geared to the needs of teachers as adult learners as perceived by teachers themselves and by those who are directly involved with the work of teachers, namely, the supervisors.

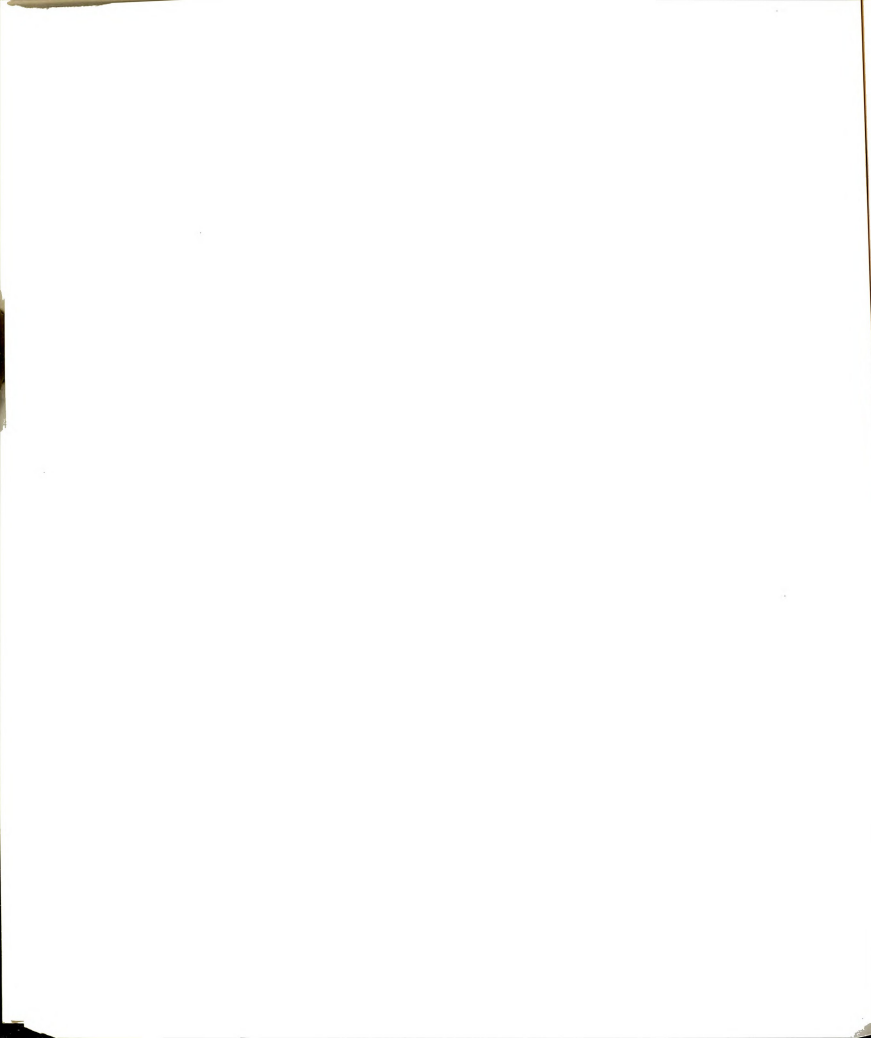
Your participation in completing this survey is strictly voluntary. You may decide not to participate at all, or not answer certain questions without any penalty. The survey will take about 15 minutes to complete. Do not write your name anywhere on the document.

You will notice that the first part of the questionnaire asks for information about you. The second part includes 25 statements which represent varieties of andragogical learning approaches in inservice education programs. In any event, you will not be personally identified. Your answer will be strictly confidential.

Your patience and cooperation are greatly appreciated.

Yours sincerely,

Yahya M. Affash  
Ph.D. Candidate  
Michigan State University





## Part I

Demographic and Personal Data

Please answer all questions. Indicate your answer by using (✓) in the appropriate place.

## 1. Gender:

- 1. ☐ Male
- 2. ☐ Female.

## 2. What is your age?

- 1. ☐ 20 - 29 years
- 2. ☐ 30 - 39 years
- 3. ☐ 40 - 49 years
- 4. ☐ Over 50 years

## 3. What is your present responsibility?

- 1. ☐ Teacher
- 2. ☐ Supervisor.

## 4. In what school level do you work now?

- 1. ☐ Elementary School
- 2. ☐ Intermediate School
- 3. ☐ Secondary School.

## 5. How many years of teaching experience do you have?

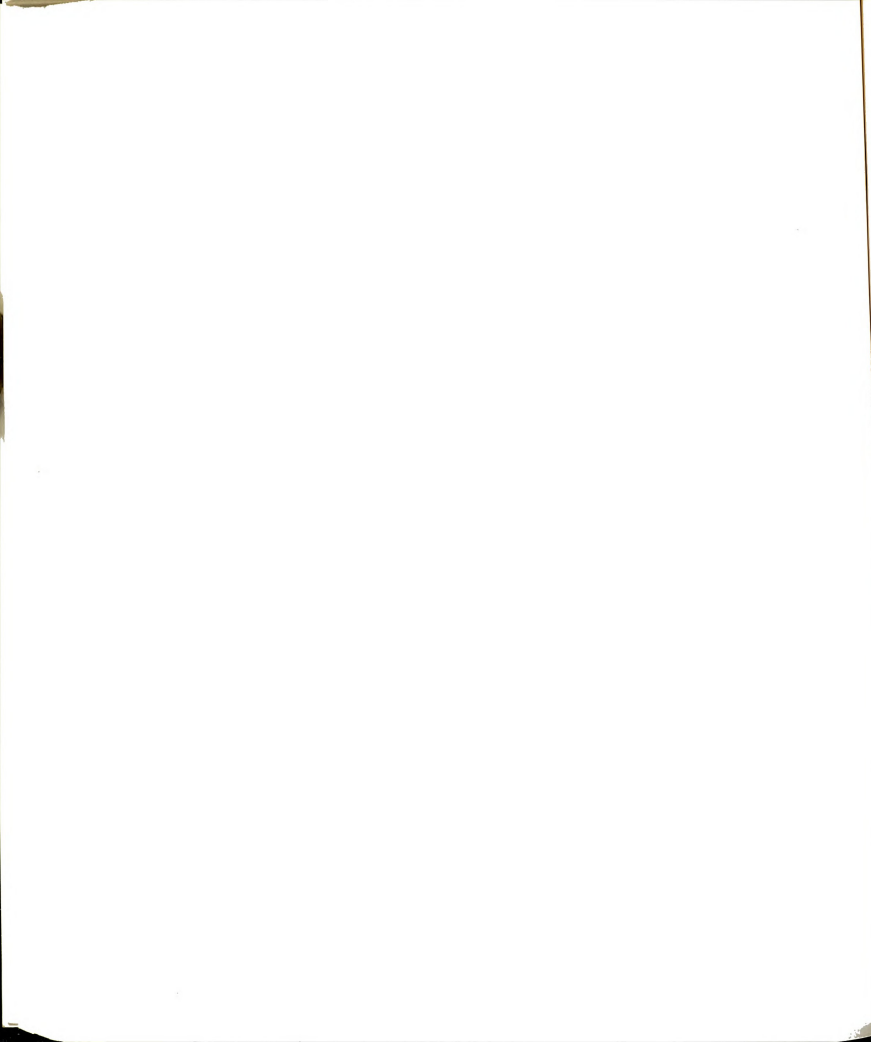
- 1. ☐ 1 - 5 years
- 2. ☐ 6 - 10 years
- 3. ☐ 11 - 15 years
- 4. ☐ Over 15 years

## 6. How many years of supervision experience do you have?

- 1. ☐ 1 - 5 years
- 2. ☐ 6 - 10 years
- 3. ☐ 11 - 15 years
- 4. ☐ Over 15 years

## 7. What is your highest level of educational achievement?

- 1. ☐ High School
- 2. ☐ Teacher Training (2 years)
- 3. ☐ Bachelor's Degree
- 4. ☐ Master's Degree
- 5. ☐ Other (please specify) \_\_\_\_\_

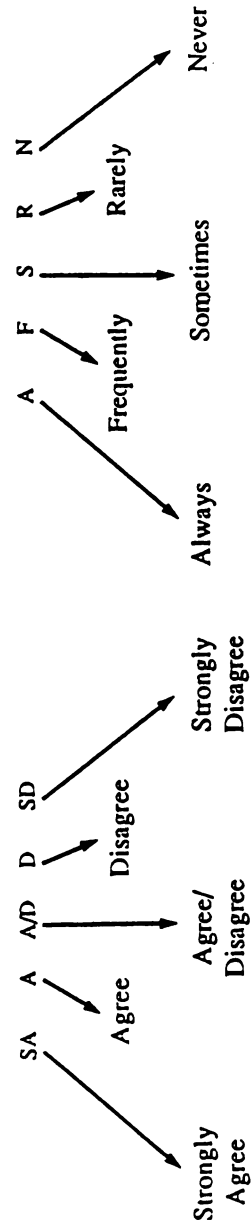


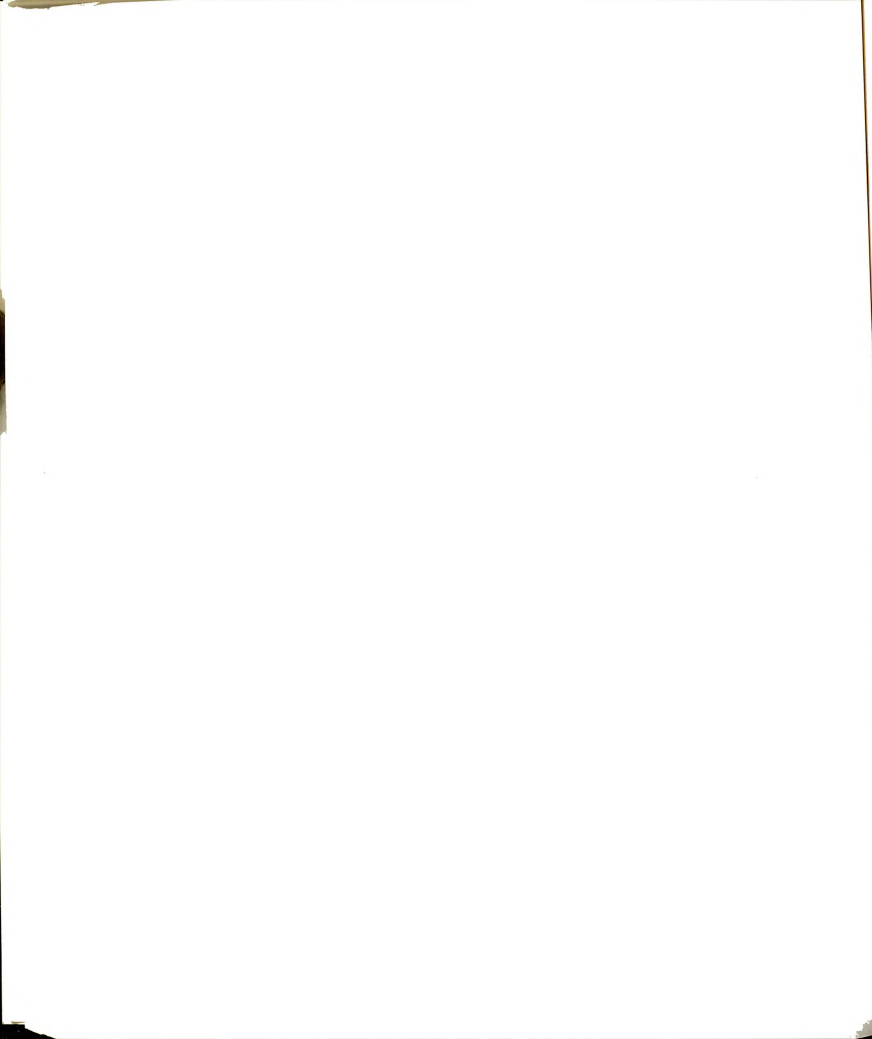
## Part II

In-service education programs have long been established means of conserving education for teachers in Jordan and abroad. For each of the following items, circle the appropriate number in the first column of which statement describing the extent to which you feel the statement should be practiced is in-service education program in Jordan. In the second column, circle the number indicating the degree to which you feel the statement regarding in-service was actually practiced through in-service education program.

For example:

In-service Education Program	(1)					(2)				
	Extent of Agreement					Frequency of Occurrence				
	SA	A	A/D	D	SD	A	F	S	R	N
I believe in-service program should be boring.	1	2	3	4	⑤	1	②	3	4	5

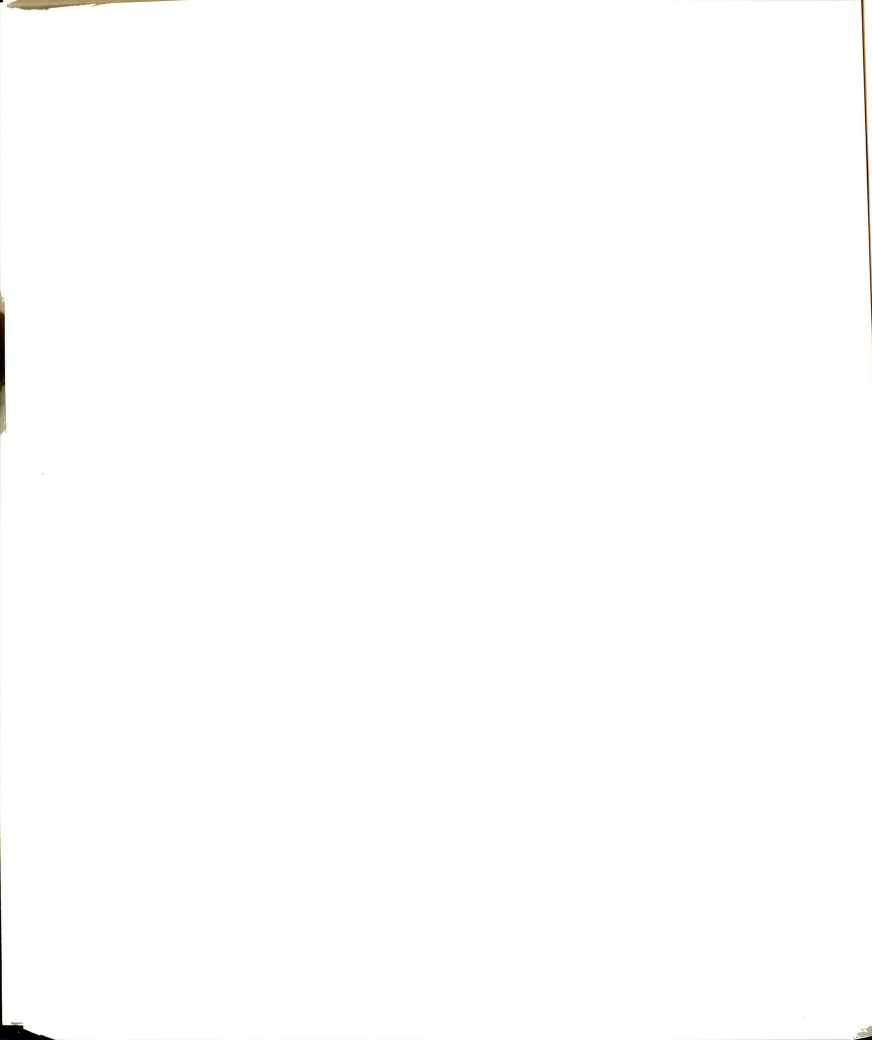




(1)

(2)

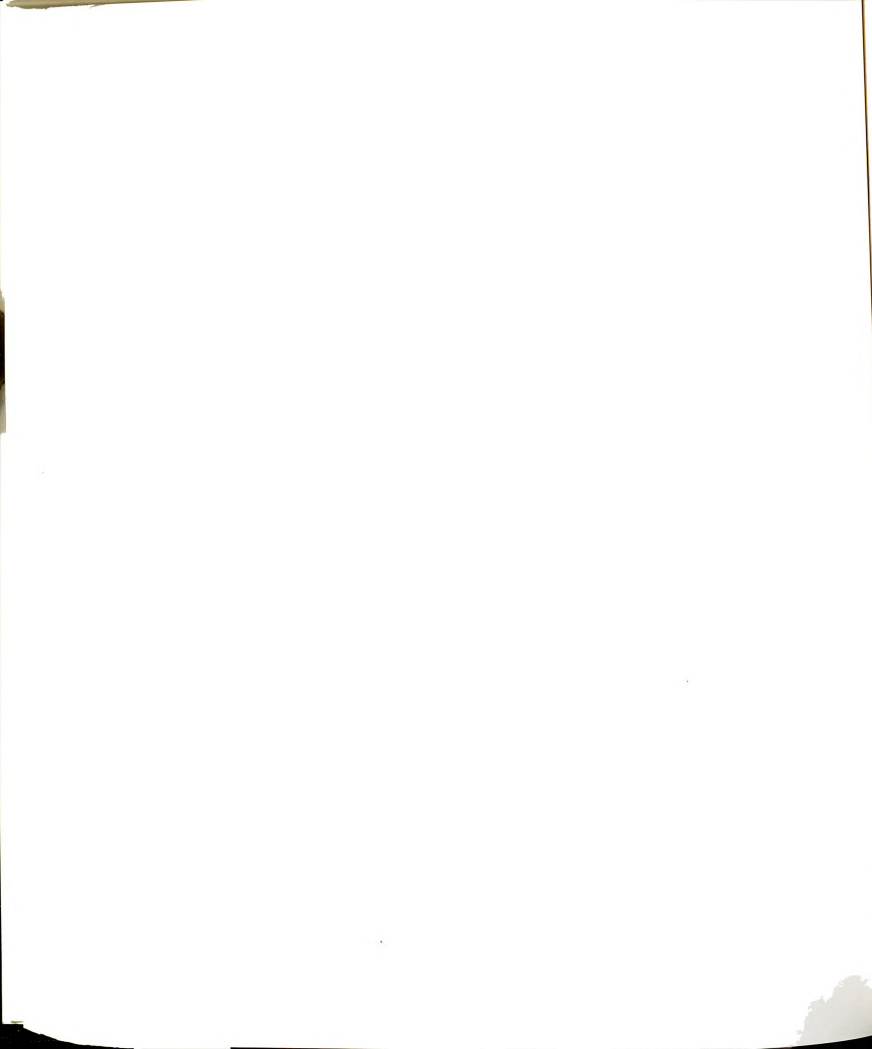
<u>Inservice Education Program</u>	<u>Extent of Agreement</u>					<u>Frequency of Occurrence</u>				
	SA	A	A/D	D	SD	A	F	S	R	N
1. Teachers should be permitted to design their own inservice programs.	1	2	3	4	5	1	2	3	4	5
2. The experiences of the teachers taking part in an inservice program should be utilized as sources of information.	1	2	3	4	5	1	2	3	4	5
3. I am capable of directing my own professional development.	1	2	3	4	5	1	2	3	4	5
4. Inservice programs should provide options for teachers who do not want to follow the planned program.	1	2	3	4	5	1	2	3	4	5
5. Each teacher should be responsible for his/her professional development.	1	2	3	4	5	1	2	3	4	5
6. A feeling of trust should exist between inservice planners and teachers.	1	2	3	4	5	1	2	3	4	5
7. Teachers should be helped by inservice programs to free themselves of patterns of thought that block their growth.	1	2	3	4	5	1	2	3	4	5
8. Teachers should be allowed to set their own goals at inservice programs.	1	2	3	4	5	1	2	3	4	5
9. Inservice programs should have a clear purpose.	1	2	3	4	5	1	2	3	4	5



(1)

(2)

<u>Inservice Education Program</u>	<u>Extent of Agreement</u>					<u>Frequency of Occurrence</u>				
	SA	A	A/D	D	SD	A	F	S	R	N
10. Teachers should be treated as mature adults at inservice programs.	1	2	3	4	5	1	2	3	4	5
11. Teachers should be treated as professionals at inservice programs.	1	2	3	4	5	1	2	3	4	5
12. I prefer working with small groups of teachers to listening to lectures.	1	2	3	4	5	1	2	3	4	5
13. Inservice programs should help teachers learn about themselves.	1	2	3	4	5	1	2	3	4	5
14. Theories presented at inservice programs should be directly related to the teachers' personal experiences.	1	2	3	4	5	1	2	3	4	5
15. I should be permitted to direct my own learning experiences.	1	2	3	4	5	1	2	3	4	5
16. Self-evaluation should be an integral part of inservice programs.	1	2	3	4	5	1	2	3	4	5
17. The "best" inservice programs should help me learn new processes for dealing with my concerns.	1	2	3	4	5	1	2	3	4	5
18. Inservice settings should be scheduled at convenient times for teachers.	1	2	3	4	5	1	2	3	4	5

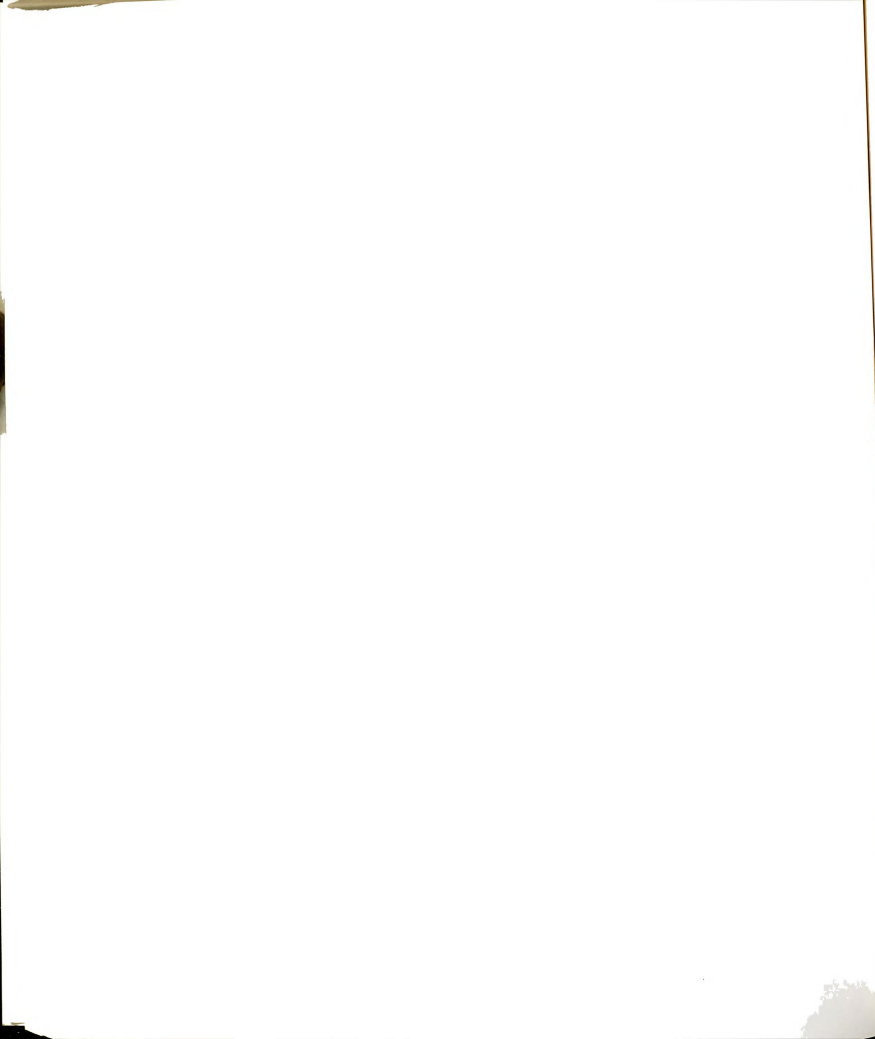




(1)

(2)

<u>Inservice Education Program</u>	<u>Extent of Agreement</u>					<u>Frequency of Occurrence</u>				
	SA	A	A/D	D	SD	A	F	S	R	N
19. Solving problems that are of interest to the classroom teacher should be emphasized at inservice meetings.	1	2	3	4	5	1	2	3	4	5
20. Small groups should be created to solve problems at inservice programs.	1	2	3	4	5	1	2	3	4	5
21. Teachers should group themselves according to their interests and needs at inservice meetings.	1	2	3	4	5	1	2	3	4	5
22. Teachers should be encouraged to examine their own feelings, attitudes and behavior in inservice programs.	1	2	3	4	5	1	2	3	4	5
23. Inservice presenters should show teachers that the teachers' abilities and experience are valued and respected.	1	2	3	4	5	1	2	3	4	5
24. Inservice presenters should take time to develop a friendly and cooperative atmosphere.	1	2	3	4	5	1	2	3	4	5
25. Cooperation among teachers at inservice settings is an important aid to learning.	1	2	3	4	5	1	2	3	4	5



(1)

بسم الله الرحمن الرحيم

الأخوة المشرفون التربويون الأكارم

السلام عليكم ورحمة الله وبركاته .. وبعد :

أن الهدف الأساسي من برامج التأهيل التربوي هو تحيين أداء المعلم / المعلمة ، ولذلك فإن أفضل نشاطات برامج التأهيل التربوي أثناء الخدمة هي التي تهتم باحتياجات المعلمين / المعلمات كما يراها المشاركون وكما يراها أولئك الذين على اتصال مستمر ومباشر معهم وهم المشرفون التربويون .

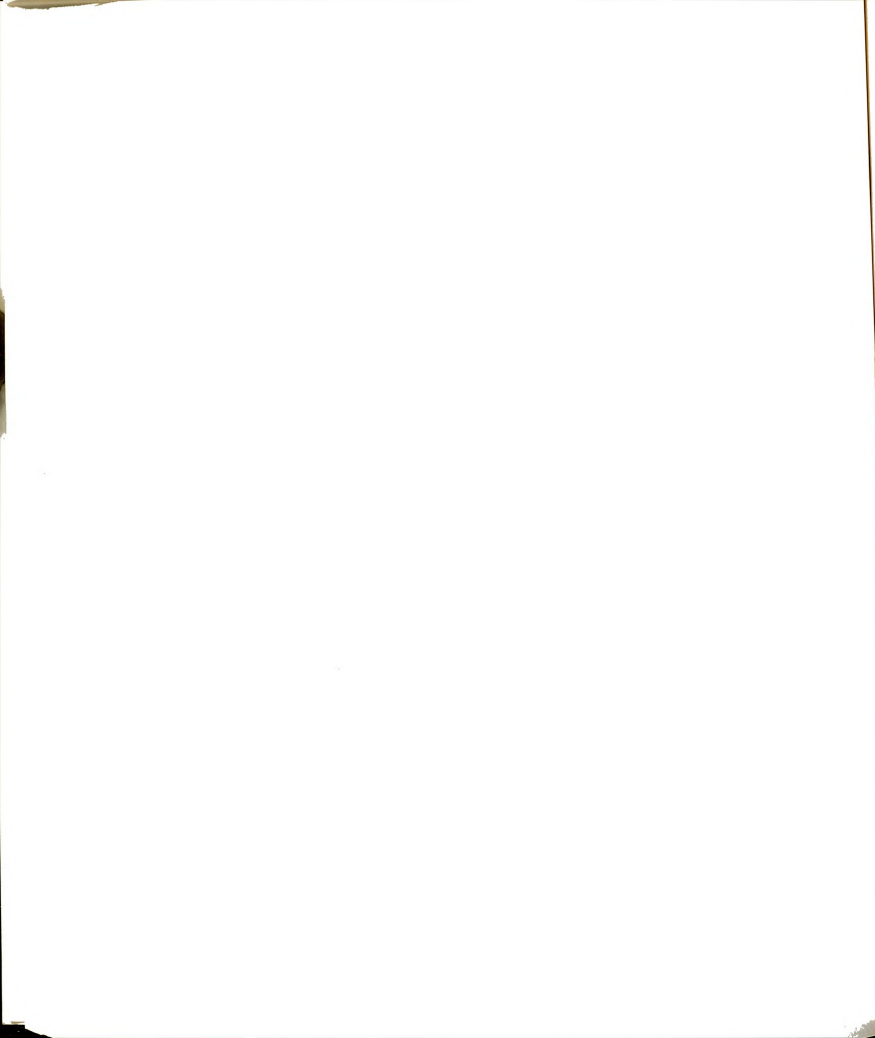
أن مشاركتك في الاجابة على هذا الاستبيان هو عمل تطوعي ولك الحرية بعدم الاجابة على بعض الاسئلة . أن الاجابة على هذه الاسئلة ستأخذ من وقتك خمس عشرة دقيقة وليس مطلوب منك أن تكتب اسمك على الاستفتاء .

يتألف الجزء الأول من سبع اسئلة للحمول على بعض المعلومات الشخصية ، وأما الجزء الثاني فهو مؤلف من خمس وعشرين عبارة تمثل بعض المهارات والقدرات التي يجب توفرها في برامج التأهيل التربوي أثناء الخدمة . وتأكد أن الاجابة ستكون محل عنايه كبيره ولن تدل على الاطلاق على هويتك وأن اجابتك ستعامل بمنتهى السريه مع العلم أن الحصول على هذه المعلومات ستكون لأغراض البحث فقط .

شكرا على تعاونكم

الباحث

يحي محمد ارشيد عفتي



(٢)

**الجزء الأول**  
**( المعلومات الشخصية )**

الرجاء وضع علامة ( ✓ ) بجانب الإجابة التي تراها مناسبة :

- ١ - الجنس : \_\_\_\_\_ ذكر \_\_\_\_\_ أنثى
- ٢ - العمر ( السن ) :  
 ١ - ( ٢٠ - ٢٩ ) سنة \_\_\_\_\_  
 ٢ - ( ٣٠ - ٣٩ ) سنة \_\_\_\_\_  
 ٣ - ( ٤٠ - ٤٩ ) سنة \_\_\_\_\_  
 ٤ - ( ٥٠ سنة فما فوق ) \_\_\_\_\_
- ٣ - الوظيفة :  
 ١ - مدرس \_\_\_\_\_  
 ٢ - موجه تربوي \_\_\_\_\_
- ٤ - المرحلة الدراسية التي ( تعمل / تعملين ) بها :  
 ١ - المرحلة الابتدائية \_\_\_\_\_  
 ٢ - المرحلة الإعدادية \_\_\_\_\_  
 ٣ - المرحلة الثانوية \_\_\_\_\_
- ٥ - عدد سنوات خدمته في حقل التعليم :  
 ١ - ( ١ - ٤ ) سنوات \_\_\_\_\_  
 ٢ - ( ٥ - ١٠ ) سنوات \_\_\_\_\_  
 ٣ - ( ١١ - ١٤ ) سنوات \_\_\_\_\_  
 ٤ - ( ١٥ سنة فما فوق ) \_\_\_\_\_
- ٦ - عدد سنوات خدمته في التوجيه التربوي :  
 ١ - ( ١ - ٤ ) سنوات \_\_\_\_\_  
 ٢ - ( ٥ - ١٠ ) سنوات \_\_\_\_\_  
 ٣ - ( ١١ - ١٤ ) سنوات \_\_\_\_\_  
 ٤ - ( ١٥ سنة فما فوق ) \_\_\_\_\_
- ٧ - المؤهل العلمي :  
 ١ - شهادة الدراسة الثانوية أو ما يعادلها \_\_\_\_\_  
 ٢ - دبلوم كليات مجتمع ( معهد علميين ) \_\_\_\_\_  
 ٣ - ليسانس / بكالوريوس \_\_\_\_\_  
 ٤ - ماجستير \_\_\_\_\_  
 ٥ - أي شهادة أخرى - حدد ذلك \_\_\_\_\_



(٣)

## الاستبيان

## الجزء الثاني :

يعني التدريب والتأهيل التربوي استمرارية تعليم المعلم في الأردن وفي الخارج .

أقرأ نصوص الاستبيان المرفق وضع دائرة حول الرقم الذي تراه مناسباً في العمود الأول الذي يشير إلى الحد الذي يجب أن يطبق به برنامج التأهيل والتدريب التربوي .. وفي العمود الثاني ضع دائره حول الرقم الذي تراه مناسباً للحاله التي تعف الحد الذي تشعر أنه يطابق برنامج للتأهيل التربوي المعماري فعلياً .

الرقم (١) في العمود الأول يعني (أوافق بشده) وفي العمود الثاني يعني (دائماً) .  
الرقم (٢) في العمود الأول يعني (أوافق ) وفي العمود الثاني يعني (مراراً) .  
الرقم (٣) في العمود الأول يعني ( لا أعلم ) وفي العمود الثاني يعني (أحياناً) .  
الرقم (٤) في العمود الأول يعني ( لا أوافق ) وفي العمود الثاني يعني (نادراً) .  
الرقم (٥) في العمود الأول يعني (أعارض بشده) وفي العمود الثاني يعني (لا يحدث أبداً) .

" ٢ "

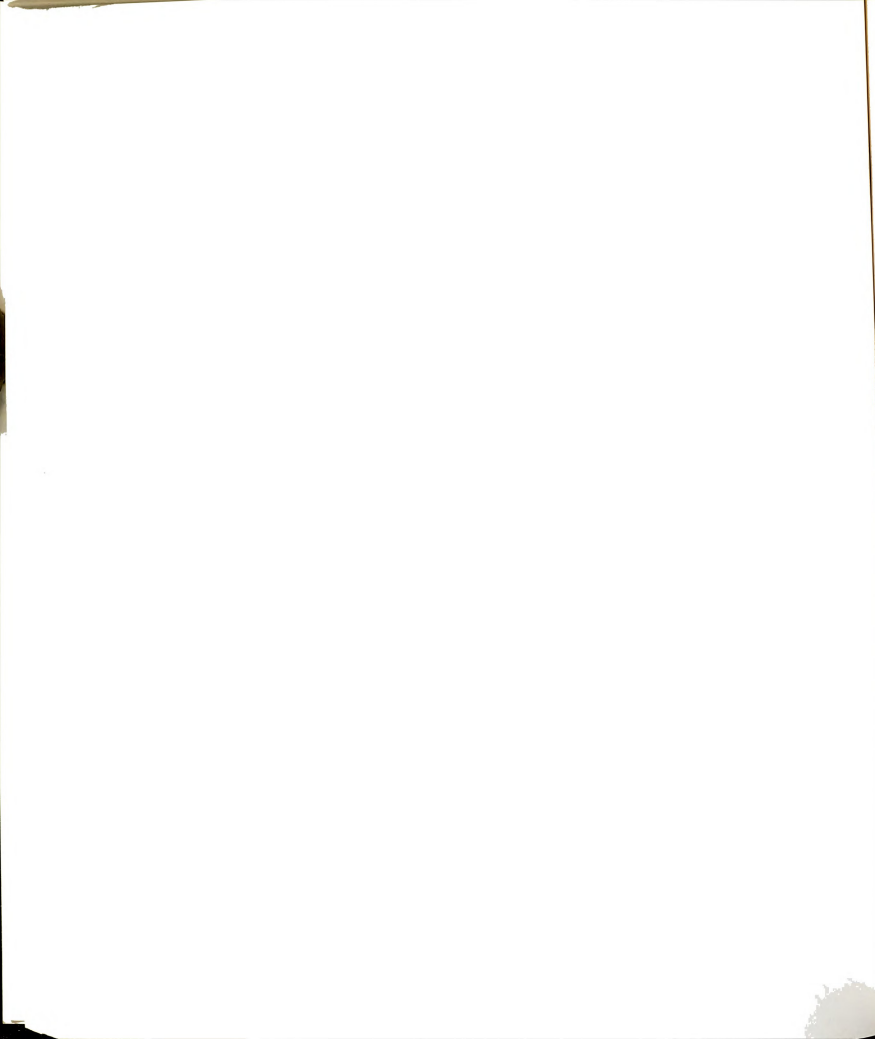
" ١ "

مثال :

الرقم التأهيل والتدريب التربوي درجة الموافقه					تكرار الحدوث				
أوافق بشده	أوافق	لا أعلم	لا أوافق بشده	أعارض	دائماً	مراراً	أحياناً	نادراً	أبداً
١	٢	٣	٤	٥	١	٢	٣	٤	٥

أ - أعتقد أن برامج تأهيل المعلمين / المعلمات أثناء الخدمة لابد وأن تكون معله .

إذا كنت تعارض فكره (يجب أن تكون برامج التأهيل معله) فإنه يجب أن تضع دائره حول الرقم (٥) كذلك إذا كنت تهن أن كثيراً من برامج التأهيل المطبقه حالياً معله فأنك يجب أن تضع دائره حول الرقم (٢) كما هو موضح في المثال .





(٤)

" ٢ "

تكرار الحدث				
لا يحدث أبدا	نادرًا	أحيانًا	غالبًا	دائمًا
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي				
أوافق بشدة	أوافق	لا أعلم	لا أوافق	أعارض بشدة
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

١ - يجب أن يسمح للمعلمين/المعلمات بتصميم برامج التأهيل التربوي الخاصة بهم أثناء الخدمة .

٢ - خبرات المعلمين/المعلمات في برامج التأهيل يجب أن تستخدم كمصدر للمعلومات .

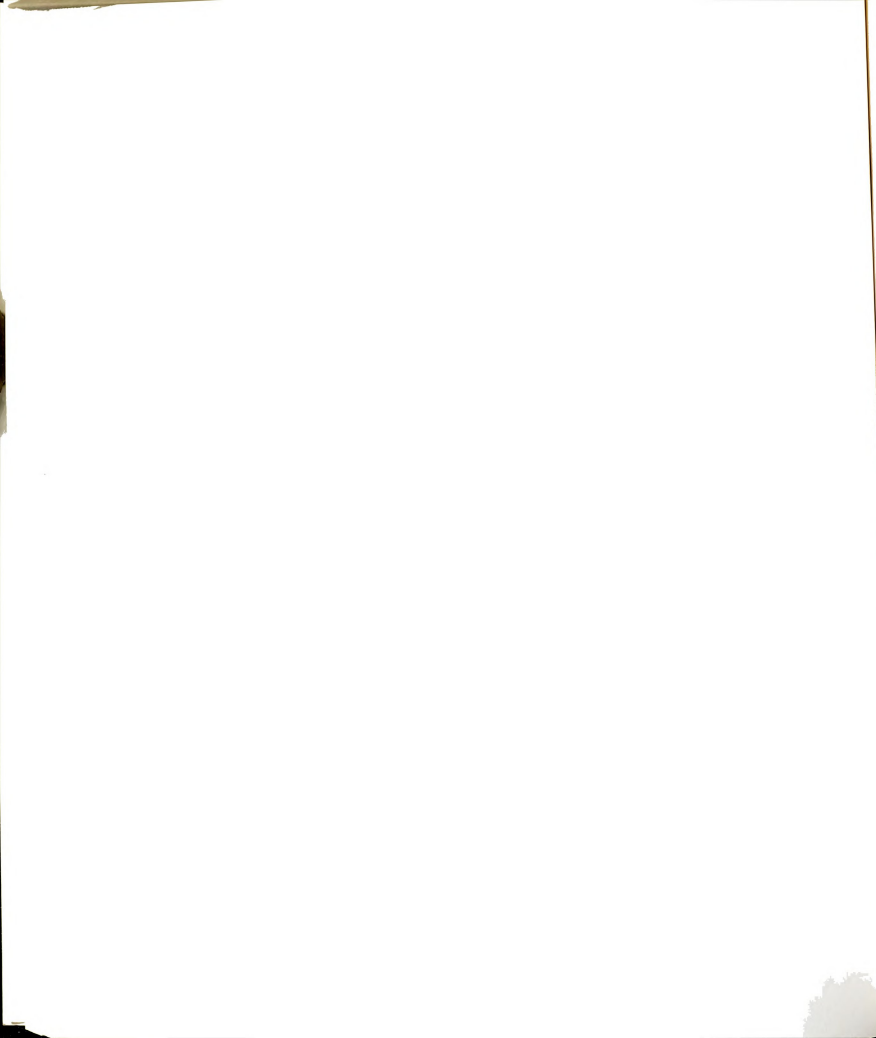
٣ - اني قادر على توجيه نموي الوظيفي.

٤ - أعتقد أن برامج التأهيل أثناء الخدمة يجب أن توفر خيارات أخرى للذين لا يرغبون الالتحاق فسي برامج التأهيل .

٥ - كل معلم / معلمة يجب أن يكون مسؤولاً عن تحسين أدائه المهني .

٦ - يجب توفير الثقة بين المعلمين / المعلمات ومنظمي البرامج .

٧ - أعتقد أنه يجب على برامج التأهيل التربوي أثناء الخدمة أن تساعد المعلمين / المعلمات على التخلص من الأنماط التقليدية التي تعيق نموهم الوظيفي .



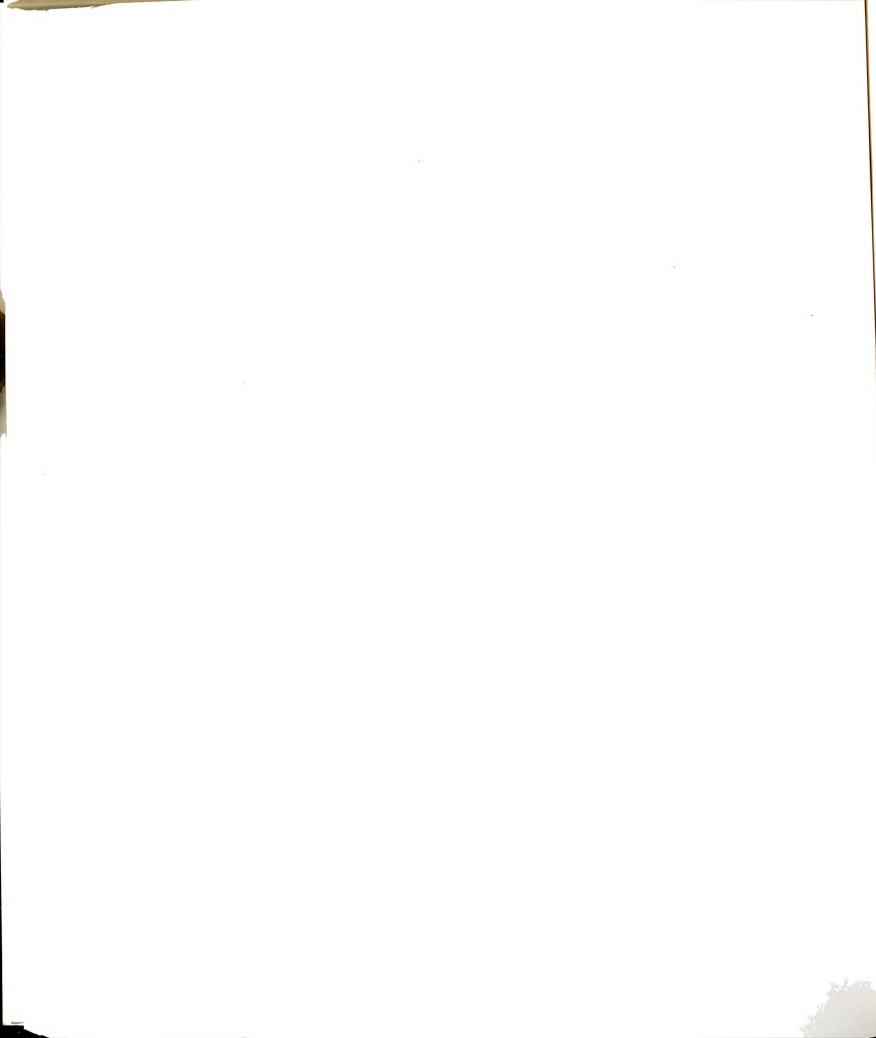
(د)

" ٢ "

تكرار الحدوث				
لا يحدث أبداً	نادراً	أحياناً	مراراً	دائماً
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي				
درجة الموافقة				
أوافق بشدة	أوافق	لا أعظم	لا أوافق بشدة	أعظم
٥	٤	٣	٢	١
٨ - يسمح للمعلمين / المعلمات بوضع أهدافهم الخاصة بهم في برامج التأهيل .				
٥	٤	٣	٢	١
٩ - من الواجب أن يكون هناك هدفاً واضحاً لبرامج التأهيل .				
٥	٤	٣	٢	١
١٠ - يجب أن يعامل المعلمين/المعلمات كمتعلمين راشدين في برامج التأهيل التربوي أثناء الخدمة .				
٥	٤	٣	٢	١
١١ - يجب أن يعامل المعلمين/المعلمات كذوي خبرات تربوية في برامج التأهيل التربوي أثناء الخدمة .				
٥	٤	٣	٢	١
١٢ - أفضل أن أشارك في مجموعة تعليمية مهيأة من المعلمين/المعلمات على أن أستمع للمحاضرات .				
٥	٤	٣	٢	١
١٣ - برامج التأهيل أثناء الخدمة يجب أن تساعد المعلمين/المعلمات على أن يتعرفوا على ذواتهم بطريقة أفضل .				
٥	٤	٣	٢	١



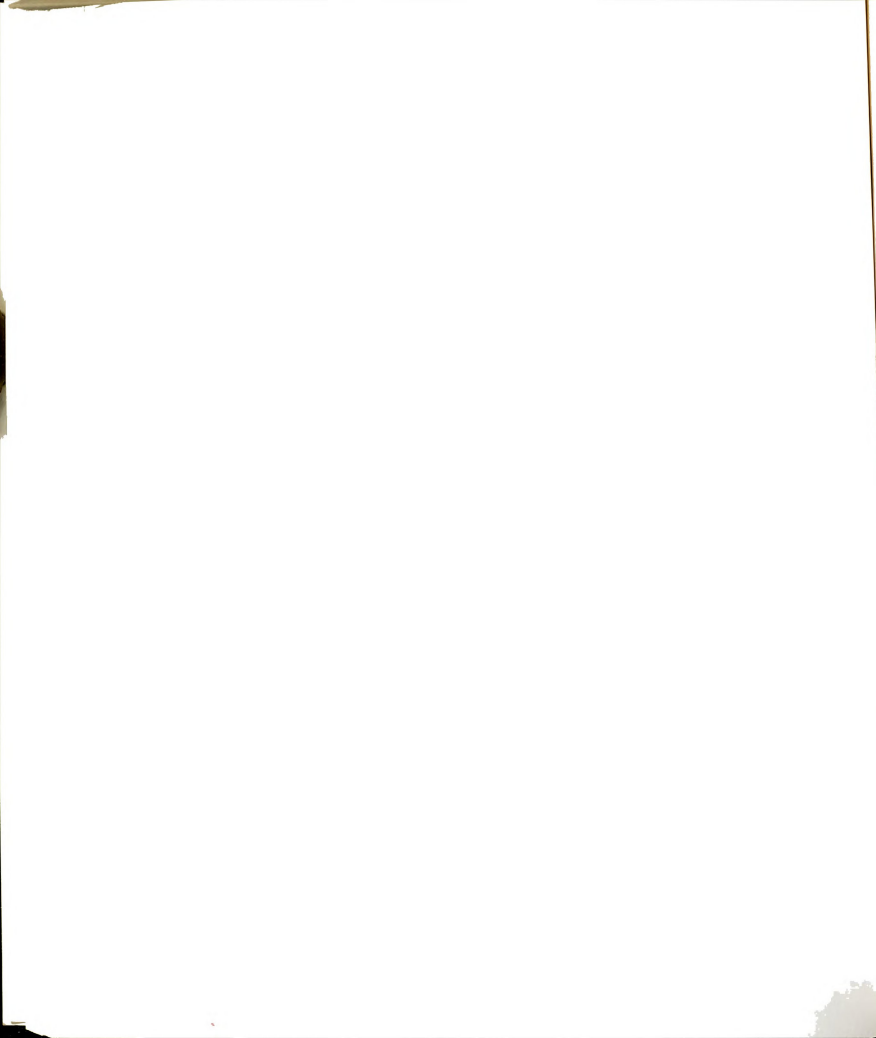
(٦)

" ٢ "

تكرار الحدوث				
لا يحدث أبداً	نادر	أحياناً	مراراً	دائماً
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي					درجة الموافقة				
					أوافق بشدة	أوافق	لا أعلم	لا أوافق	أعارض بشدة
١٤- النظريات التي تقدم في برامج التأهيل أثناء الخدمة يجب أن تكون لها علاقة مباشرة بخبرات المعلمين / المعلمات الشخية .					٥	٤	٣	٢	١
١٥- يسمح لي بعرض خبراتي التعليميه في برامج التأهيل أثناء الخدمة .					٥	٤	٣	٢	١
١٦- التقويم الذاتي يجب أن يكون جزءاً مضمناً لبرامج التأهيل التربوي أثناء الخدمة .					٥	٤	٣	٢	١
١٧- أفضل برامج التأهيل أثناء الخدمة هي التي تساعدني على تعلم طرق جديده للتعامل مع اهتماماتي .					٥	٤	٣	٢	١
١٨- اجتماعات برامج التأهيل أثناء الخدمة يجب أن تعقد في أوقات تلائم المعلمين / المعلمات .					٥	٤	٣	٢	١
١٩- يجب أن يؤكد على حل المشاكل التي تهم المعلمين / المعلمات في صفوف الدراسه في برامج التأهيل التربوي أثناء الخدمة .					٥	٤	٣	٢	١



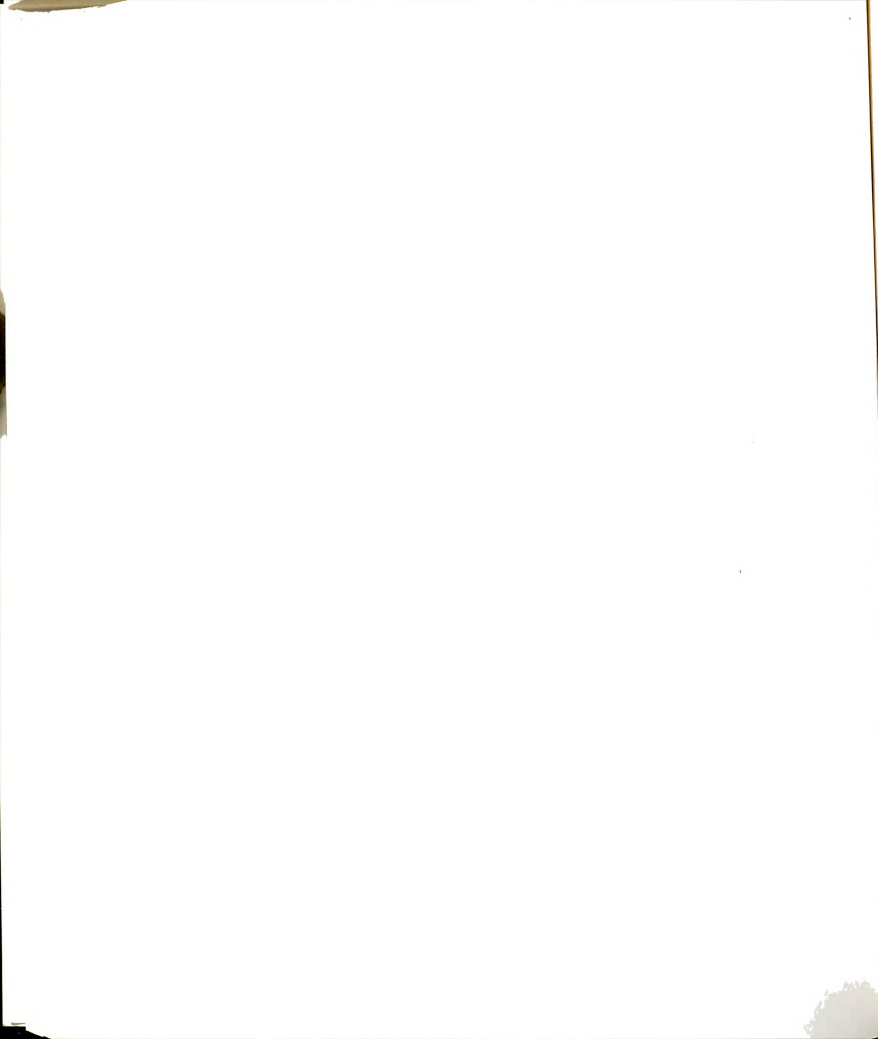
(٧)

" ٢ "

تكرار الحدث				
لا يحدث أبداً	نادر	أحياناً	بشكل متكرر	دائماً
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

الرقم التأهيل والتدريب التربوي					درجة الموافقة				
أوافق بشدة	أوافق	لا أعلم	لا أقول	أعاري بشدة	أوافق بشدة	أوافق	لا أعلم	لا أقول	أعاري بشدة
٥	٤	٣	٢	١	٥	٤	٣	٢	١
٢٠ - يجب تكوين مجموعات تعليمية مغيرة لتحل المشاكل التعليمية في برامج التأهيل التربوي أثناء الخدمة .					٥	٤	٣	٢	١
٢١ - يجب على المعلمين/المعلمات أن ينظموا أنفسهم في مجموعات تعليمية بناءً على رغباتهم وحاجاتهم في برامج التأهيل .					٥	٤	٣	٢	١
٢٢ - يجب تشجيع المعلمين/المعلمات على إعادة النظر نحو مشاعرهم واتجاهاتهم وسلوكهم إزاء برامج التأهيل التربوي أثناء الخدمة .					٥	٤	٣	٢	١
٢٣ - على المشرفين على برامج التأهيل التربوي أثناء الخدمة أن يبينوا للمعلمين/المعلمات أن قدراتهم وخبراتهم مقدرة ومحترمة فسي البرنامج .					٥	٤	٣	٢	١





(٨)

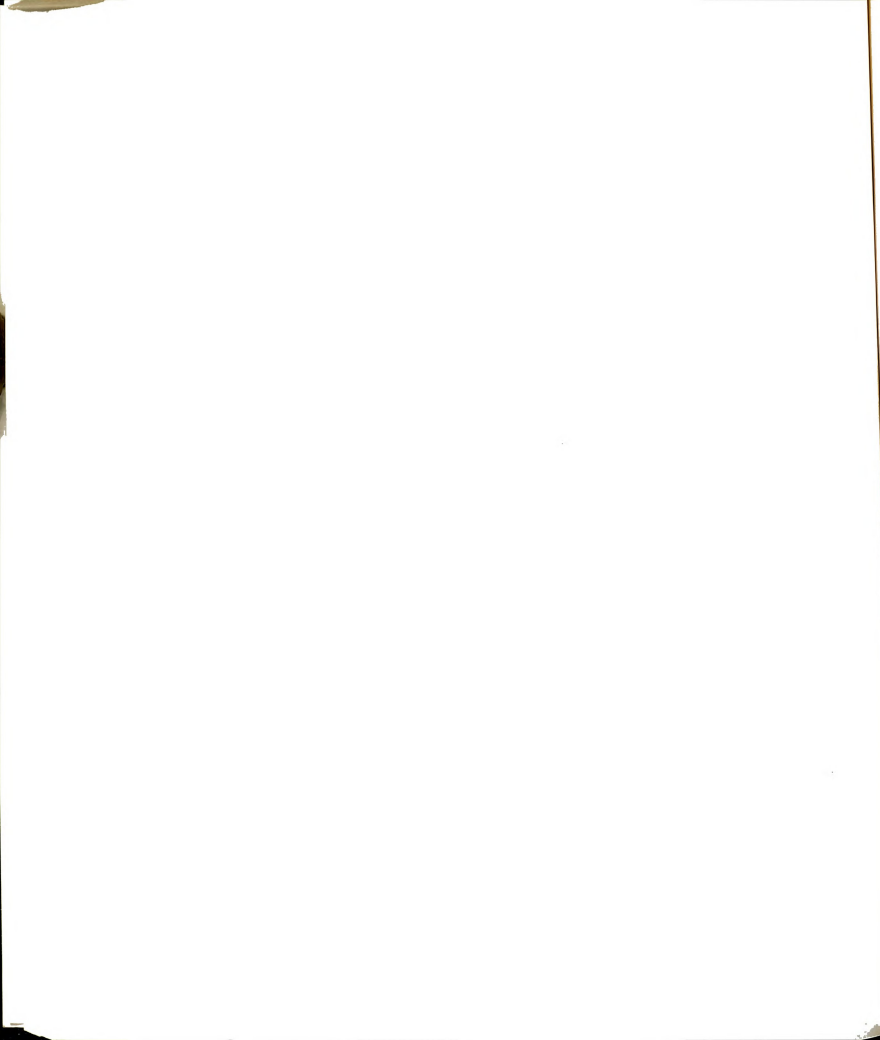
" ٢ "

تكرار حدوث				
لا يحدث أبدا	نادرا	أحيانا	مرارا	دائما
٥	٤	٣	٢	١
٥	٤	٣	٢	١

" ١ "

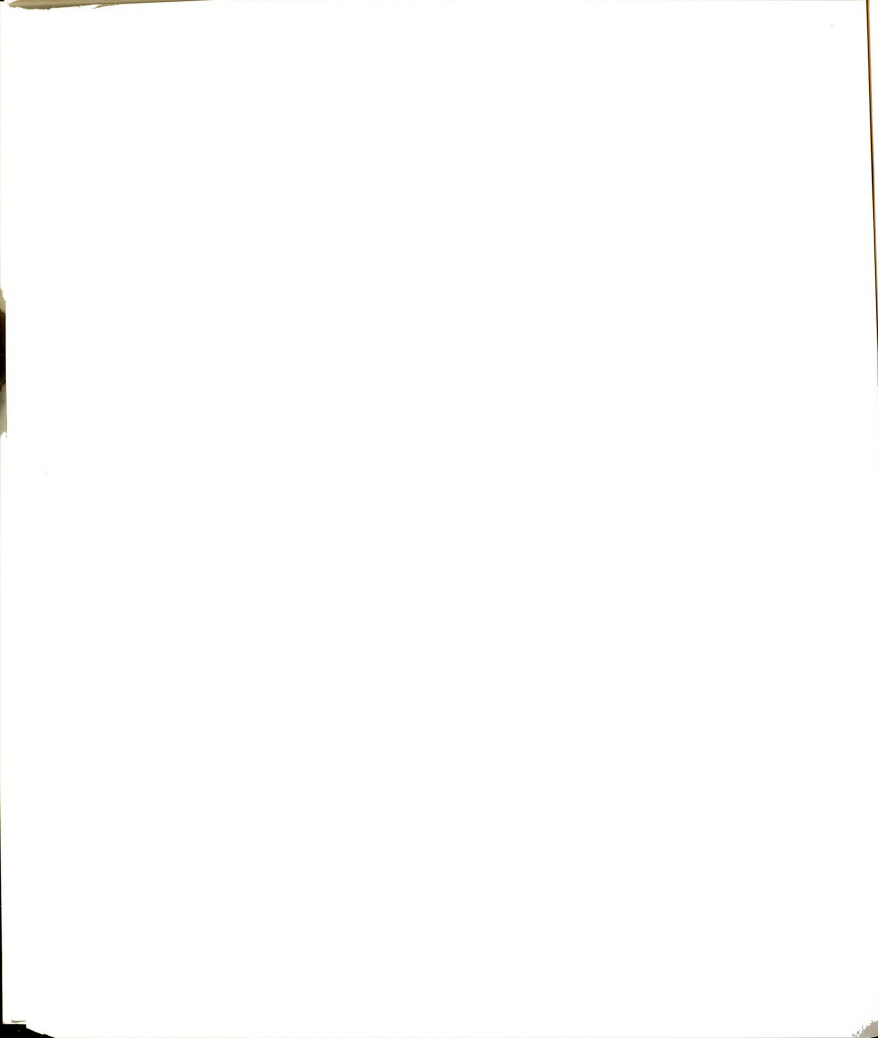
الرقم التأهيل والتدريب التربوي					درجة الموافقة				
					أعظم بشده	لا أو القليل	لا أعلم	أوافق بشده	أوافق بشده
٢٤ - على المشرفين على برامج التأهيل أثناء الخدمة أن يكونوا جوا من المذاقه والتعاون مع المعلمين / المعلمات المشاركين في البرنامج .					٥	٤	٣	٢	١
٢٥ - التعاون بين المعلمين/المعلمات المشاركين في اجتماعات التأهيل التربوي أثناء الخدمة عامل مهم في التعليم .					٥	٤	٣	٢	١

شكرا جزيلا



**APPENDIX B**

**CORRESPONDENCE**



## MICHIGAN STATE UNIVERSITY

EVENING COLLEGE • KELLOGG CENTER

EAST LANSING • MICHIGAN 48824-1022

May 3, 1989

Minister of Education  
Jordan-Amman

Dear Sir:

I am writing to you on behalf of Mr. Yahya Affash, who is at present a doctoral student from Jordan under my direction, in the College of Education, Department of Educational Administration at Michigan State University.

Mr. Affash has proposed a doctoral research study on:

"The Needs of Teachers as Adult Learners as Perceived by Teachers and Supervisors in In-Service Teacher Education Programs in Jordan."

He plans to do his research in the next few months, and in order to complete his study, needs to have your approval and help in gathering data from public school teachers and supervisors in the Mafrag District.

His Doctoral Committee feels that his study will contribute significantly in advancing educational knowledge in the fields of Adult and Teacher Education, and will also provide valuable information for your Ministry of Education.

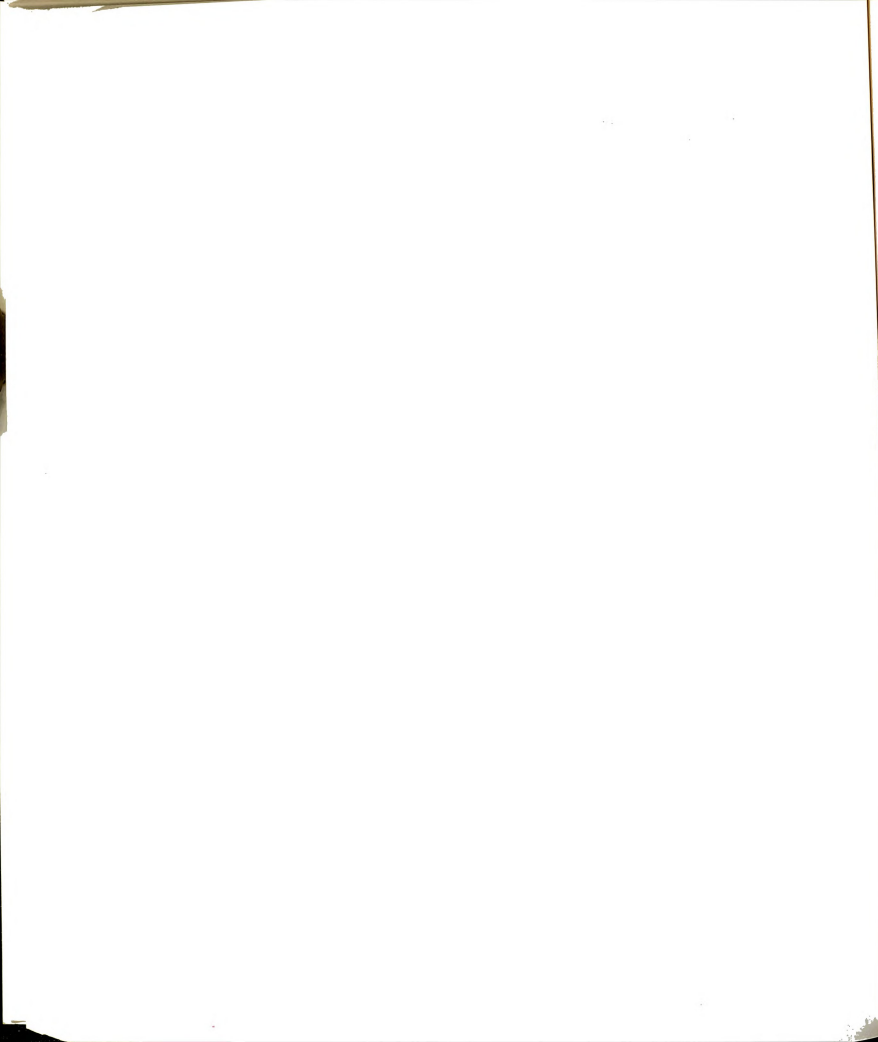
Your approval and help in the research study will be very much appreciated. If further information is needed, we will be pleased to comply.

Sincerely,



Dr. Charles A. McKee  
Professor and Committee Chairman  
Department of Educational Administration  
College of Education  
18 Kellogg Center

CAM:dt



## MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING  
HUMAN SUBJECTS (UCRIHS)  
206 BERKELEY HALL  
(517) 353-9738

EAST LANSING • MICHIGAN • 48824-1111

May 19, 1989

# 89-257

Yahya M. Affash  
1512 #E Spartan Village  
E. Lansing, Michigan 48823

Dear Mr. Affash:

Re: The Needs of Teachers as Adult Learners as Perceived by Teachers and  
Supervisors in In-service Teacher Education Programs in Jordan 89-257

The above project is exempt from full UCRIHS review. I have reviewed the proposed research protocol and find that the rights and welfare of human subjects appear to be protected. You have approval to conduct the research.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval one month prior to May 19, 1990.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

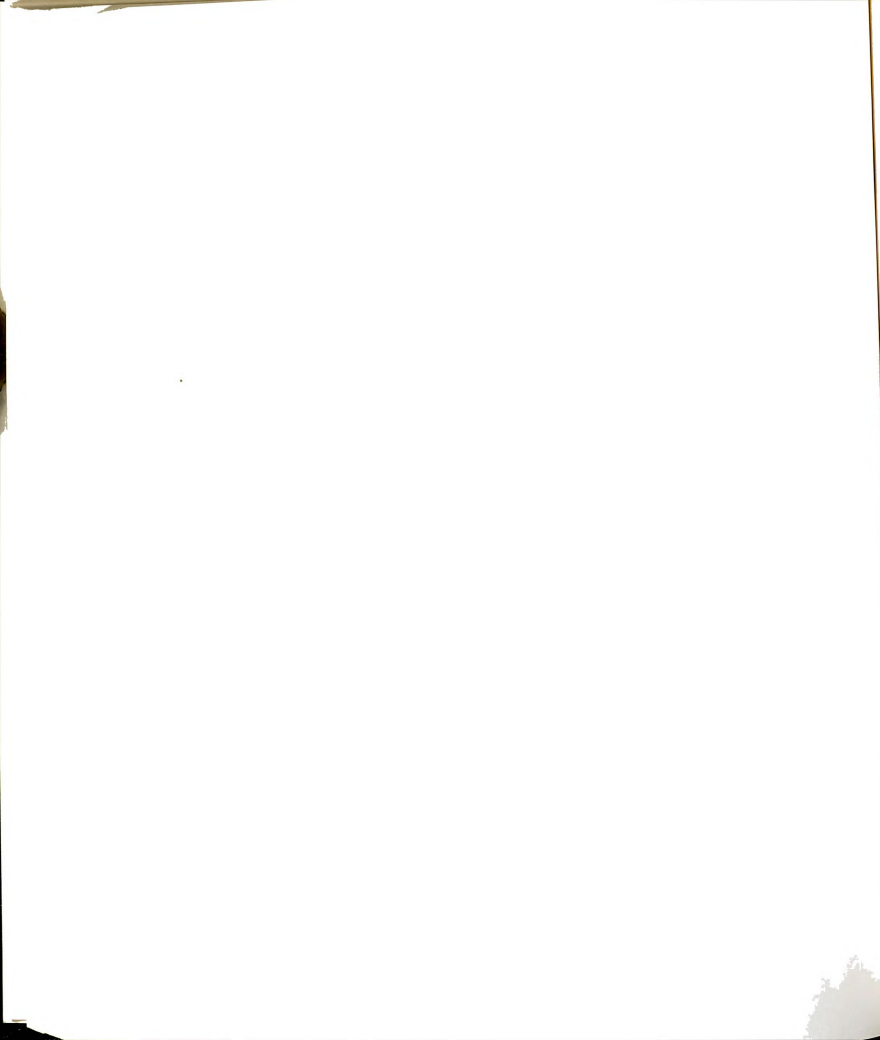
Sincerely,



John K. Hudzik, Ph.D.  
Chair, UCRIHS

JKH/mm

cc: Dr. McKee





# CUMBERLAND TRACE ELEMENTARY

830 Cumberland Trace Road  
Bowling Green, Kentucky 42101

Telephone 502/781-1356

ROBERT J. GOVER  
Superintendent

DENNIS O. MINIX  
Principal

March 6, 1989

Mr. Yahya M. Affash  
1512 #E Spartan Village  
E. Lansing, MI 48823

Dear Mr. Affash:

Please find enclosed a copy of the survey instrument I developed to collect data on teachers' views on inservice education. I am very much interested in your research and would appreciate feedback on your findings. In addition, I would like to have a copy of the translated instrument for my files.

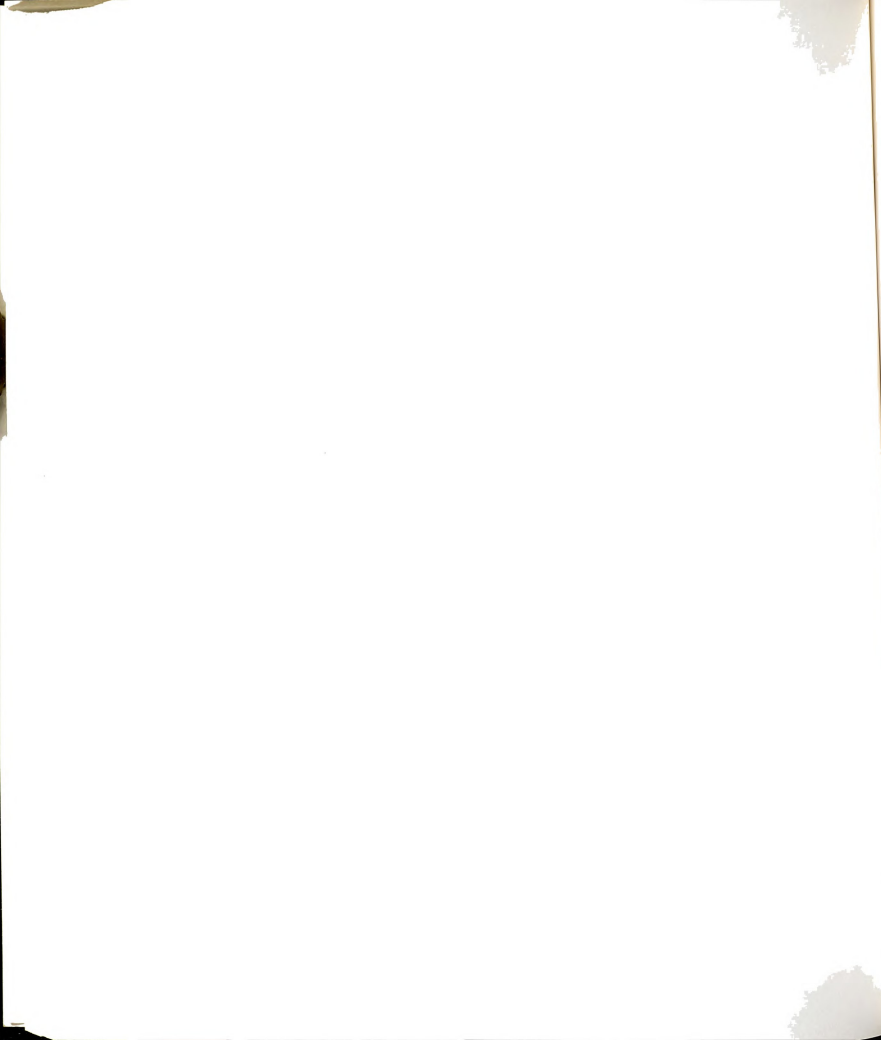
You have my permission to translate the instrument and to use it in your research. I am pleased that you have confidence in the quality of my work.

Good luck on your project and if I can be of additional help please feel free to call.

Sincerely,



Dennis O. Minix, Ed.D.



## MICHIGAN STATE UNIVERSITY

COLLEGE OF ARTS AND LETTERS  
DEPARTMENT OF LINGUISTICS AND GERMANIC,  
SLAVIC, ASIAN AND AFRICAN LANGUAGES  
A-615 WELLS HALL

EAST LANSING • MICHIGAN • 48824-1027

May 5, 1989

To Whom It May Concern:

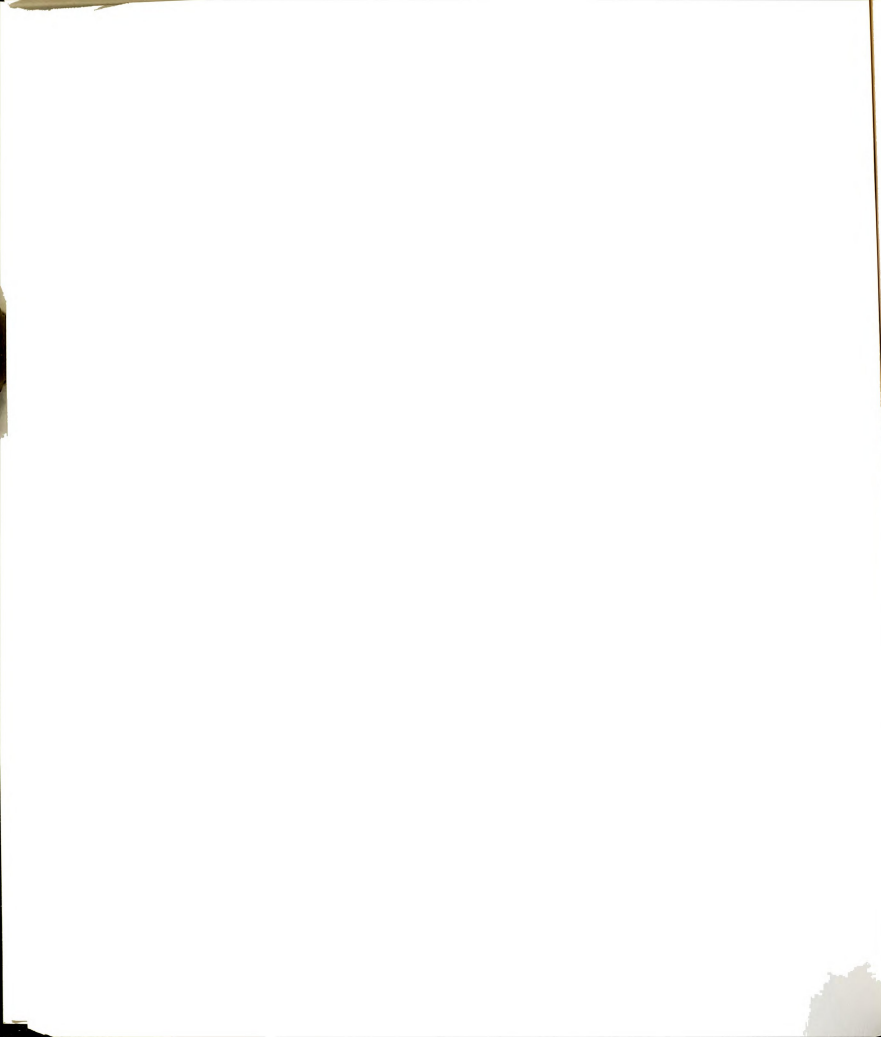
I hereby certify that Mr. Yahya M. Affash has translated into Arabic the cover letter and the questionnaire used as a tool in his research for his doctoral dissertation entitled, "The Needs of Teachers as Adult Learners as Perceived by Teachers and Supervisors in In-Service Teacher Education Programs in Jordan". The translation is accurate, reliable and faithful to the English original in both format and content.

I do wish him the best of luck.

Sincerely,

  
Khalil Al-Sughayer  
Arabic Instructor

Department of Linguistics and  
Germanic, Slavic, Asian and  
African Languages  
Michigan State University  
Wells Hall  
East Lansing, MI 48824-1027



THE HASHEMITE KINGDOM  
OF JORDAN  
MINISTRY OF EDUCATION

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



المملكة الأردنية الهاشمية  
وزارة التربية والتعليم

Ref. No. \_\_\_\_\_

Date \_\_\_\_\_

الرقم ١٠/٣  
التاريخ ١٤٠٩/١٠/٢٨  
الموافق ١٩٨٩/٥/٢٩

مدير التربية والتعليم لمحافظة المفرق

الموضوع: البحث التربوي والدراسات العليا

يقوم الطالب يحيى محمد ارشيد عفاش بدراسة موضوعها " تحديد حاجات المعلمين من التأهيل والتدريب  
كما يراها المعلمون والمشرفون التربويون " . ويحتاج لذلك زيارة المدارس التابعة لمديريتكم وتعبئة  
استبيان اعد لهذا الغرض .

ارجو تسهيل مهمته وتقديم المساعدة الممكنة له .

واقبلوا الاحترام

وزير التربية والتعليم

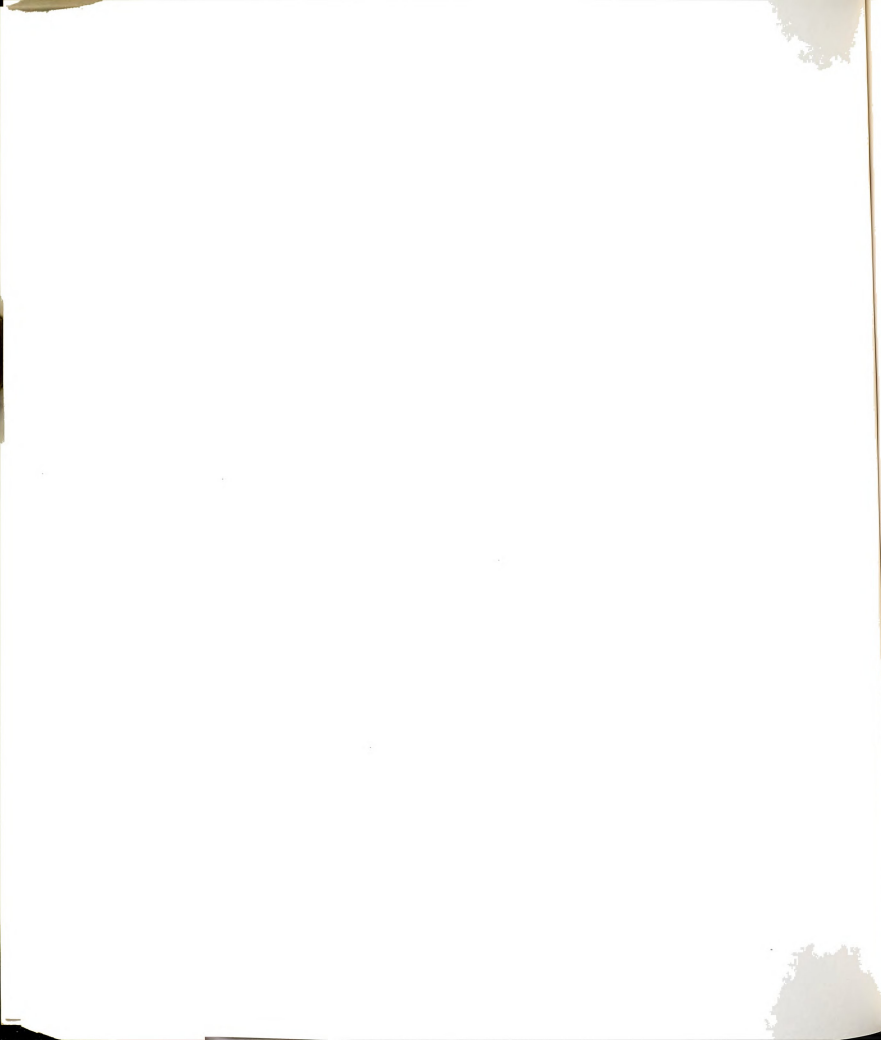
الدكتور عزت جرادات  
مدير عام التخطيط والتطوير  
والبحث التربوي

نسخة / لمدير عام التخطيط والتطوير والبحث التربوي

نسخة / لمدير البحث والتطوير التربوي

نسخة / لرئيس قسم البحث التربوي بالوكالة

نسخة / للملف رقم ١٠/٣



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم/ف/٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

المضيق الإداري الثاني  
مدرسة مكية مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

إشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحيى محمد رشيد عفاش" بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستبلغ الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمته وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الإداري

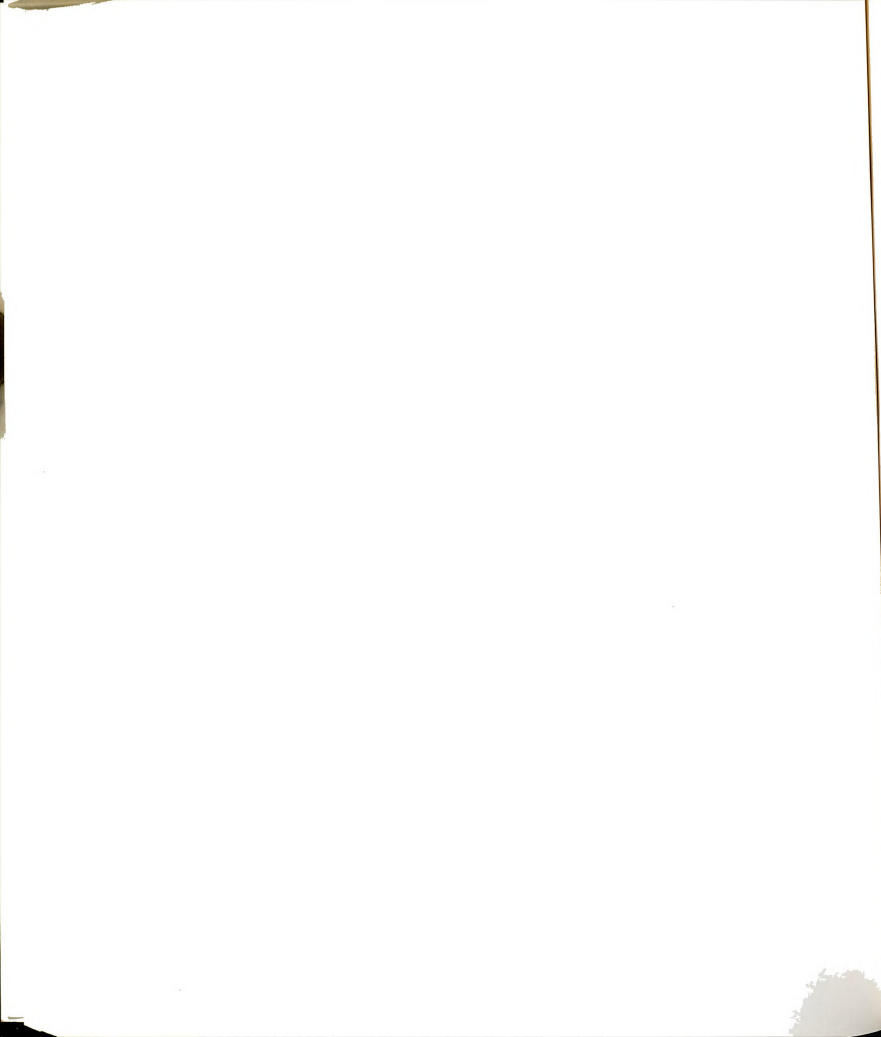
نسخة لـ "مفتي" التعليم

نسخة لـ "مفتي" الإشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

١٩٨٩/٥/٢٢/ك





بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٤

التاريخ ١٤٠٩/٦/١٤

الموافق ١٩٨٩/٥/٢٢

المديرية رايه بنت الحسين الثانوية للبنات  
مكة/منيرة مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ٢٥٤٧٤/٥/٢١ سيقوم الباحث  
"الطالب" يحيى محمد ارشيد عفاش" بدراسة موضوعها. "تحديد حاجات المعلمين من التأهيل والتدريب كما  
يراهها المعلمون والمشرفون التربويون" وستتبع الاستبانة على مداركم ولا مانع لدي من تسهيل مهمته  
وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

على جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

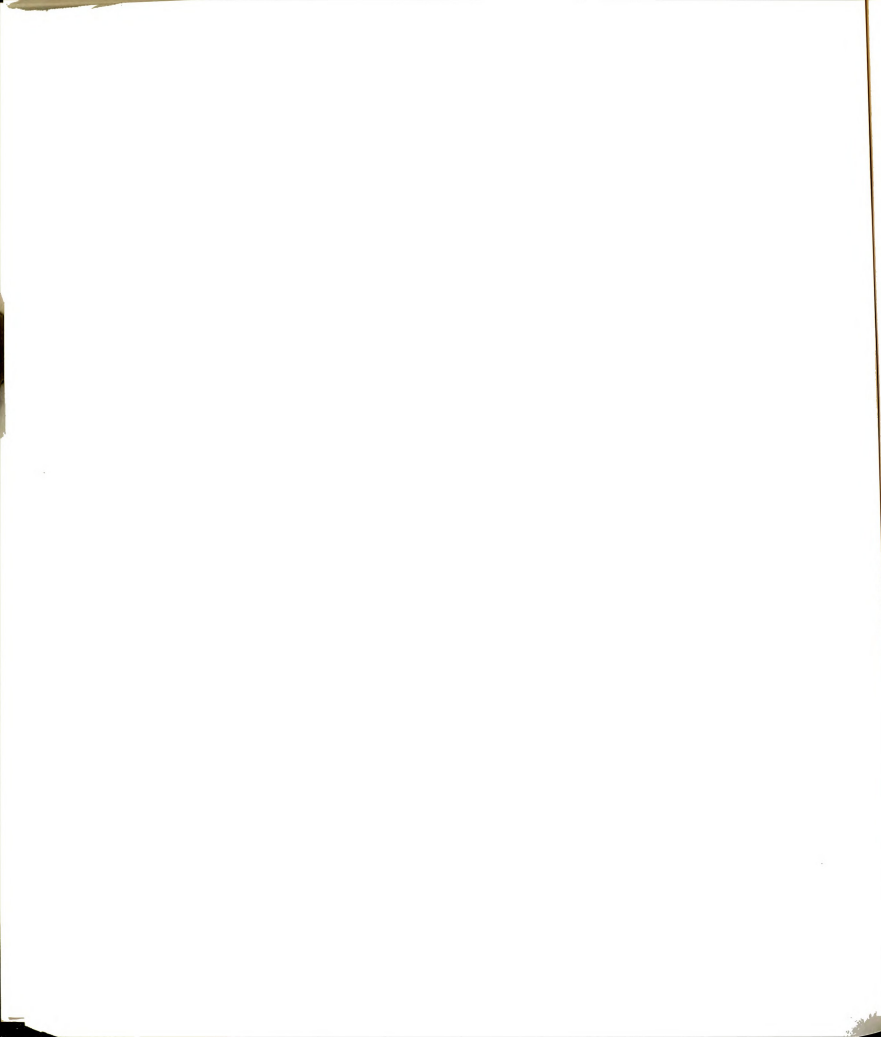
نسخة لمرشد التعليم

نسخة لمرشد الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

١٩٨٩/٥/٢٢/ك



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢

التاريخ ١٤٠٩/٩/١٤

الموافق ١٩٨٩/٥/٢٢

المستند الثاني للبيان  
مكرر/مديرية مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحيى محمدا رشيد عفاش " بدراسة موضوعها "تحديد حاجات المعلمين من التاهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستلج الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمة وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

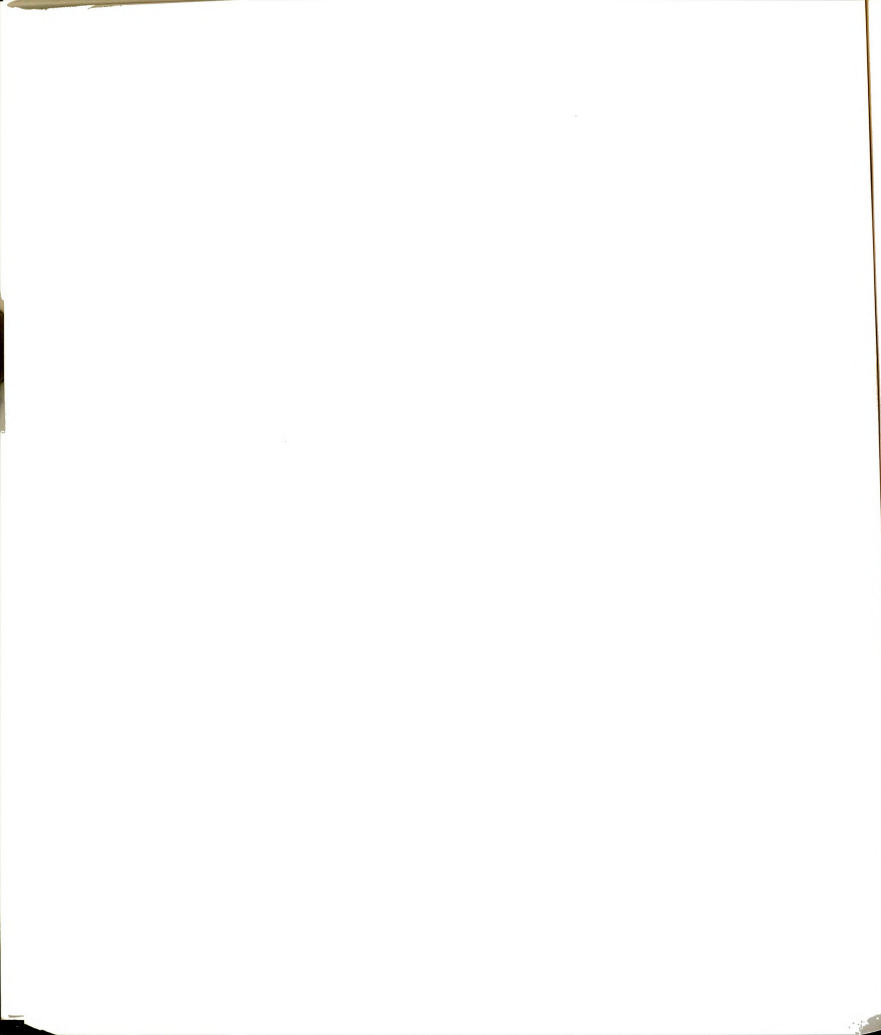
نسخة لرقى التعليم

نسخة لرقى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

أ.ك. ١٩٨٩/٥/٢٢



بسم الله الرحمن الرحيم  
 مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
 التاريخ ١٤٠٩/٦/١٤  
 الموافق ١٩٨٩/٥/٢٢

بناءً على زيادة الالتحاق  
 بمديرية مدرسة .....  
 الموضوع / البحث التربوي والدراسات العليا

إشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيتم الباحث  
 "الطالب" يحيى محمد رشيد عفاش" بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما  
 يراها المعلمون والمثقفون التربويون" وستنوع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمة  
 وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جندوع قباهه

نسخة للمدير الفني

نسخة للمدير الإداري

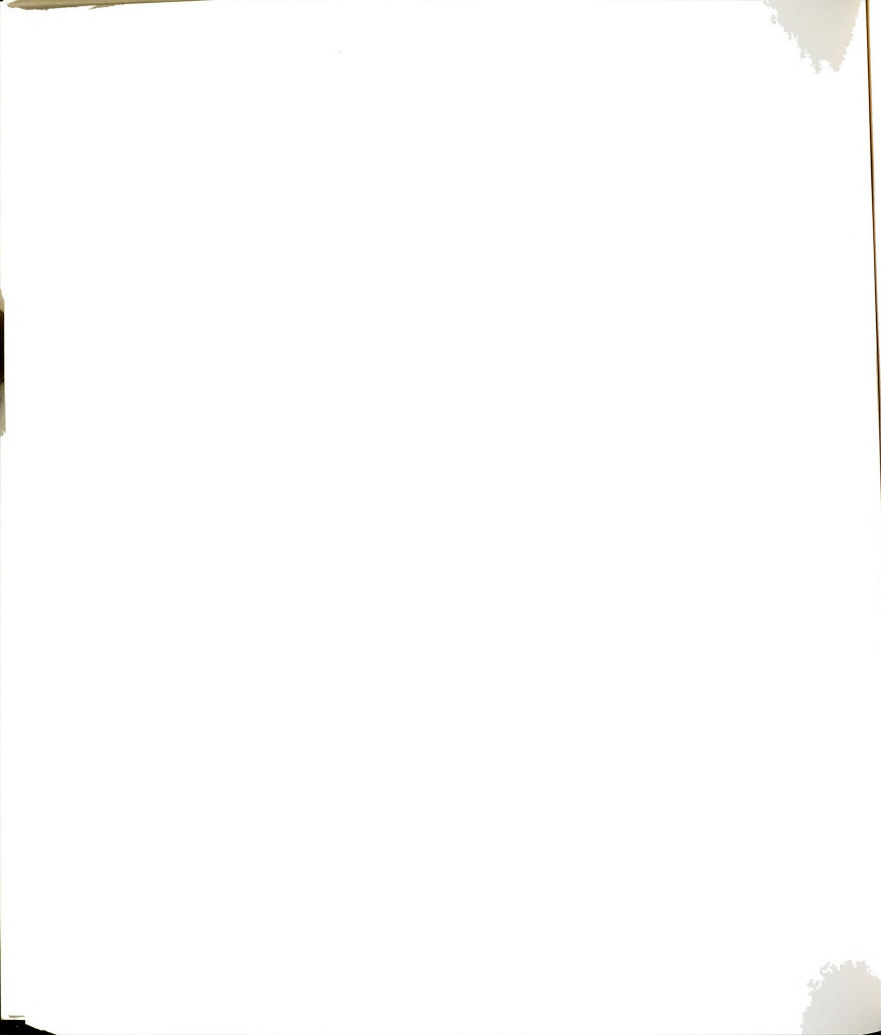
نسخة لرقم التعليم

نسخة لرقم الإشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة /التعليم .

١٩٨٩/٥/٢٢ /اك



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

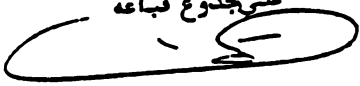
الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

بنات في العليات الابتدائية  
مكتب مديرية مدرسة .....  
الموضوع / البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث  
"الطالب" يحيى محمدا رشيد عفاش " بدراسة موضوعها: "تحديد حاجات المعلمين من التأهيل والتدريب كما  
يراهها المعلمون والمشرفون التربويون" وستلج الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمته  
وتقديم المساعدة الممكنة له .

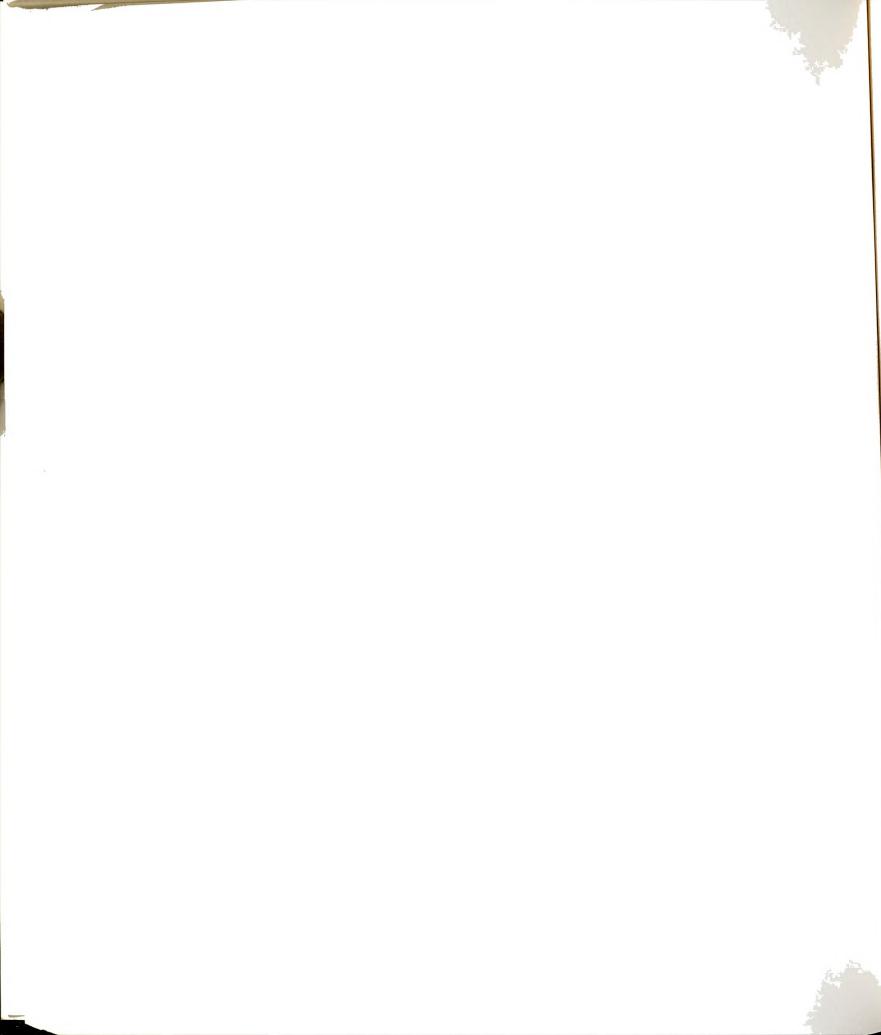
مدير التربية والتعليم

على جدوع قباعة



نسخة للمدير الفني  
نسخة للمدير الاداري  
نسخة لرقى التعليم  
نسخة لرقى الاشراف  
نسخة لكل مشرف تربوي  
نسخة ملف المتابعة /التعليم .

أث ١٩٨٩/٥/٢٢





بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم / ٢٣ / ٧ / ٩٠٦٤  
التاريخ ١٤٠٩ / ٩ / ١٤  
الموافق ١٩٨٩ / ٥ / ٢٤

بنات في صفوف الإعدادية  
مكتب / مديرية مدرسة .....  
الموضوع / البحث التربوي والدراسات العليا

إشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤ / ١٠ / ٣ تاريخ ١٩٨٩ / ٥ / ٢١ سيقوم الباحث "الطالب" يحيى محمد ارشيد عفاش" بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستتبع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمت وتقديم المساعدة الممكنة له.

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الإداري

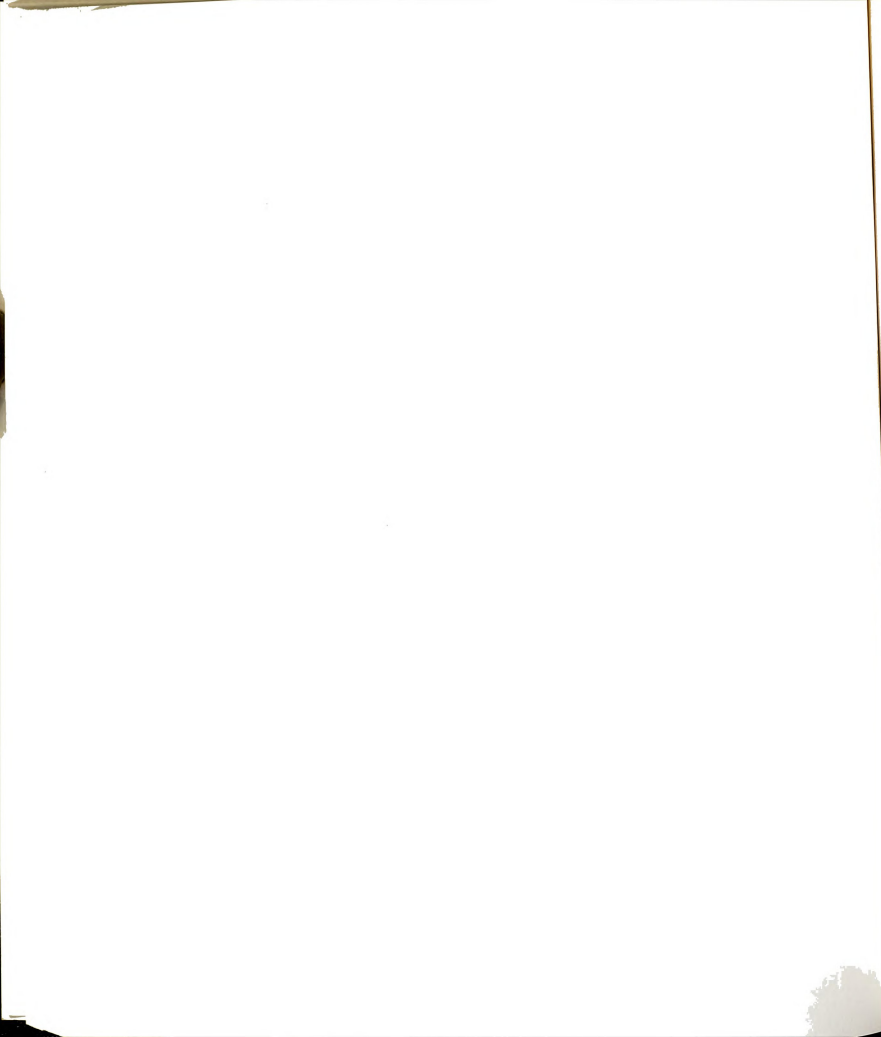
نسخة رتي التعليم

نسخة رق الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة / التعليم

١٩٨٩ / ٥ / ٢٤ / ١٤



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم/ف/٣٣/٧/ ٩٠٦٢

التاريخ ١٤٠٩/٩/١٤

الموافق ١٩٨٩/٥/٢٢

بناءً على زيادته الاعلانية  
مديرية مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحيى محمدا رشيد عفاش " بدراسة موضوعها: "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستلج الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمت وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

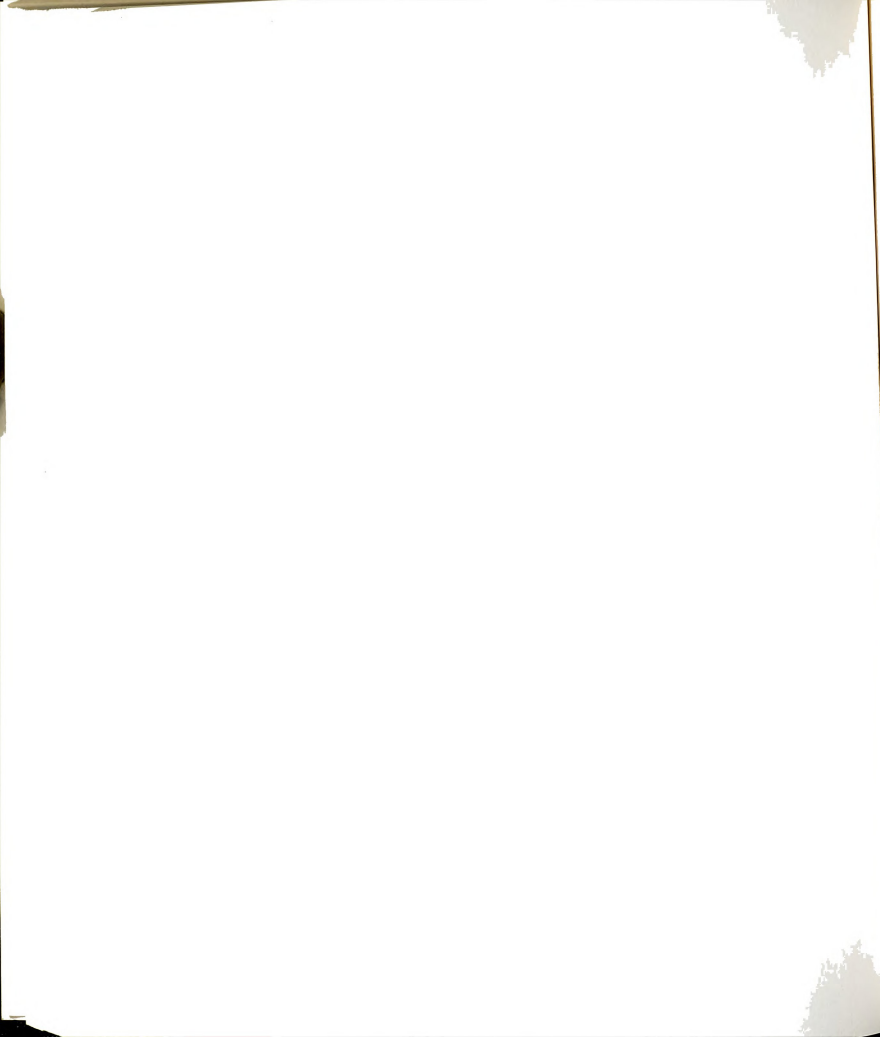
نسخة لرقم التعليم

نسخة لرقم الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

أث/ ١٩٨٩/٥/٢٢



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

بنات الربيع ليتت يعود الابدائيه  
مديرية مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحيى محمدا رشيد عفاش" بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستوزع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمته وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

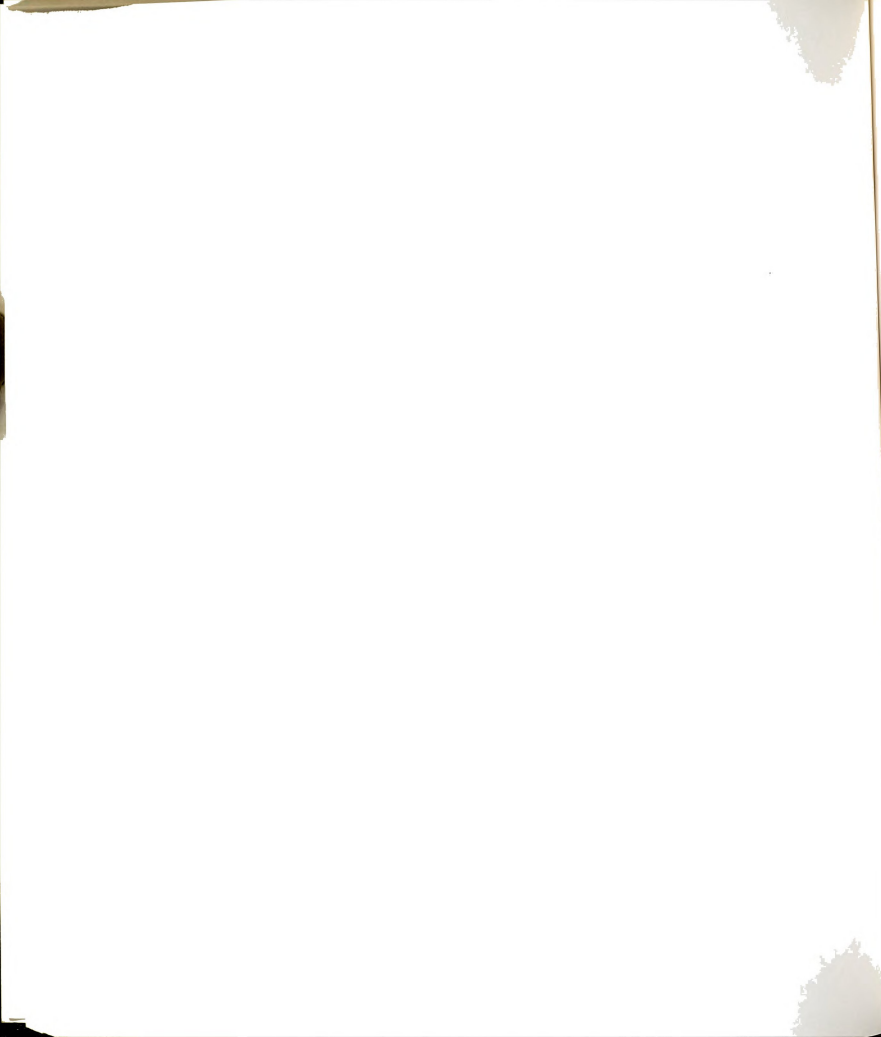
نسخة لرقى التعليم

نسخة لرقى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

أ.ك/ ١٩٨٩/٥/٢٢



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٦/١٤  
الموافق ١٩٨٩/٥/٢٢

بنات الحضره الاعداريه  
مديرية مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث  
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وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

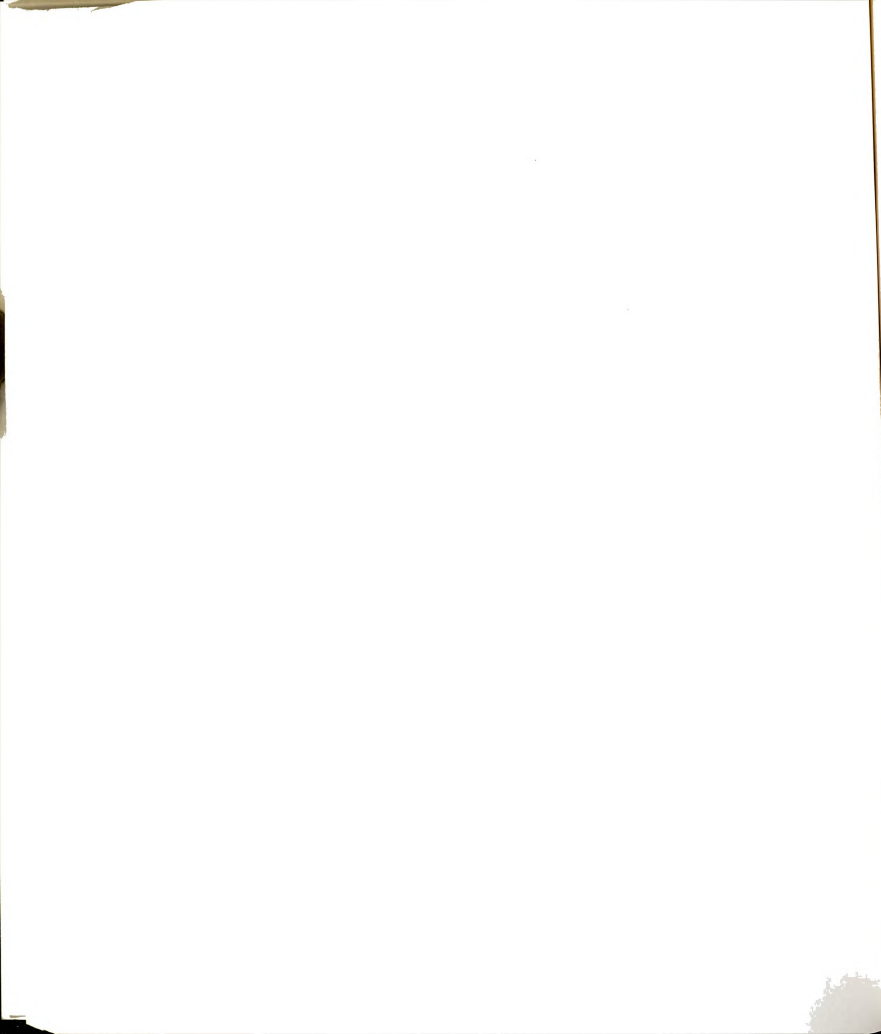
نسخة لرقى التعليم

نسخة لرقى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

أ.ك/ ١٩٨٩/٥/٢٢





بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢

التاريخ ١٤٠٩/٩/١٤

الموافق ١٩٨٩/٥/٢٢

الحضرة الثانوية للبنين

مدير مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحيى محمدا رشيد عفاش" بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستتبع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمته وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

على جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

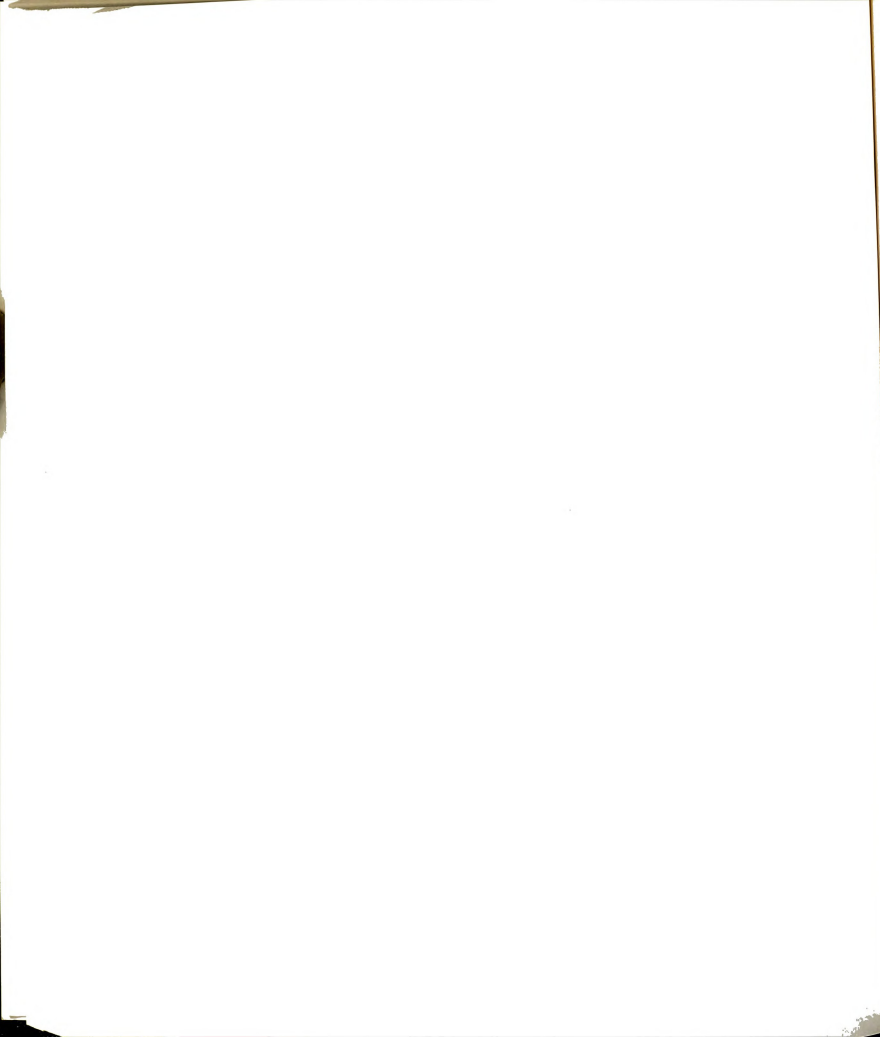
نسخة لقي التعليم

نسخة رق الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

أث/ ١٩٨٩/٥/٢٢



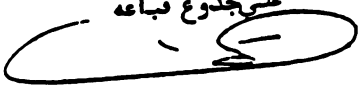
بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٦/١٤  
الموافق ١٩٨٩/٥/٢٢

فوزي الملقى الثانوي للبنين  
مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

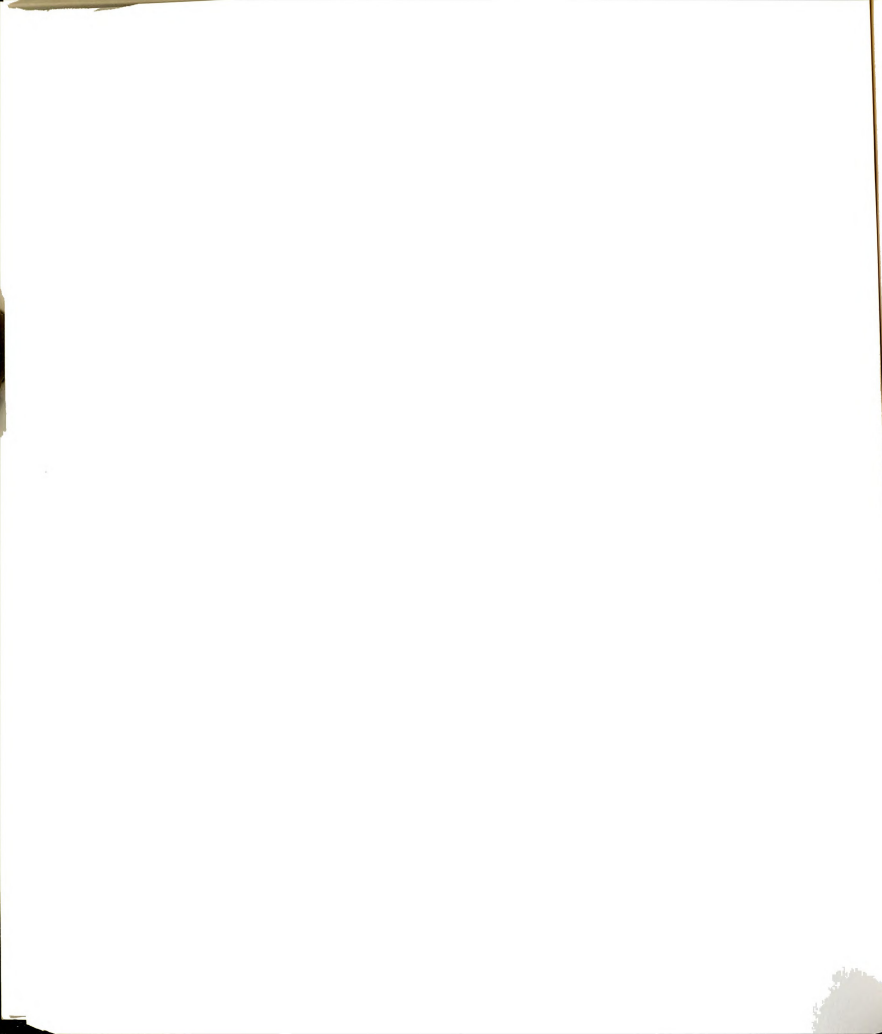
إشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحيى محمدا رشيد عفاش" بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستتبع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمته وتقديم المساعدة الممكنة له .

مدير التربية والتعليم  
علي جدوع قباعة



نسخة للمدير الفني  
نسخة للمدير الإداري  
نسخة لرقى التعليم  
نسخة لرق الإشراف  
نسخة لكل مشرف تربوي  
نسخة ملف المتابعة /التعليم .

أ.ك. /٢٢/ ١٩٨٩/٥/٢٢



بسم الله الرحمن الرحيم  
 مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢

التاريخ ١٤٠٩/٦/١٤

الموافق ١٩٨٩/٥/٢٢

المستفيد الثانوي للبنين  
 مدير مدرسة .....  
 الموضوع / البحث التربوي والدراسات العليا

إشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحيى محمدا رشيد عفاش " بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستوزع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمة وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الإداري

نسخة لمتى التعليم

نسخة لرقق الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة /التعليم .

أ.ك /٢٢/ ١٩٨٩/٥



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

المفارقة الاعداريه الاردن للبنين  
مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث  
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وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

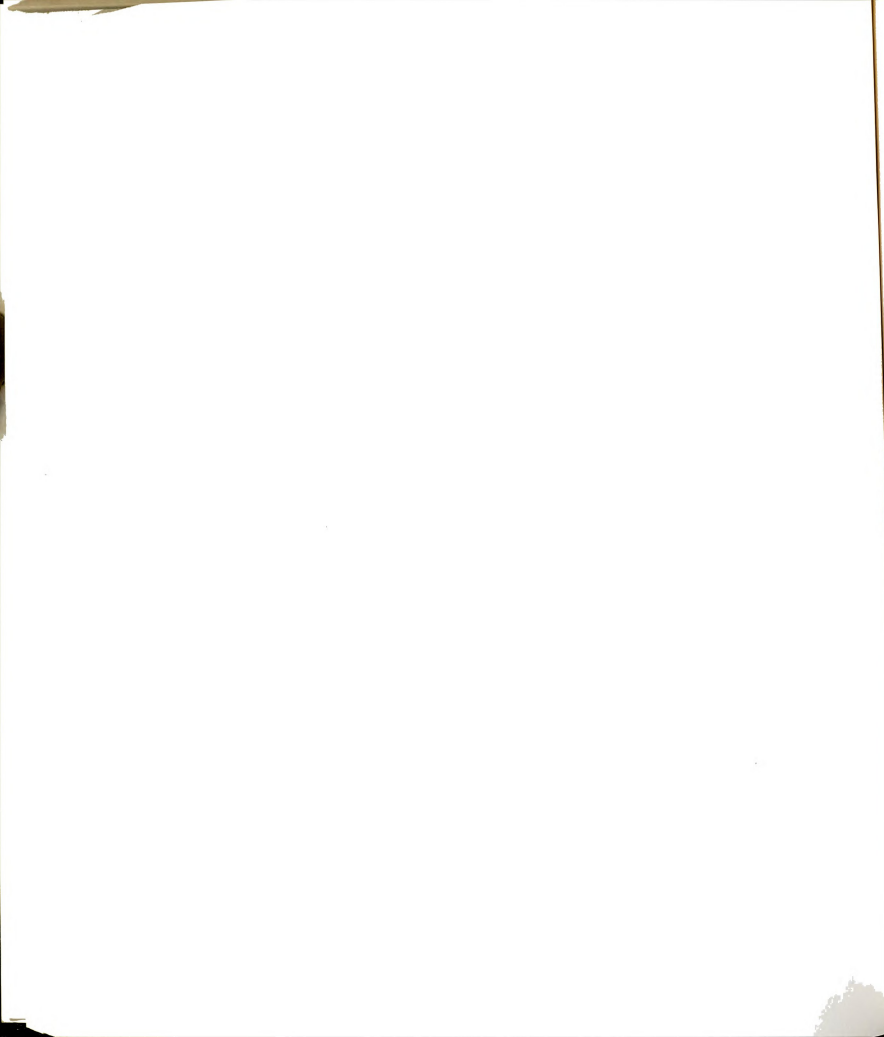
نسخة لرقى التعليم

نسخة لرقى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة /التعليم .

١٩٨٩/٥/٢٢/ك





بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢

التاريخ ١٤٠٩/٦/١٤

الموافق ١٩٨٩/٥/٢٢

عبدالله بن رواحه الابتدائي للبنين  
مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

أشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحي محمدا رشيد عفاش" بدراسة موضوعها "تحديد حاجات المعلمين من التأهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستتبع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمته وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

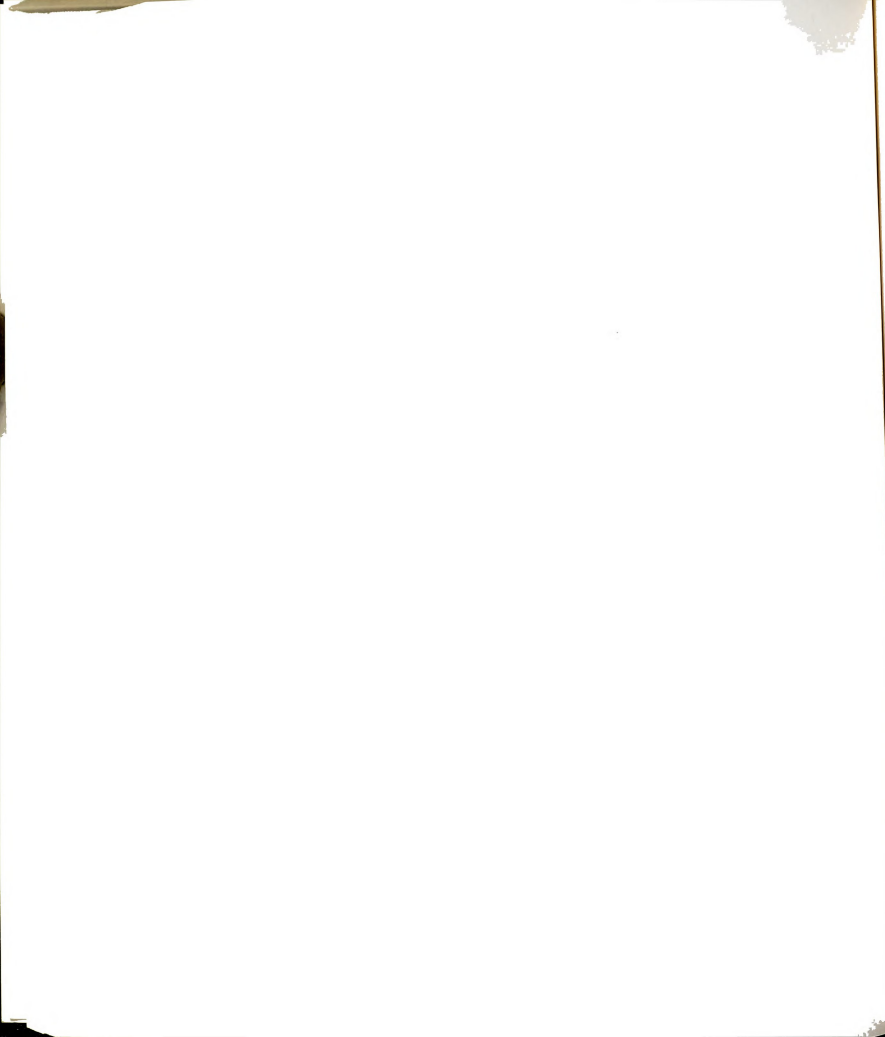
نسخة لرقى التعليم

نسخة لرقى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة /التعليم .

أث / ١٩٨٩/٥/٢٢



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

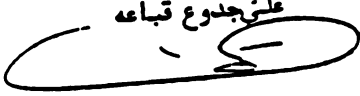
صباحاً الايتدا ييه للنس

مدرسة .....  
الموضوع / البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث "الطالب" يحي محمدا رشيد عفاش " بدراسة موضوعها "تحديد حاجات المعلمين من التاهيل والتدريب كما يراها المعلمون والمشرفون التربويون" وستتبع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمة وتقديم المساعدة الممكنة له .

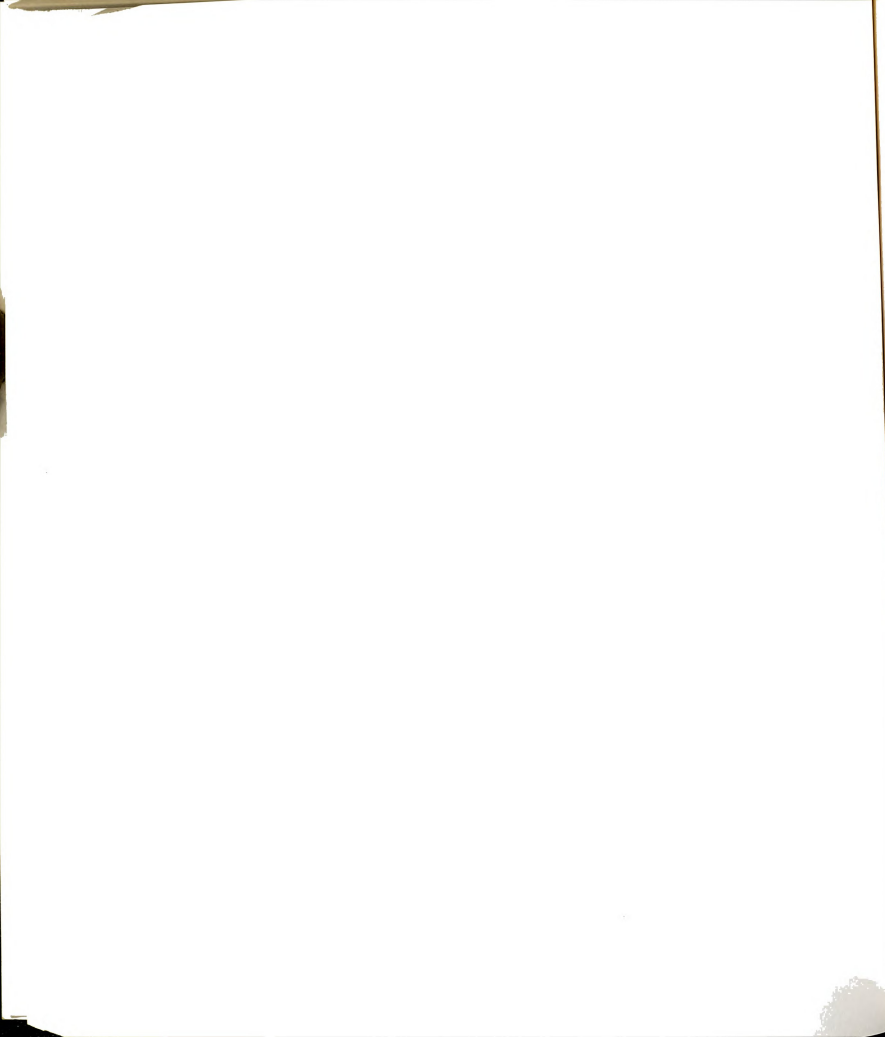
مدير التربية والتعليم

على جدوع قباعة



نسخة للمدير الفني  
نسخة للمدير الاداري  
نسخة لرقى التعليم  
نسخة لرقى الاشراف  
نسخة لكل مشرف تربوي  
نسخة ملف المتابعة /التعليم .

أ/ك /٢٢/٥/١٩٨٩



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

ام السعالم الشريف الاعداديه للبنين  
مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

اشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث  
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مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الاداري

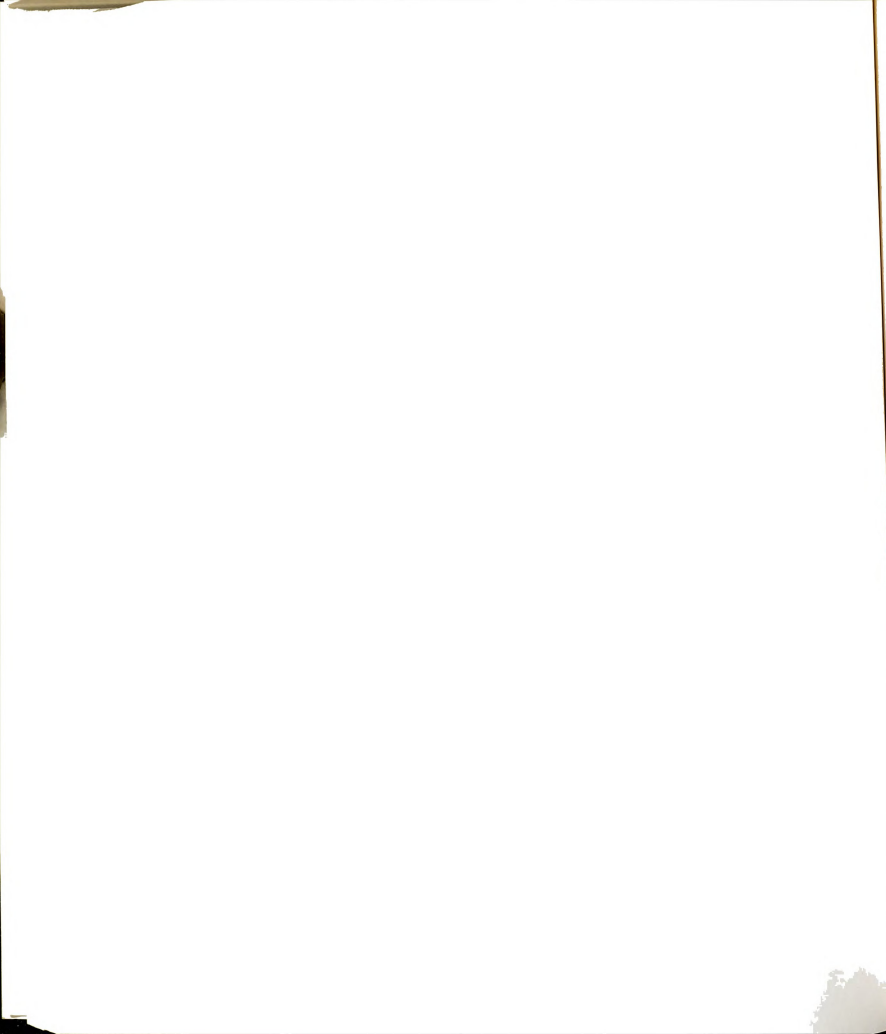
نسخة لرقى التعليم

نسخة لرقى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة /التعليم .

أ.ك/ ١٩٨٩/٥/٢٢



بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧/ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

المستشار الابتدائي للبيئي  
مدرسة /مكتبة مدرسة .....  
الموضوع/ البحث التربوي والدراسات العليا

إشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ١٩٨٩/٥/٢١ سيقوم الباحث  
"الطالب" يحيى محمدا رشيد عفاش " بدراسة موضوعها: "تحديد حاجات المعلمين من التأهيل والتدريب كما  
يراهها المعلمون والمشرفون التربويون" وستوزع الاستبانة على مدارسكم ولا مانع لدي من تسهيل مهمة  
وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الإداري

نسخة لرقى التعليم

نسخة لرقى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة/التعليم .

أ.ك/ ١٩٨٩/٥/٢٢





بسم الله الرحمن الرحيم  
مديرية التربية والتعليم لمحافظة المفرق

الرقم /ف/ ٣٣/٧ ٩٠٦٢  
التاريخ ١٤٠٩/٩/١٤  
الموافق ١٩٨٩/٥/٢٢

بنات المفرق الثانوية  
مكتمل /مديرة مدرسة .....  
الموضوع / البحث التربوي والدراسات العليا

إشارة لكتاب معالي وزير التربية والتعليم رقم ٢٥٤٧٤/١٠/٣ تاريخ ٢٥٤٧٤/١٠/٣١ سيقوم الباحث  
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وتقديم المساعدة الممكنة له .

مدير التربية والتعليم

علي جدوع قباعة

نسخة للمدير الفني

نسخة للمدير الإداري

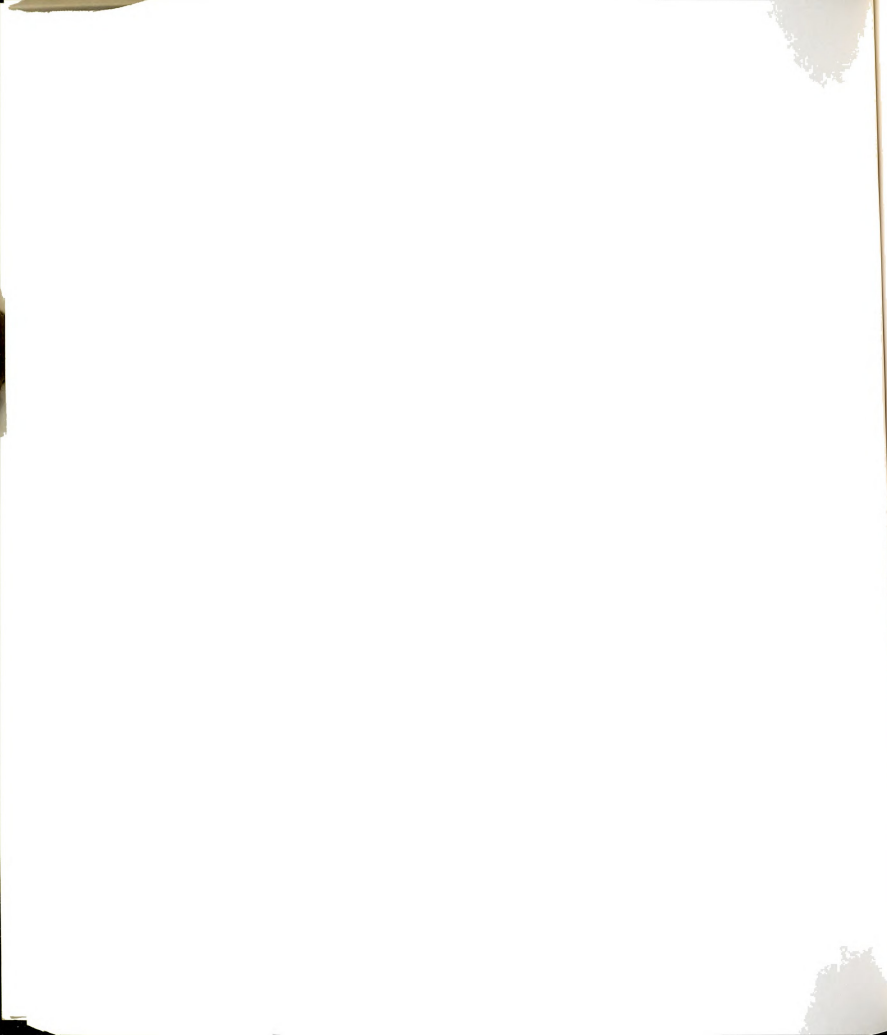
نسخة لـ قى التعليم

نسخة لـ قى الاشراف

نسخة لكل مشرف تربوي

نسخة ملف المتابعة /التعليم .

أ.ك. ١٩٨٩/٥/٢٢



## APPENDIX C

### OBSERVED FREQUENCY DISTRIBUTION TABLES



Table C.01.--Observed Frequency Distribution Regarding  
Inservice Needs of Teachers for the 25 Items  
by All Teachers (Extent of Agreement)

Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		SA	A	A/D	D	SD	
1	N	226	11	3	-	-	F6
	%	94.2	4.6	1.2	-	-	
2	N	176	59	5	-	-	F6
	%	73.3	24.6	2.1	-	-	
3	N	129	95	3	-	-	F1
	%	54.0	39.7	6.3	-	-	
4	N	92	127	21	-	-	F1
	%	38.3	52.9	8.8	-	-	
5	N	101	113	26	-	-	F1
	%	42.1	47.1	10.8	-	-	
6	N	84	132	24	-	-	F4
	%	35.0	55.0	10.0	-	-	
7	N	102	112	26	-	-	F4
	%	42.5	46.7	10.8	-	-	
8	N	106	107	27	-	-	F1
	%	44.2	44.6	11.2	-	-	
9	N	150	81	8	-	-	F4
	%	62.8	33.9	3.3	-	-	
10	N	80	134	25	-	-	Profess
	%	33.5	56.1	10.5	-	-	Adults
11	N	76	134	3	-	-	Profess
	%	31.8	56.1	12.1	-	-	Adults
12	N	85	121	32	1	-	F5
	%	35.5	50.6	13.4	0.4	-	
13	N	102	101	36	-	-	F3
	%	42.7	42.3	15.1	-	-	
14	N	102	117	20	-	-	F3
	%	42.7	49.0	8.4	-	-	
15	N	135	94	11	-	-	F1
	%	56.2	39.2	4.6	-	-	
16	N	87	137	16	-	-	F3
	%	36.2	57.1	6.7	-	-	



Table C.01. (cont'd.).

Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		SA	A	A/D	D	SD	
17	N	71	142	27	-	-	F2
	%	29.6	59.2	11.2	-	-	
18	N	121	97	22	-	-	F2
	%	50.4	40.4	9.2	-	-	
19	N	142	86	11	-	-	F2
	%	59.4	36.0	4.6	-	-	
20	N	96	125	18	-	-	F5
	%	40.2	52.3	7.5	-	-	
21	N	84	137	18	-	-	F2
	%	35.1	57.3	7.5	-	-	
22	N	98	116	24	-	-	F3
	%	41.2	48.7	10.1	-	-	
23	N	119	107	13	-	-	F2
	%	49.8	44.8	5.4	-	-	
24	N	97	109	33	-	-	F2
	%	40.6	45.6	13.8	-	-	
25	N	109	108	22	-	-	F2
	%	45.6	45.2	9.2	-	-	

SA - Strongly Agree  
 A - Agree  
 A/D - Agree/Disagree  
 D - Disagree  
 SD - Strongly Disagree





Table C.02.--Observed Frequency Distribution Regarding  
Inservice Needs of Teachers for the 25 Items  
by All Supervisors (Extent of Agreement)

Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		SA	A	A/D	D	SD	
1	N	20	-	-	-	-	F6
	%	100.0	-	-	-	-	
2	N	20	-	-	-	-	F6
	%	100.0	-	-	-	-	
3	N	12	8	-	-	-	F1
	%	60.0	40.0	-	-	-	
4	N	9	11	-	-	-	F1
	%	45.0	55.0	-	-	-	
5	N	7	10	3	-	-	F1
	%	35.0	50.0	15.0	-	-	
6	N	7	12	1	-	-	F4
	%	35.0	60.0	5.0	-	-	
7	N	7	12	1	-	-	F4
	%	35.0	60.0	5.0	-	-	
8	N	9	9	2	-	-	F1
	%	45.0	45.0	10.0	-	-	
9	N	19	1	-	-	-	F4
	%	95.0	5.0	-	-	-	
10	N	13	7	-	-	-	Profess
	%	65.0	35.0	-	-	-	Adults
11	N	8	11	1	-	-	Profess
	%	40.0	55.0	5.0	-	-	Adults
12	N	2	13	2	-	-	F5
	%	25.0	65.0	10.0	-	-	
13	N	4	14	2	-	-	F3
	%	20.0	70.0	10.0	-	-	
14	N	4	13	3	-	-	F3
	%	20.0	65.0	15.0	-	-	
15	N	18	2	-	-	-	F1
	%	90.0	10.0	-	-	-	
16	N	13	6	1	-	-	F3
	%	65.0	30.0	5.0	-	-	

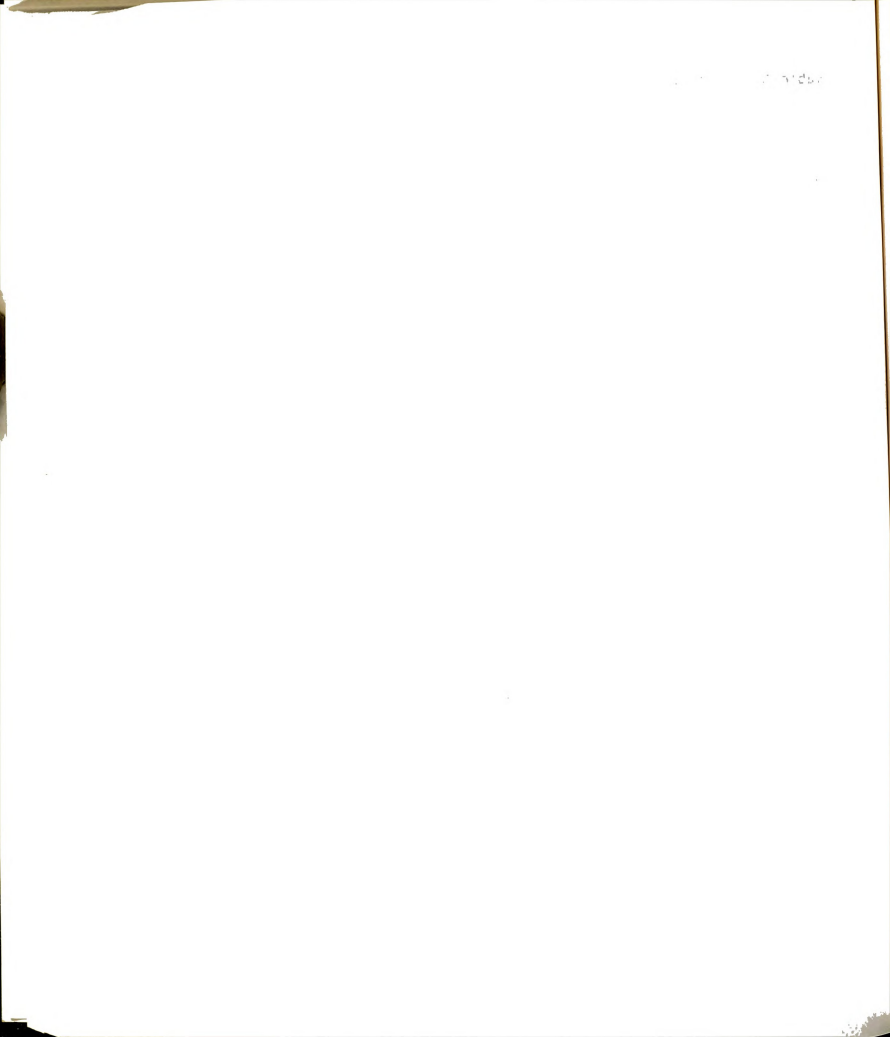


Table C.02. (cont'd.).

Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		SA	A	A/D	D	SD	
17	N	10	8	2	-	-	F2
	%	50.0	40.0	10.0	-	-	
18	N	9	9	2	-	-	F2
	%	45.0	45.0	10.0	-	-	
19	N	16	4	-	-	-	F2
	%	80.0	20.0	-	-	-	
20	N	9	11	-	-	-	F5
	%	45.0	55.0	-	-	-	
21	N	4	15	1	-	-	F2
	%	20.0	75.0	5.0	-	-	
22	N	4	15	1	-	-	F3
	%	20.0	75.0	5.0	-	-	
23	N	8	9	3	-	-	F2
	%	40.0	45.0	15.0	-	-	
24	N	11	9	-	-	-	F2
	%	55.0	45.0	-	-	-	
25	N	12	8	-	-	-	F2
	%	60.0	40.0	-	-	-	

SA - Strongly Agree  
 A - Agree  
 A/D - Agree/Disagree  
 D - Disagree  
 SD - Strongly Disagree



Table C.03.--Observed Frequency Distribution Regarding  
Inservice Needs of Teachers for the 25 Items  
by All Teachers (Actual Practice)

Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		A	F	S	R	N	
1	N	-	14	112	100	14	F6
	%	-	5.8	46.7	41.7	5.8	
2	N	-	9	57	148	25	F6
	%	-	3.8	23.8	61.9	10.5	
3	N	-	4	46	126	62	F1
	%	-	1.7	19.3	52.9	26.1	
4	N	-	8	30	130	72	F1
	%	-	3.3	12.5	54.2	30.0	
5	N	-	7	35	104	94	F1
	%	-	2.9	14.6	43.3	39.2	
6	N	-	5	33	107	95	F4
	%	-	2.1	13.7	44.6	39.6	
7	N	-	5	41	119	75	F4
	%	-	2.1	17.1	49.6	31.3	
8	N	-	5	35	128	72	F1
	%	-	2.1	14.6	53.3	30.0	
9	N	-	12	92	111	25	F4
	%	-	5.0	38.3	46.2	10.4	
10	N	-	12	46	142	40	Profess
	%	-	5.0	19.2	59.2	16.7	Adults
11	N	-	5	49	123	63	Profess
	%	-	2.1	20.4	51.2	26.2	Adults
12	N	-	12	31	126	70	F5
	%	-	5.0	13.0	52.7	29.3	
13	N	-	12	34	131	63	F3
	%	-	5.0	14.2	54.6	26.2	
14	N	-	8	58	116	58	F3
	%	-	3.3	24.2	48.3	24.2	
15	N	-	14	97	102	27	F1
	%	-	5.8	40.4	42.5	11.2	
16	N	-	9	49	139	43	F3
	%	-	3.7	20.4	57.9	17.9	



Table C.03. (cont'd.).

Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		A	F	S	R	N	
17	N	-	6	35	147	52	F2
	%	-	2.5	14.6	61.2	21.7	
18	N	-	4	41	126	69	F2
	%	-	1.7	17.1	52.5	28.7	
19	N	-	7	50	122	60	F2
	%	-	2.9	20.9	51.0	25.1	
20	N	-	7	36	118	78	F5
	%	-	2.9	15.1	49.4	32.6	
21	N	-	6	30	101	102	F2
	%	-	2.5	12.6	42.3	42.7	
22	N	-	8	37	122	72	F3
	%	-	3.3	15.5	51.0	30.1	
23	N	-	13	53	133	40	F2
	%	-	5.4	22.2	55.6	16.7	
24	N	-	5	46	120	69	F2
	%	-	2.1	19.2	50.0	28.7	
25	N	-	6	34	127	73	F2
	%	-	2.5	14.2	52.9	30.4	

A - Always  
 F - Frequently  
 S - Sometimes  
 R - Rarely  
 N - Never





Table C.04.--Observed Frequency Distribution Regarding  
Inservice Needs of Teachers for the 25 Items  
by Supervisors (Actual Practice)

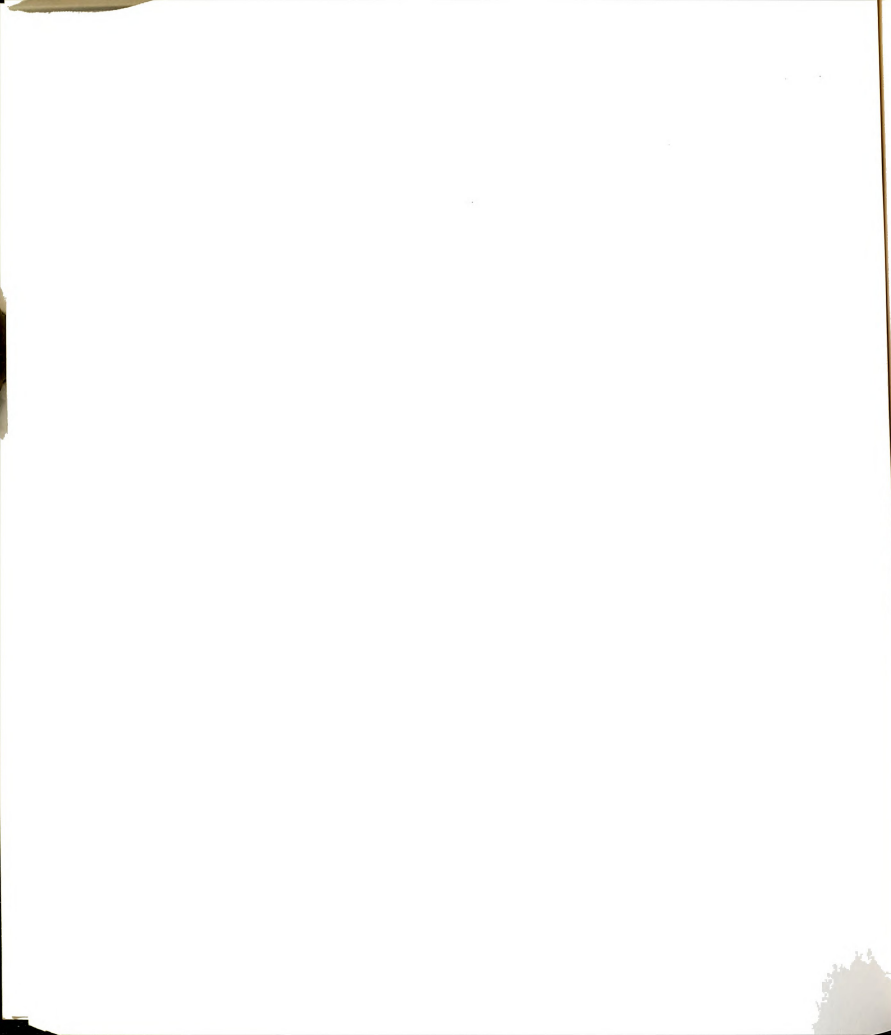
Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		A	F	S	R	N	
1	N	-	3	11	6	-	F6
	%	-	15.0	55.0	30.0	-	
2	N	-	2	8	9	1	F6
	%	-	10.0	40.0	45.0	5.0	
3	N	-	3	5	6	5	F1
	%	-	15.8	26.3	31.6	26.3	
4	N	-	2	6	7	5	F1
	%	-	10.0	30.0	35.0	25.0	
5	N	-	2	6	9	3	F1
	%	-	10.0	30.0	45.0	15.0	
6	N	-	-	10	8	2	F4
	%	-	-	50.0	40.0	10.0	
7	N	-	2	9	8	1	F4
	%	-	10.0	45.0	40.0	5.0	
8	N	-	2	7	11	-	F1
	%	-	10.0	35.0	55.0	-	
9	N	-	6	13	1	-	F4
	%	-	30.0	65.0	5.0	-	
10	N	-	2	11	6	1	Profess
	%	-	10.0	55.0	30.0	5.0	Adults
11	N	-	3	5	11	1	Profess
	%	-	15.0	25.0	55.0	5.0	Adults
12	N	-	1	4	11	4	F5
	%	-	5.0	20.0	55.0	20.0	
13	N	-	1	6	12	1	F3
	%	-	5.0	30.0	60.0	5.0	
14	N	-	4	7	7	2	F3
	%	-	20.0	35.0	35.0	10.0	
15	N	-	4	13	2	1	F1
	%	-	20.0	65.0	10.0	5.0	
16	N	-	2	10	7	1	F3
	%	-	10.0	50.0	35.0	5.0	



Table C.04. (cont'd.).

Degree of Importance		1	2	3	4	5	Item Cluster
Item Number		A	F	S	R	N	
17	N	-	1	8	7	4	F2
	%	-	5.0	40.0	35.0	20.0	
18	N	-	1	8	7	4	F2
	%	-	5.0	40.0	35.0	20.0	
19	N	1	3	9	5	2	F2
	%	5.0	15.0	45.0	25.0	10.0	
20	N	-	2	10	6	2	F5
	%	-	10.0	50.0	30.0	10.0	
21	N	-	-	10	6	4	F2
	%	-	-	50.0	30.0	20.0	
22	N	-	2	9	4	5	F3
	%	-	10.0	45.0	20.0	25.0	
23	N	-	3	6	7	4	F2
	%	-	15.0	30.0	35.0	20.0	
24	N	-	-	10	8	2	F2
	%	-	-	50.0	40.0	10.0	
25	N	-	2	4	12	2	F2
	%	-	10.0	20.0	60.0	10.0	

A - Always  
 F - Frequently  
 S - Sometimes  
 R - Rarely  
 N - Never



**APPENDIX D**

**SUPPLEMENTARY TABLES**



Table D.01.--Total Instrument Percentages and Mean  
Scores of Extent of Agreement and Frequency  
of Occurrence for Andragogical Items

Extent of Agreement		Frequency of Occurrence	
Strongly Agree	50.90%	Always	0.10%
Agree	40.90%	Frequently	6.60%
Agree/Disagree	6.40%	Sometimes	32.60%
Disagree	0.02%	Rarely	44.70%
Strongly Disagree	0.00%	Never	18.80%
Mean = 1.57		Mean = 3.51	

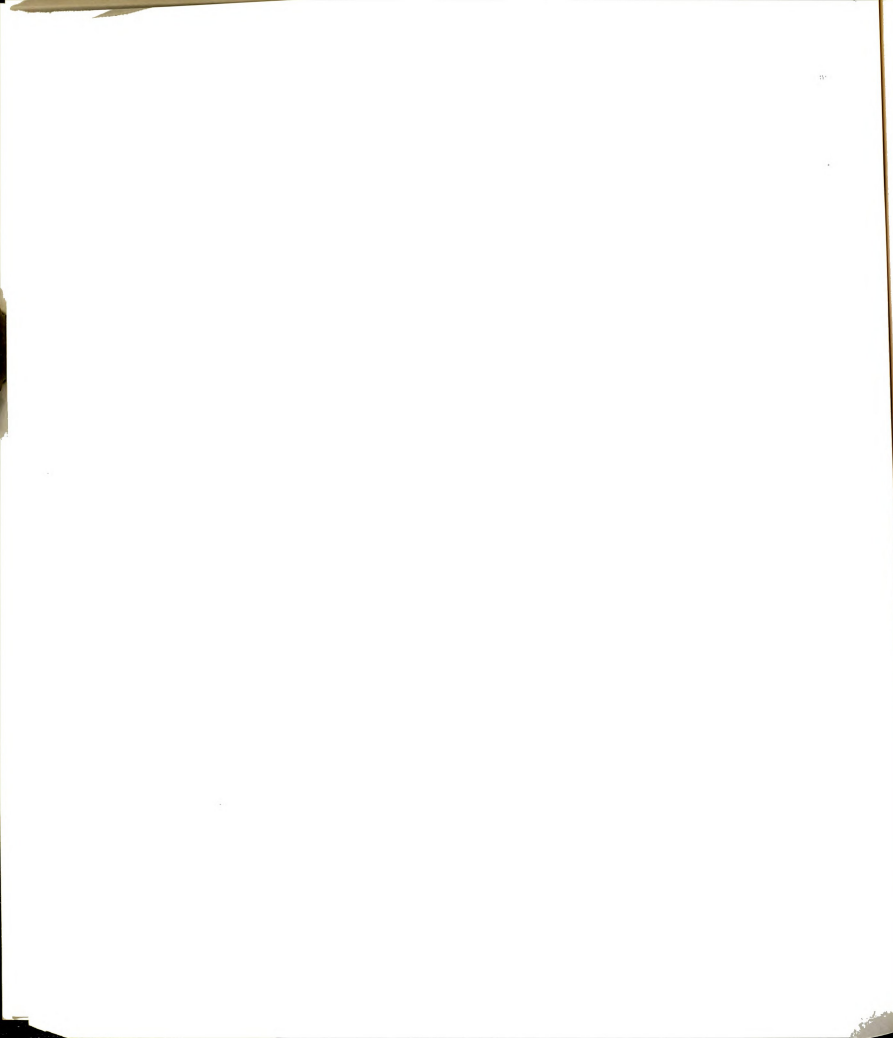




Table D.02.--Percentages and Mean Scores for Extent of Agreement and Frequency of Occurrence for Self-Directed Items (Approach 1) by Teachers and Supervisors

Group Role	<u>Extent of Agreement</u>						<u>Frequency of Occurrence</u>					
	SAX	AZ	A/DX	DX	SDX	$\bar{x}$	AZ	FZ	SZ	RZ	NZ	$\bar{x}$
Teachers	49.96	44.58	8.02	0.0	0.0	1.61	0.00	3.16	20.28	49.24	27.30	3.98
Supervisors	55.00	40.00	5.00	0.0	0.0	1.50	0.00	13.16	37.26	35.32	14.26	3.46

SA - Strongly Agree  
A - Agree  
A/D - Agree/Disagree  
D - Disagree  
SD - Strongly Disagree

A - Always  
F - Frequently  
S - Sometimes  
R - Rarely  
N - Never

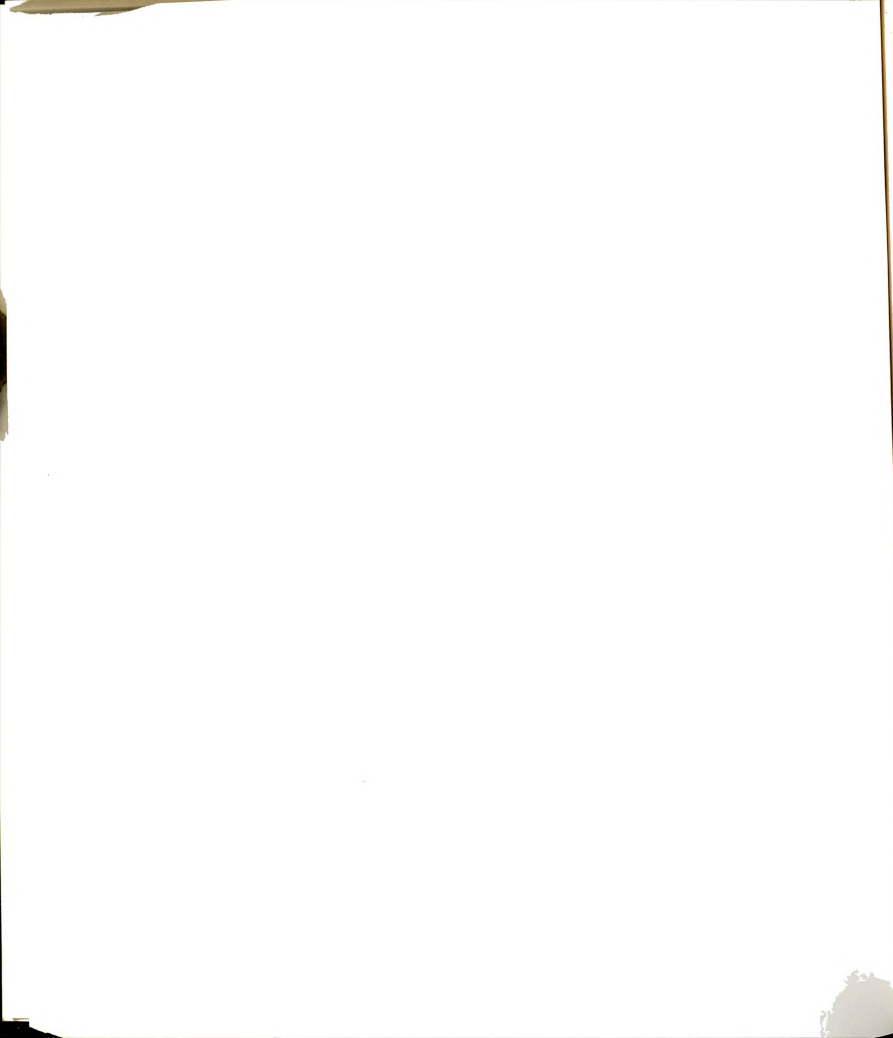


Table D.03.--Percentages and Mean Scores for Extent of Agreement and Frequency of Occurrence for Approach 2 by Teachers and Supervisors

Group Role	<u>Extent of Agreement</u>						<u>Frequency of Occurrence</u>					
	SAZ	AZ	A/DZ	DZ	SDZ	$\bar{x}$	AZ	FZ	SZ	RZ	NZ	$\bar{x}$
Teachers	44.36	46.94	8.70	0.0	0.0	1.65	0.00	2.80	40.26	52.20	38.49	3.04
Supervisors	50.00	44.29	5.70	0.0	0.0	1.56	0.71	7.14	39.29	37.14	15.71	3.60

SA - Strongly Agree  
 A - Agree  
 A/D - Agree/Disagree  
 D - Disagree  
 SD - Strongly Disagree

A - Always  
 F - Frequently  
 S - Sometimes  
 R - Rarely  
 N - Never

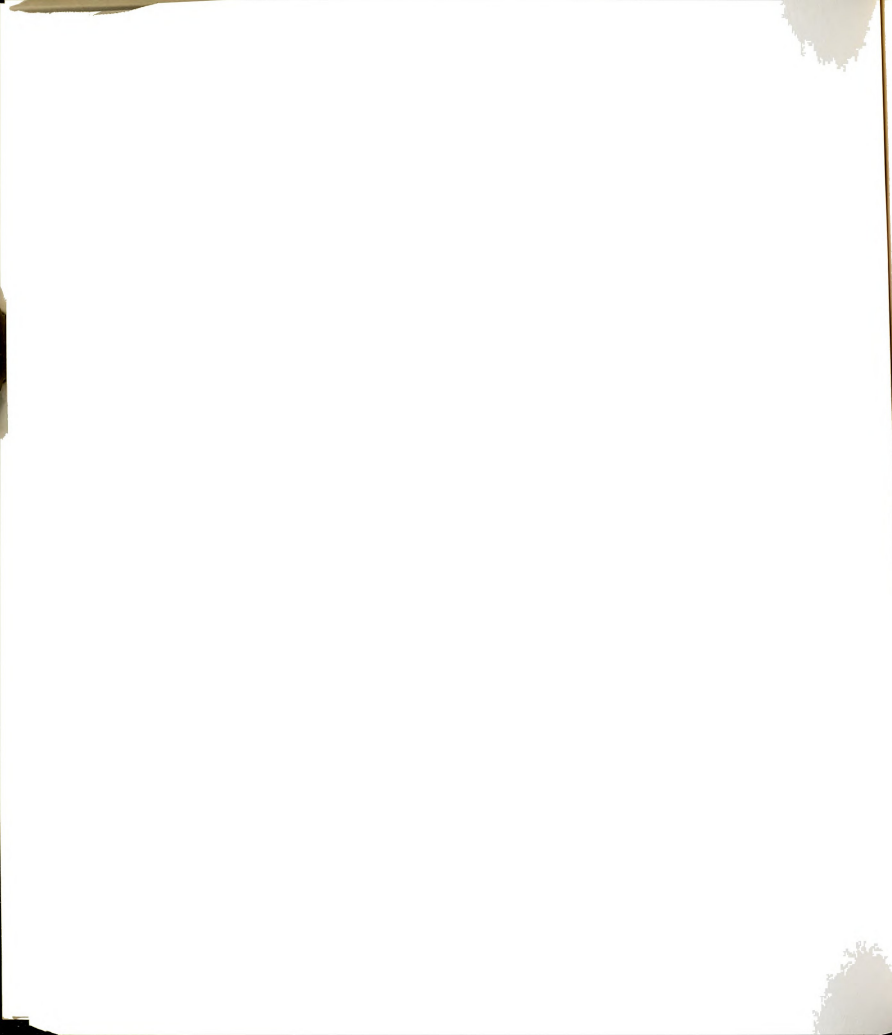


Table D.04.--Percentages and Mean Scores for Extent of Agreement and Frequency of Occurrence for Approach 3 by Teachers and Supervisors

Group Role	<u>Extent of Agreement</u>						<u>Frequency of Occurrence</u>					
	SA%	A%	A/D%	D%	SD%	$\bar{x}$	A%	F%	S%	R%	N%	$\bar{x}$
Teachers	40.70	28.16	10.8	0.0	0.0	1.69	0.00	3.81	18.58	52.95	24.60	3.98
Supervisors	31.25	60.00	8.75	0.0	0.0	1.78	0.00	11.25	40.00	37.50	11.25	3.49

SA - Strongly Agree  
 A - Agree  
 A/D - Agree/Disagree  
 D - Disagree  
 SD - Strongly Disagree

A - Always  
 F - Frequently  
 S - Sometimes  
 R - Rarely  
 N - Never



Table D.05.--Percentages and Mean Scores for Extent of Agreement and Frequency of Occurrence for Approach 4 by Teachers and Supervisors

Group Role	<u>Extent of Agreement</u>						<u>Frequency of Occurrence</u>					
	SA%	A%	A/D%	D%	SD%	$\bar{x}$	A%	F%	S%	R%	N%	$\bar{x}$
Teachers	46.77	45.20	8.03	0.0	0.0	1.61	0.00	3.06	23.03	46.77	27.10	3.98
Supervisors	55.00	41.70	3.30	0.0	0.0	1.48	0.00	13.30	53.30	28.30	5.00	3.25

SA - Strongly Agree  
 A - Agree  
 A/D - Agree/Disagree  
 D - Disagree  
 SD - Strongly Disagree

A - Always  
 F - Frequently  
 S - Sometimes  
 R - Rarely  
 N - Never

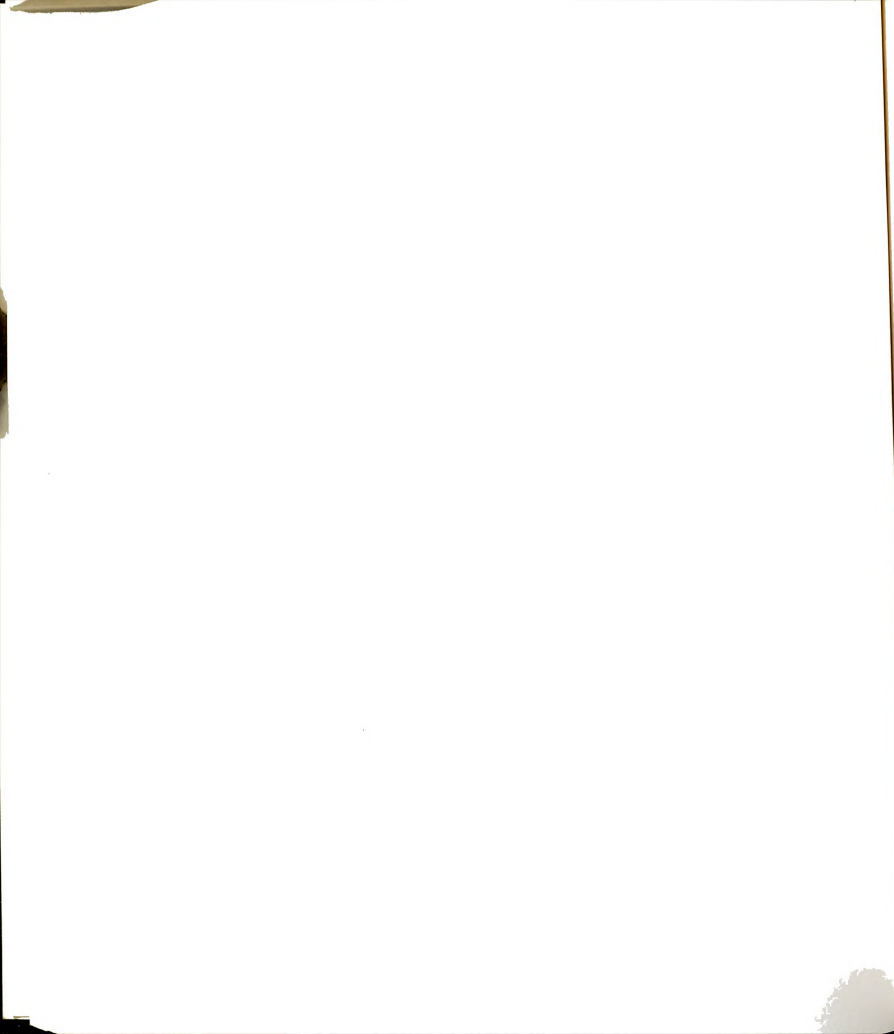




Table D.06.--Percentages and Mean Scores for Extent of Agreement and Frequency of Occurrence for Approach 5 by Teachers and Supervisors

Group Role	<u>Extent of Agreement</u>						<u>Frequency of Occurrence</u>					
	SA%	A%	A/D%	D%	SD%	$\bar{x}$	A%	F%	S%	R%	N%	$\bar{x}$
Teachers	37.85	51.45	10.45	0.2	0.0	1.60	0.00	3.95	14.05	51.05	30.95	4.07
Supervisors	35.00	60.00	5.00	0.0	0.0	1.48	0.00	7.50	35.00	42.50	15.00	3.33

SA - Strongly Agree  
 A - Agree  
 A/D - Agree/Disagree  
 D - Disagree  
 SD - Strongly Disagree

A - Always  
 F - Frequently  
 S - Sometimes  
 R - Rarely  
 N - Never

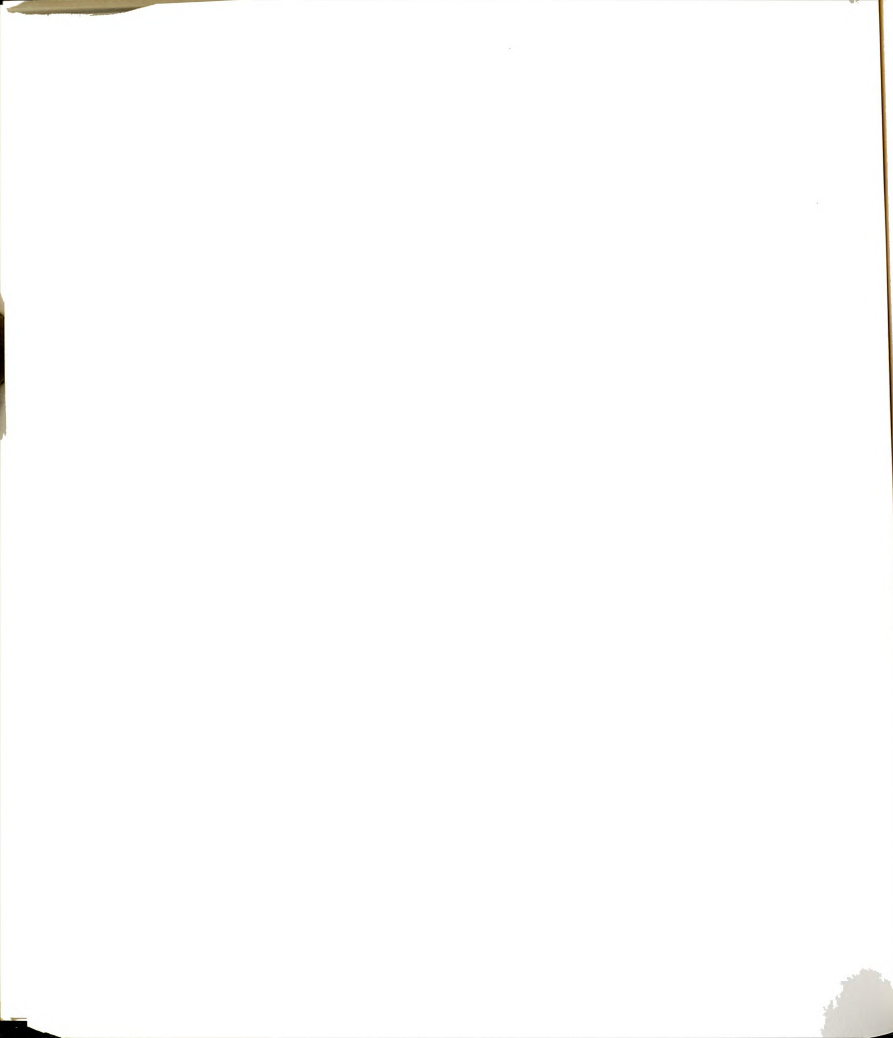


Table D.07.--Percentages and Mean Scores for Extent of Agreement and Frequency of Occurrence for Approach 6 by Teachers and Supervisors

Group Role	<u>Extent of Agreement</u>						<u>Frequency of Occurrence</u>					
	SA%	A%	A/D%	D%	SD%	$\bar{x}$	A%	F%	S%	R%	N%	$\bar{x}$
Teachers	83.75	14.60	1.65	0.0	0.0	1.18	0.00	4.80	35.25	51.80	8.15	3.63
Supervisors	83.75	14.00	1.60	0.0	0.0	1.00	0.00	4.80	35.25	51.80	8.15	3.30

SA - Strongly Agree  
 A - Agree  
 A/D - Agree/Disagree  
 D - Disagree  
 SD - Strongly Disagree

A - Always  
 F - Frequently  
 S - Sometimes  
 R - Rarely  
 N - Never

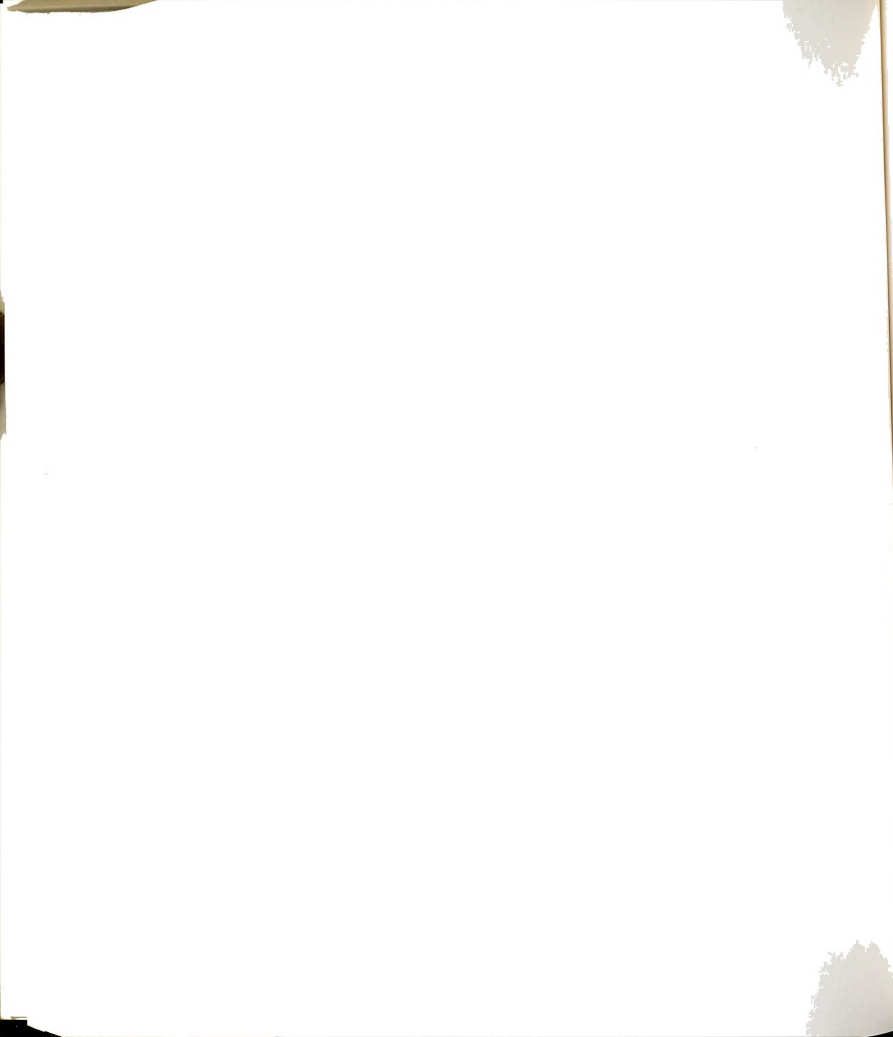
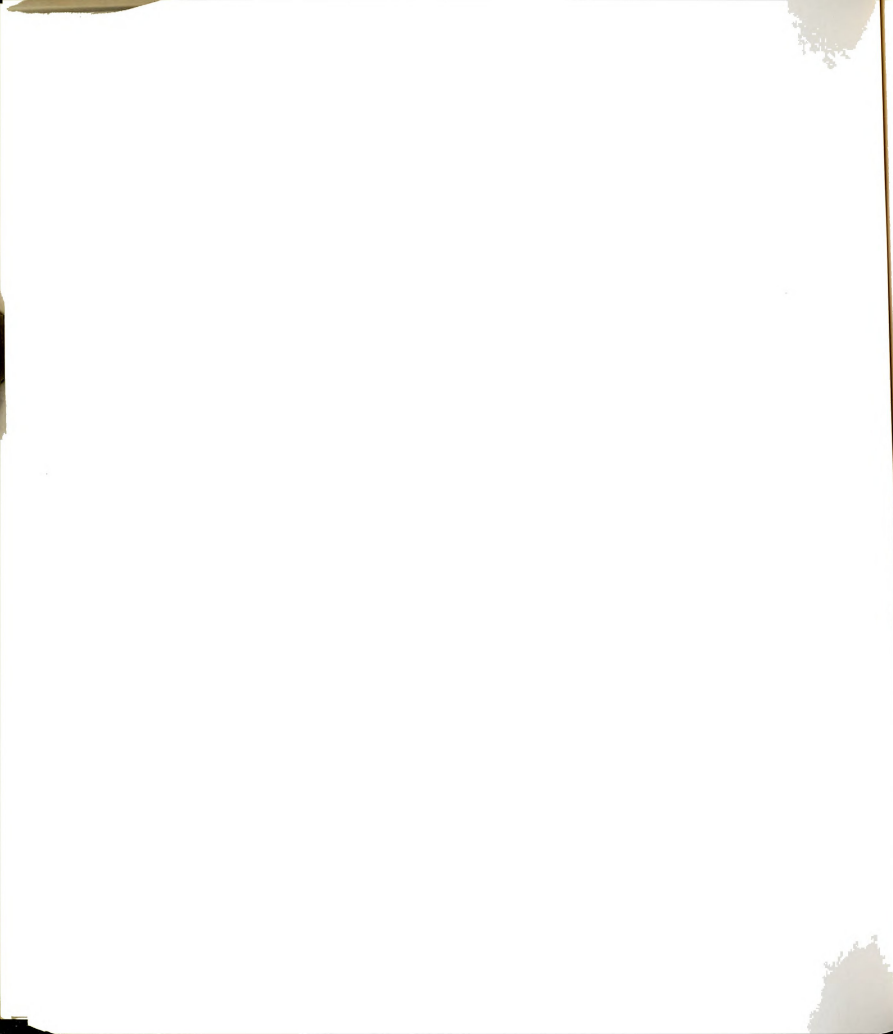


Table D.08.--T-Test Results Comparing Teachers'  
Perceptions for Frequency of Occurrence and  
Extent of Agreement

Approach #	Approach	<u>Frequency of Occurrence</u>		<u>Extent of Agreement</u>		T-Test	Level of Significance
		$\bar{x}$	N	$\bar{x}$	N		
1	Beliefs of a self-directed learner	3.980	237	1.614	237	-55.86	0.000*
2	Characteristics associated with teacher-centered inservice programs	4.047	238	1.645	238	-60.17	0.000*
3	Improving teachers' self-knowledge	3.992	237	1.689	237	-51.93	0.000*
4	Trust in the program purpose	3.986	239	1.611	239	-54.96	0.000*
5	Small group work	4.074	236	1.593	236	-51.31	0.000*
6	Teachers' desire to have teacher-initiated inservice programs	3.634	239	1.174	239	-55.73	0.000*

\*Significant at the .05 level



## APPENDIX E

MEANS AND STANDARD DEVIATIONS FOR  
ALL 25 ITEMS OF ANDRAGOGICAL APPROACHES

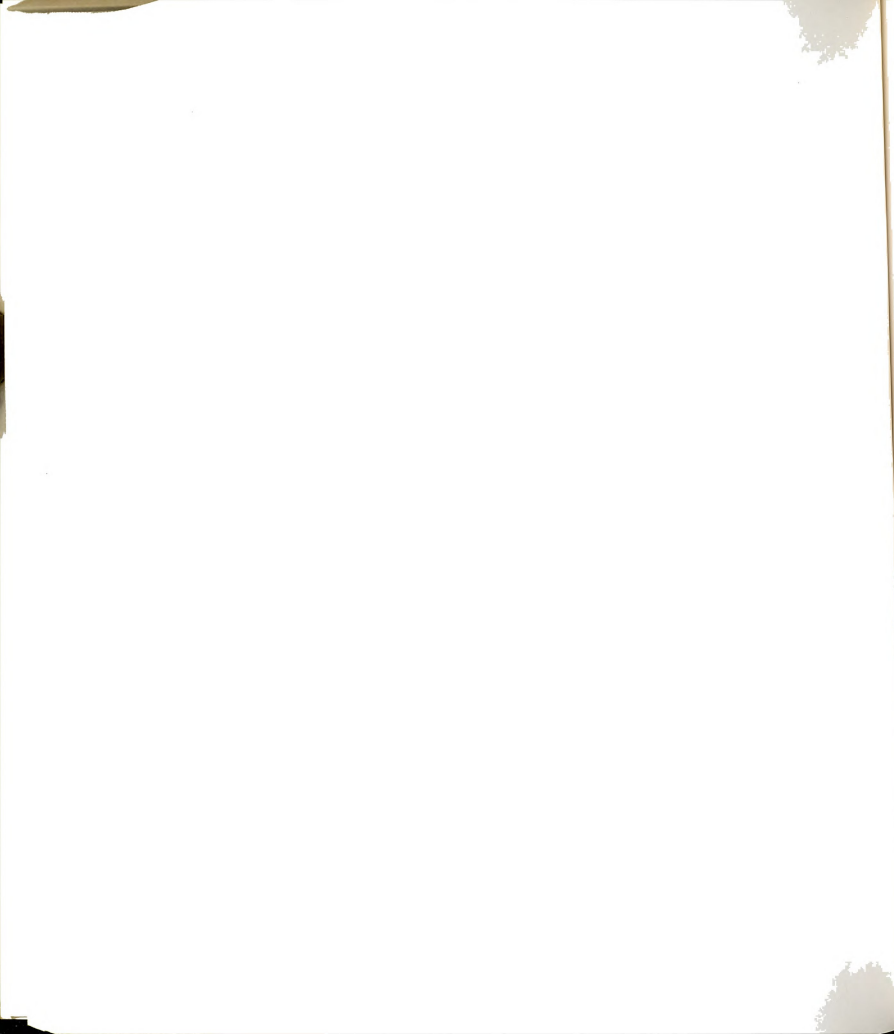




Table E.01.--Mean Scores and Standard Deviations for All  
25 Items (Extent of Agreement) by Teachers  
and Supervisors

Teachers			Supervisors		
Item No.	$\bar{X}$	S.D.	Item No.	$\bar{X}$	S.D.
1	1.071	.302	2	1.000	.000
2	1.287	.498	1	1.000	.000
9	1.405	.556	9	1.050	.224
19	1.452	.584	15	1.100	.308
15	1.483	.586	19	1.200	.410
3	1.523	.614	10	1.350	.489
23	1.556	.598	25	1.400	.503
18	1.587	.654	16	1.400	.598
25	1.636	.645	3	1.400	.503
14	1.657	.628	24	1.450	.510
8	1.671	.669	20	1.550	.510
20	1.674	.610	4	1.550	.510
7	1.683	.659	17	1.600	.681
5	1.688	.658	18	1.650	.671
22	1.689	.646	11	1.650	.587
16	1.704	.586	8	1.650	.671
4	1.704	.620	7	1.700	.571
21	1.724	.593	6	1.700	.571
13	1.724	.709	23	1.750	.716
24	1.732	.689	5	1.800	.696
6	1.750	.624	22	1.850	.489
10	1.770	.623	21	1.850	.489
12	1.787	.680	12	1.850	.587
11	1.803	.634	13	1.900	.553
17	1.817	.613	14	1.950	.605

Note:

- 1.00 - 1.99 - Strongly Agree  
 2.00 - 2.99 - Agree  
 3.00 - 3.99 - Agree/Disagree  
 4.00 - 5.00 - Disagree/Strongly Disagree



Table E.02.--Mean Scores and Standard Deviations for All  
25 Items (Actual Practice) by Teachers  
and Supervisors

Teachers			Supervisors		
Item No.	$\bar{X}$	S.D.	Item No.	$\bar{X}$	S.D.
1	3.475	.696	15	3.000	.725
15	3.592	.765	1	3.150	.671
9	3.621	.739	19	3.200	.725
2	3.791	.672	10	3.300	.733
23	3.837	.763	16	3.350	.745
10	3.875	.738	14	3.350	.933
16	3.900	.721	20	3.400	.821
14	3.933	.784	7	3.400	.754
19	3.983	.761	8	3.450	.686
11	4.017	.743	2	3.450	.759
17	4.021	.681	11	3.500	.827
13	4.021	.779	24	3.600	.681
3	4.034	.729	23	3.600	.995
24	4.054	.750	22	3.600	.995
12	4.063	.789	6	3.600	.681
22	4.079	.766	13	3.650	.671
18	4.083	.721	5	3.650	.875
7	4.100	.748	3	3.684	.856
4	4.108	.741	25	3.700	.801
25	4.112	.732	21	3.700	.801
8	4.112	.720	18	3.700	.865
20	4.117	.763	17	3.700	.865
5	4.188	.788	9	3.750	.550
6	4.217	.556	4	3.750	.967
21	4.251	.770	12	3.900	.788

Note:

1.00 - 1.99 - Always  
 2.00 - 2.99 - Frequently  
 3.00 - 3.99 - Sometimes  
 4.00 - 5.00 - Rarely/Never

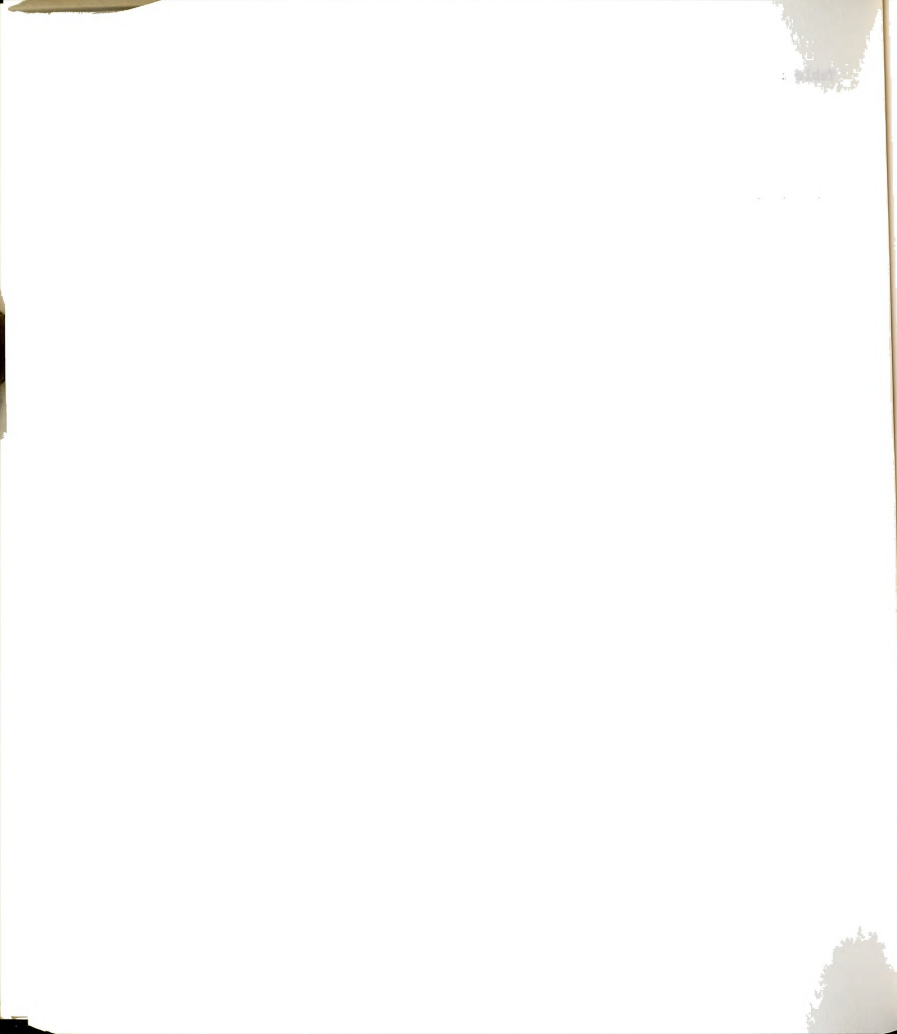


Table E.03.--Rank Order for All Items by Elementary, Intermediate and Secondary School Teachers (Actual Practice)

Elementary Teachers			Intermediate Teachers			Secondary Teachers		
Item No.	$\bar{X}$	S.D.	Item No.	$\bar{X}$	S.D.	Item No.	$\bar{X}$	S.D.
15	3.330	.697	1	3.362	.661	14	3.550	.769
1	3.340	.607	15	3.588	.704	23	3.567	.789
9	3.440	.729	9	3.625	.663	15	3.800	.817
2	3.690	.563	2	3.750	.626	9	3.817	.766
16	3.710	.640	10	3.875	.663	22	3.833	.733
10	3.790	.715	16	3.887	.584	1	3.850	.755
3	3.869	.723	17	3.950	.745	8	3.850	.732
23	3.870	.761	11	4.000	.675	18	3.850	.732
11	3.870	.717	19	4.000	.751	25	3.883	.813
19	3.880	.742	23	4.000	.698	13	3.900	.817
24	3.890	.835	14	4.000	.796	7	3.983	.676
20	4.030	.703	12	4.025	.871	2	4.017	.841
17	4.050	.672	13	4.063	.847	10	4.017	.825
13	4.060	.694	3	4.075	.612	17	4.067	.607
22	4.070	.820	4	4.125	.718	24	4.067	.733
4	4.080	.732	24	4.125	.644	12	4.085	.877
12	4.080	.662	20	4.152	.735	16	4.100	.933
25	4.090	.780	7	4.175	.725	11	4.117	.865
7	4.110	.803	8	4.188	.765	4	4.133	.791
14	4.110	.709	18	4.200	.698	5	4.133	.812
5	4.120	.832	22	4.203	.705	6	4.133	.833
21	4.120	.756	6	4.225	.711	19	4.133	.791
18	4.130	.720	25	4.237	.579	20	4.217	.885
8	4.210	.640	5	4.313	.704	3	4.254	.801
6	4.260	.747	21	4.329	.729	21	4.367	.823

Note:

1.00 - 1.99 - Always  
 2.00 - 2.99 - Frequently  
 3.00 - 3.99 - Sometimes  
 4.00 - 5.00 - Rarely/Never

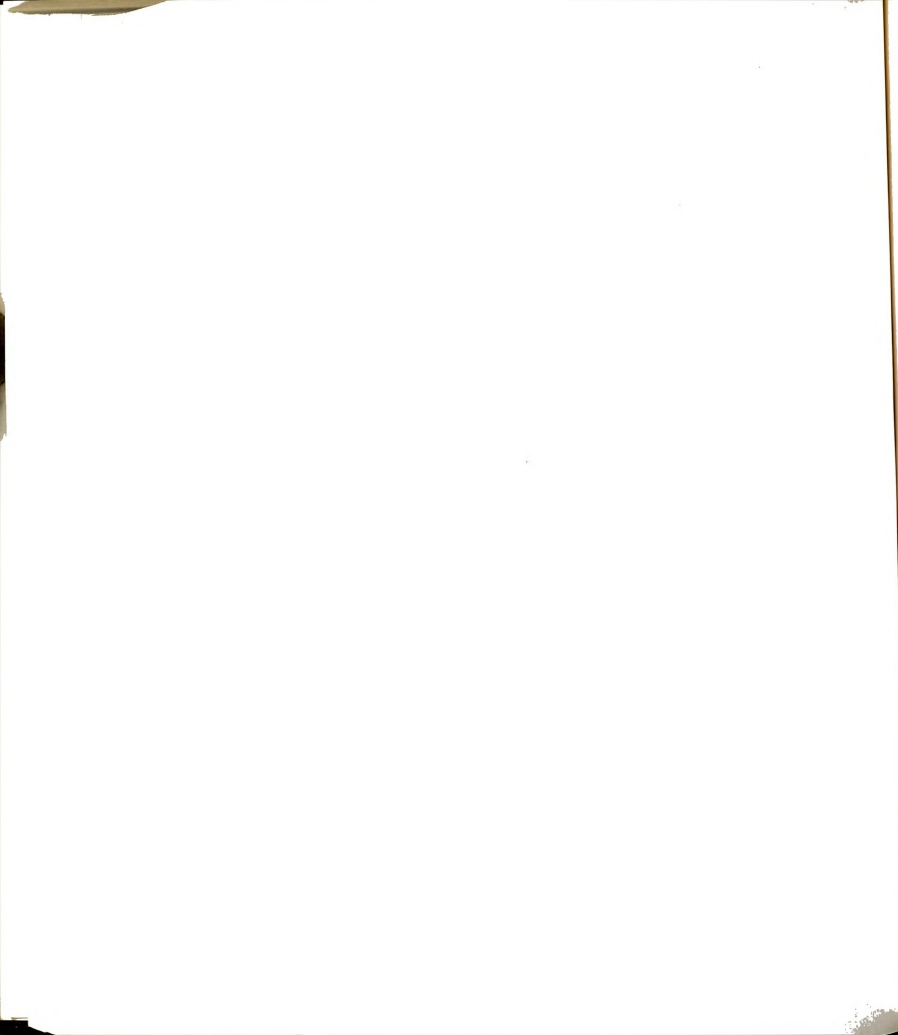


Table E.04.--Rank Order for All Items by Elementary, Intermediate and Secondary School Teachers (Extent of Agreement)

Elementary Teachers			Intermediate Teachers			Secondary Teachers		
Item No.	$\bar{X}$	S.D.	Item No.	$\bar{X}$	S.D.	Item No.	$\bar{X}$	S.D.
1	1.010	.100	1	1.000	.000	1	1.267	.548
2	1.130	.338	2	1.275	.449	9	1.390	.558
3	1.430	.498	19	1.278	.451	18	1.483	.596
9	1.430	.573	15	1.375	.513	19	1.517	.596
23	1.450	.539	9	1.387	.539	2	1.567	.647
15	1.480	.577	3	1.500	.616	8	1.583	.619
4	1.550	.539	24	1.512	.551	15	1.633	.663
14	1.550	.575	25	1.512	.656	7	1.667	.629
19	1.550	.642	18	1.587	.630	22	1.678	.681
5	1.580	.638	4	1.588	.608	21	1.683	.596
7	1.640	.687	13	1.588	.739	23	1.683	.676
18	1.650	.702	23	1.595	.589	24	1.695	.676
6	1.660	.602	20	1.608	.587	3	1.712	.744
25	1.660	.639	22	1.646	.621	14	1.729	.611
8	1.670	.637	16	1.650	.576	20	1.733	.634
16	1.690	.563	11	1.688	.608	12	1.763	.678
20	1.690	.615	5	1.700	.644	25	1.763	.625
21	1.690	.581	17	1.725	.573	10	1.780	.696
13	1.710	.686	8	1.737	.742	6	1.783	.613
22	1.730	.649	10	1.737	.590	13	1.797	.714
10	1.790	.608	12	1.737	.670	16	1.800	.632
17	1.820	.657	14	1.737	.689	11	1.831	.647
24	1.830	.742	7	1.750	.646	17	1.833	.578
12	1.840	.692	21	1.797	.607	5	1.850	.685
11	1.880	.640	6	1.837	.645	4	1.983	.676

Note:

- 1.00 - 1.99 - Strongly Agree  
 2.00 - 2.99 - Agree  
 3.00 - 3.99 - Agree/Disagree  
 4.00 - 5.00 - Disagree/Strongly Disagree





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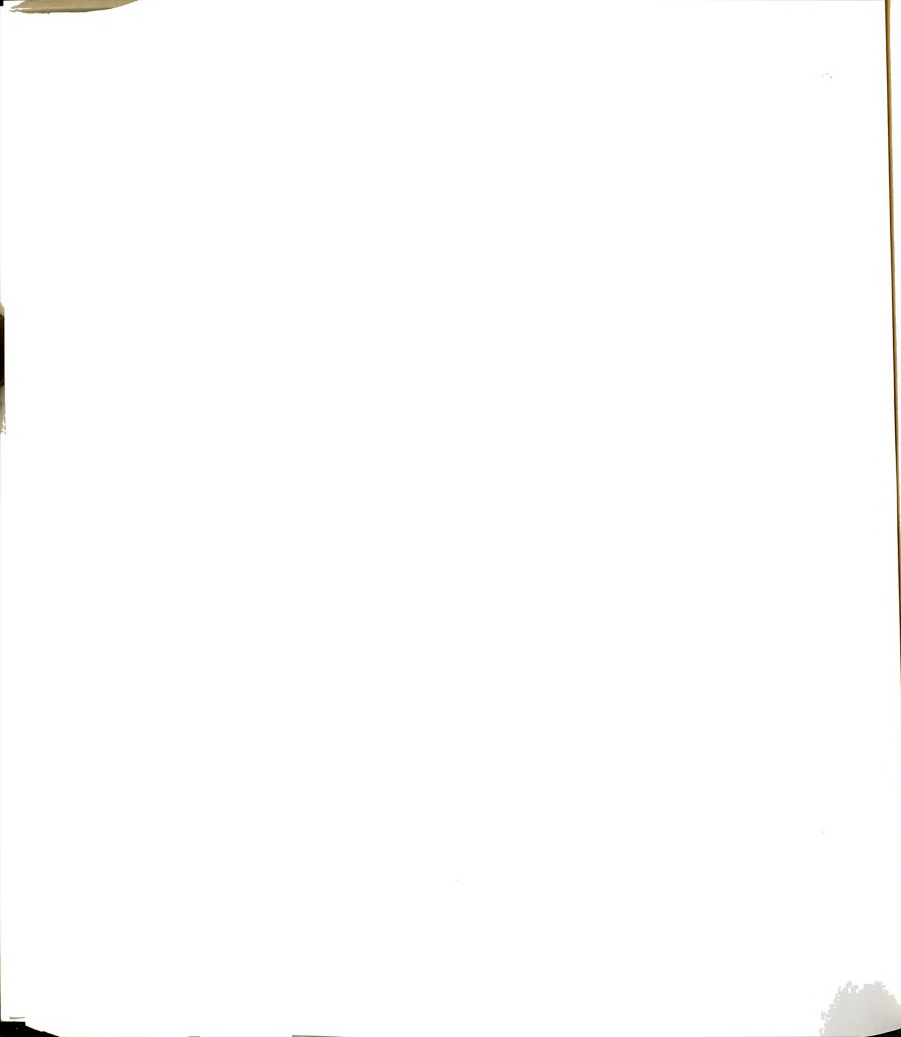
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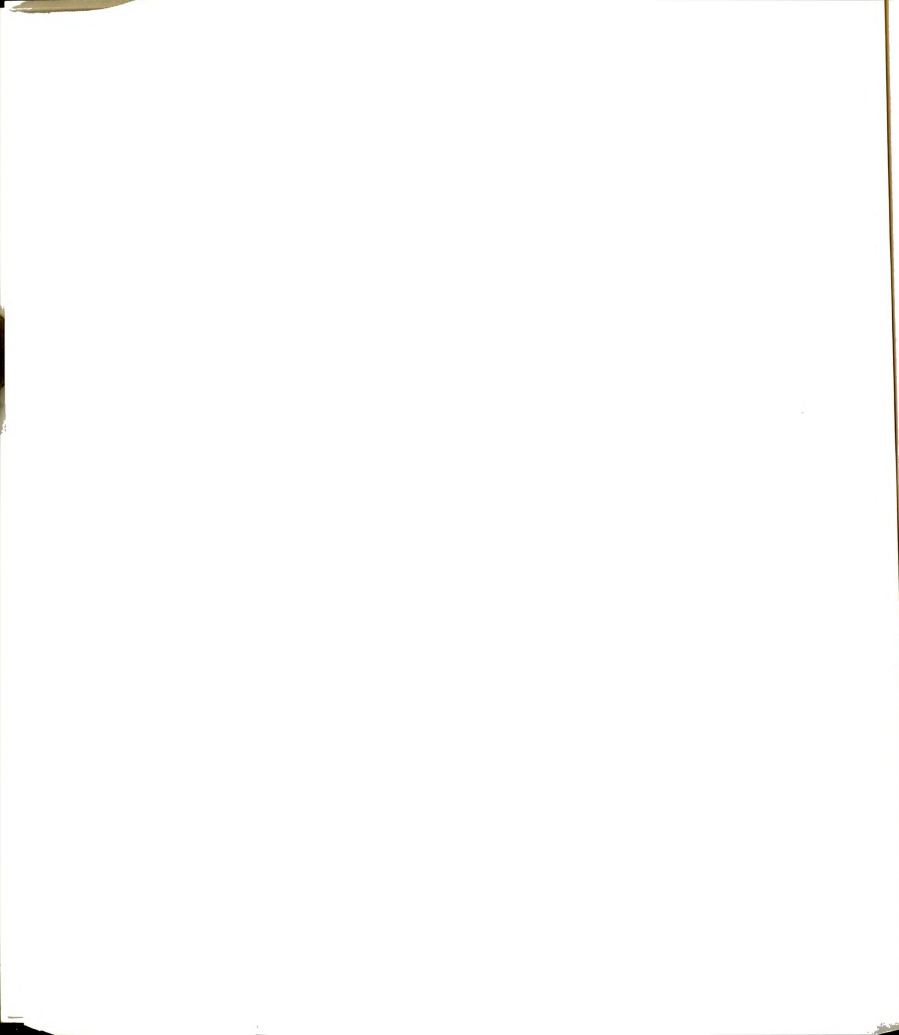
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