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**TRAINING NEEDS FOR TEACHERS OF THE
MENTALLY RETARDED IN JORDAN**

By

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A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
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ABSTRACT

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AbdelAziz Mustafa Abdelmuti

Body of Abstract

The purpose of this study was to assess the status of training plans for teachers of the mentally retarded in Jordan. To accomplish this purpose the current and future plans of policy makers and center administrators were investigated. In addition the instructional behaviors of teachers of the mentally retarded were determined.

The study was thought to be important because special education is relatively new in Jordan's schools and the number of teachers trained to work with the mentally retarded is limited in spite of the fact that new programs continue to open in an effort to met the need for service.

The subjects for the study included three known educational policy makers, 15 of 18 center administrators and a sample of teachers selected from the total population of teachers of the mentally retarded.

Policy makers and center administrators were interviewed and their responses recorded, while teachers were interviewed, their instruction observed and their classroom records reviewed. Teacher data were recorded on an instrument designed for the purpose.

The responses of policy makers and center administrators were analyzed and reported as were the teacher data. The teacher data were further analyzed

to determine the significance of performance, to- date in level of education, degree of retardation of students taught, experience, and type of school in which one teaches. The conclusions of the study were:

1. Jordan does not appear to have a national policy in teacher training in the area of special education.
2. Center administrators of programs for the mentally retarded in Jordan recognize the deficiencies of teacher training, are aware of implications for their programs and agree that the situation must be alleviated.
3. Teachers of the mentally retarded in Jordan as a group appear to have minimal basic instructional skill.

DEDICATION

I would like to dedicate this study to the memory of my father, Mustafa Said, who prayed that his son receive the highest possible level of education and who planted the motivation of learning in my mind.

I would also like to dedicate this study to my mother, Fareedeh Saleem, back home, on the other side of the world, who was the first to believe in me and show me the value of living with commitment.

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TABLE OF CONTENTS

Chapter	Page
LIST OF TABLES	
I. THE PROBLEM	1
Introduction	1
Statement of Need	7
Purpose of the Study	10
Limitations of the Study	11
II. REVIEW OF LITERATURE	13
Policies and Special Education	14
Instructional Process	16
In-service Training	21
III. DESIGN OF THE STUDY	28
Introduction	28
Population and Sampling Method	28
Instrumentation.	33
Data Sources	33
Data Collection Forms	34
Data Collection Procedures	39
Data Analysis	41
IV. ANALYSIS OF THE DATA	45
Introduction	45
Responses of Policy Makers	45

Chapter	Page
---------	------

Responses of Center Administrators	49
Instructional Behaviors of Teachers	56
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS . . .	76
Summary	76
Discussion	78
Conclusions and Recommendations	83
BIBLIOGRAPHY	88

APPENDICES

A1. The Demographic Survey Questionnaire for teachers of the Mentally Retarded in Jordan	92
B1. Policy Makers and Center Administrators Interview Form .	93
B2. Teachers' Performance Form	94
C1. Raw Scores Data of Teachers' Performance	97
C2. Raw Scores Data According to Teachers' Level of Education	98
C3. Raw Scores Data of Teachers' Performances according to the Type of Students Instructed	99
C4. Raw Scores Data According to Teachers' Years of Experience	100
C5. Raw Scores Data According to Schools Sponsorship . . .	101

LIST OF TABLES

Table	Page
1.1 Special Education Centers According to Sponsorship	4
1.2 Distribution of Special Education Programs in Terms of Type of Handicapped, Number of Schools, and Level of Handicapped	4
1.3 Number of Teachers of the Mentally Retarded and their Levels Education in the Years of 1983 and 1984	6
3.1 Number, Sex and Distribution of Teachers of Mentally Retarded According to School Sponsorship	30
3.2 Teacher Distribution by Public and Private Sponsorship, Level of Education, Years of Experience, and Type of Students Instructed	32
4.1 Means and Standard Deviations of Teacher's Performance Presented by Task and Subtask Area	58
4.2 Means and Standard Deviations of Teachers' Performance Presented by Task Area and Level of Education (High School or Less and Diploma and More)	60
4.3 Means and Standard Deviations of Teachers' Performance by Task, Subtask Area and Level of Education (High School or less and Diploma and Above)	62
4.4 Means and Standard Deviations of Teachers' Performance by Task Area and Type of Students Instructed (EMI, TMI, SMI)	65
4.5 Means and Standard Deviations of Teachers' Performance by Task, Subtask Area and Type of Students Taught (EMI, TMI, SMI)	66

4.6	Means and Standard Deviations of Teachers' Performance by Task Area and Years of Experience (<3 yrs. and ≥3 yrs.)	69
4.7	Means and Standard Deviations of Teachers' Performance by Task, Subtask Area and Years of Experience (<3 yrs. and ≥ 3 yrs.)	70
4.8	Means and Standard Deviations of Teachers' Performance by Task Area and Type of School (Public and Private)	72
4.9	Means and Standard Deviations of Teachers' Performance by Task, Subtask Area and Type of School (Public and Private)	73

CHAPTER 1

THE PROBLEM

Introduction

Jordan is a developing Arab country in the Middle East, the population of which is estimated at 2.5 million people, more than 50% of whom are less than 15 years of age. The country covers a small land area of 37,500 km square (Department of General Statistics in Jordan, 1981).

Under the Jordanian constitution, all citizens are entitled to an equal opportunity for education. Article three of the educational act in 1964 reinforces the provision of equal learning opportunities; therefore, education is regulated sponsored, and controlled by the Ministry of Education. Despite constitutional responsibilities to provide educational programs for all citizens, the Ministry of Education provides no special education programs for the handicapped (Qaryouti, 1983). However, in an historical review of special education programs in Jordan, Qaryouti indicated that the actual start of special education programs was in the mid-1960s when a few programs for the mentally handicapped were established by voluntary organizations. As a result of these initiatives, the government became involved and initiated a few educational programs through special schools. These programs have been sponsored and operated by the Ministry of Social Development rather than the Ministry of Education.

Recently the field of special education has grown rapidly. In addition to the voluntary programs, new agencies have become involved in the field of special education, such as the National Association for the Mentally Handicapped, the Queen Alia Association for the Deaf, the Jordanian Association

for Cerebral Palsy, the Friends of Blind Association, the Deaf Cooperation Club and the Union of Physical Education for the Handicapped.

Recently, a few initiatives were created in the area of training personnel by the Ministry of Social Development. Between 1977 and 1979, an in-service training program for teachers of the mentally retarded was conducted. In 1978 the University of Jordan established the University Center for Special Education and Rehabilitation for academic training purposes. In 1980, the Jordanian Institute for Social Work created a two-year training program leading to a diploma (equivalent to an Associate Arts Degree) in Special Education (Qaryouti, 1983).

In Spring, 1984 the Ministry of Social Development proposed to change the function of the Jordanian Institute for Social Work as follows: 1) Instead of being educationally oriented (the practice had been to grant a two year diploma after High School), it will be oriented toward in-service teacher training. This means that the existing unit of in-service training at this institute would be expanded with more qualified staff and thus be assured of being one of the main participants in training programs, and 2) it would concentrated more on research studies in order to initiate appropriate programs for various needs.

Most of these changes in special education programs in Jordan, as Daoud (1981) noted, are thought to be a result of the following developments:

1. the public has become more aware of the handicapped and the necessity to provide special services for them;
2. the parents of handicapped children are coming to the forefront and demanding access to care and education. This is reflected by the long waiting lists of various centers.

3. the government is encouraging and supporting the expansion of special education through the opening of new schools for handicapped children; and
4. the private sector views the sponsorship of such a training center as fashionable.

From this brief review of special education services in Jordan, it can be concluded that the field is fairly new, spanning only two decades, has been initiated by voluntary organizations, and appears to have improved during the last decade through governmental support.

Qaryouti (1983) noted in his unpublished doctoral dissertation that the special education services in Jordan were distributed over 25 special education schools. These schools were sponsored jointly by voluntary and governmental efforts and provided services to 1244 children ranging in age from three to eighteen years. The sponsorship distribution of these schools is given in Table 1.1. Distribution of these special education programs in terms of type of handicapped, number of schools, and level of handicapped, number of schools, and level of handicapped is summarized in Table 1.2.

Table 1.1*
Special Education Centers According to Sponsorship

<u>Type of Handicap</u>	<u>Sponsorship Distribution</u>			
	<u>Private (Voluntary)</u>	<u>Public (Governmental)</u>	<u>Jointly (V & P)</u>	<u>Total</u>
Mentally retarded	10	5		15
Hearing impaired	3	2	1	6
Visually impaired	1	1		2
Physically handicapped	-	1	1	2
TOTAL:	14	9	2	25

*Source: Qaryouti (1983)

Table 1.2*
Distribution of Special Education Programs in Terms of Type of Handicap, Number of Schools, and Level of Handicapped

<u>Type of Handicap</u>	<u># of Schools</u>	<u>Level and Number of Handicapped</u>			
		<u>Mildly</u>	<u>Moderately</u>	<u>Severely</u>	<u>TOTAL #</u>
Mentally impaired	15	153	329	82	564
Hearing impaired	6	17	133	289	439
Visually impaired	2	--	21	119	140
Physically handicapped	2	--	71	30	101
TOTAL:	25	170	554	520	1244

*Source: Qaryouti (1983)

According to Qaryouti (1983), the number of mentally retarded children in Jordan by 1987 will be 22,458. He arrived at this number by implementing a prevalence rate of two percent of the Jordanian population under age 18. Such a prevalence rate is commonly used by various authorities in developing countries. By comparing the number of the mentally retarded children who are being served and the projected number, it is clear that only a very small portion of the target population is being served.

Although programs for special education teacher training were established at the University of Jordan in 1977, and the Institute for Social Work and the Ministry of Social Development recently sponsored a major in-service training program for teachers of the mentally retarded, Jordan does not appear to have an established strategy for special education teacher preparation. As Qaryouti emphasized, "for the development of a national special education program, the availability of trained teachers is an essential element" (p. 138). However, the number of teachers who trained to teach the mentally retarded in Jordan has increased since Qaryouti conducted his study in the year of 1983 (Table 1.3).

Table 1.3

Number of Teachers of the Mentally Retarded and Their Levels of Education in the Years of 1983 and 1984

<u>Level of Education</u>	<u>1983 (Qaryouti)</u>	<u>1984</u>
High school diploma	30 (34%)	53 (46%)
Diplomas/degrees (Special education)	54 (60%) (0)	56 (48%) (7)
Bachelor's degrees	5 (6%)	7 (6%)
TOTAL:	89 (100%)	116 (100%)

As can be seen in Table 1.3, the total number of teachers of the mentally retarded in Jordan in 1983 was 89 but none had graduated from training programs in special education. By the Spring of 1984, the total number of schools for mentally handicapped had increased to 18 (up from 15). The total number of teachers increased to 116 (up from 89).

Comparing these new figures of teachers with figures reported by Qaryouti in 1983, it can be noted that the increase reported in both number of schools and number of teachers was not sufficient to fulfill the needs of the special education field. This is even more apparent when the projections of teacher needs made by Qaryouti are taken into consideration.

More investigation into the level of education for these teachers reveals that almost all of the new special education teachers were High School educated teachers, and only a few were teachers with diploma or Bachelor's degree. It can also be noted that new teachers with a special education degree numbered only seven. Despite this very limited number of teachers with special education diplomas, it is still an indication of some move toward employing specialized

teachers. However, the increase in High School educated teachers hired suggests that the demand for teachers exceeds the supply of trained candidates resulting perhaps in maintaining the standards for employment at a low level.

Statement of Need

As indicated in the first section, despite the novelty of special education in Jordan, the program has grown rapidly over the past few years and several new centers have been created. Other developments include the adaptation of curriculum for the mentally retarded, and Arabic translations of diagnostic instruments such as the Wechsler Adult Intelligence Scale, and the American Association on Mental Deficiency, Adaptive Behavior Scale Public School Version (Alrousan, 1981).

However, as previously mentioned it is clear that only a few Jordanian special education teachers have graduated from special education training programs prior to their employment. Recently, 25 teachers from different educational centers for mentally retarded children completed a two-year in-service training program sponsored by the Ministry of Social Development (Qaryouti, 1983). This training program required meeting every Thursday of the 1979-80 and 1980-81 academic years and included an intensive workshop during the summer vacation of 1980. This didactic program focused on an introduction to special education, an introduction to mental retardation, educational characteristics of mentally retarded children and other topics generally related to assessing and educating mentally retarded children. It may be noted that this training program was not sufficient to meet either the need for trained teachers or the needs of teachers of the mentally retarded because:

1. the number of teachers trained was small (25).

2. some of these teachers may have already left the field for either personal or professional reasons.
3. the in-service training program tended to be theoretically oriented and limited in scope; and
4. there are no known plans to continue the training program.

It appears then that Qaryouti's (1983) conclusion is still justified, namely: "the existing special education services suffer from a severe shortage of trained teachers" (p. 138). A factor that may contribute to this situation may be the insufficient number of psychologists, and audiologists and other specialists usually associated with such programs. In addition, the level of training for administrators may be a contributing factor as well. Although there is no published literature in Jordan to support such claims, personal experience suggests that these factors are worth considering and may in fact, negatively influence the quality of special education in general and teachers' instructional behaviors in particular.

In general, the need for specialized training, plus the possible impact of the preceding factors, however subjectively determined, places a great deal of responsibility on persons to plan, implement and evaluate instruction who may be inadequately prepared and inadequately supported. The literature has emphasized that teachers who acquire appropriate competencies and instructional practices will be able to respond positively to student needs (Rude, 1982; Haring, 1978). It is also reported that specialized training of teachers will assist them in accumulating knowledge in their field of study and upgrade their abilities to initiate programming efforts (McLeod et. al., 1971; Hass, 1957; Harris & Bessent, 1969, and Faloughi, 1980).

In Jordan, the problem of training teachers of the retarded is made more serious given the projected number of 22,458 mentally retarded persons (Qaryouti, 1983). The number of teachers needed in this area, using a student-teacher ratio of 10-1, would be 2,246. Moreover, the problem is further complicated by the need for special education services in the country to other disability areas (Qaryouti, 1983).

These factors and Jordan's limited resources to meet special education needs led Qaryouti to recommend that the creation of programs to train the presently employed special education teachers be given a high priority and that such plans include in-service training options and intensive summer sessions.

Considering the need for trained teachers and the relative newness of special education in Jordan, it is expected that the quality of instructional skills of teachers of the mentally retarded in Jordan may be less than satisfactory. Therefore, it is the responsibility of high level policy makers within educational agencies in Jordan to monitor the progress of special education, particularly in the area of personnel training and to design training programs that stress quality of services for the handicapped including the area of mental retardation.

Efforts to enhance the quality of teaching any handicapped children must include plans to train teachers who are now employed to teach the handicapped. One could begin by identifying instructional behaviors of these teachers in classroom settings. Efforts to determine instructional behaviors and practices of teachers of the mentally retarded in Jordan could become a baseline for developers of training programs and a place from which progress in teacher training could be measured. It is evident that there is need for both a review of present policy concerning the training of teachers of the mentally retarded and

an objective analysis of instructional behaviors of the present group of teachers of the retarded.

Purpose of the Study

It appears that the desire to provide service, particularly education, to the mentally retarded of Jordan has prompted both private and government agencies to open schools for that purpose. The demand for teachers far exceeds the supply of persons trained for the responsibility of teaching the mentally retarded and the attempts to increase the number of trained teachers through either pre-service or in-service programs have been less than effective. In addition, it is not clear even in the light of the constitutional guarantee of education for all citizens, if the government has developed a national plan for preparing teachers to work with the mentally retarded.

Given the present situation, it was the general purpose of this study to determine the current and future plans for teacher training in special education, particularly in the area of mental retardation and to ascertain the instructional behaviors of the present group of teachers of the mentally retarded.

Specifically, the study was designed to answer two basic questions.

1. In Jordan, what are the policies and roles of the Ministry of Social Development, and those of center administrators regarding training programs for teachers of the mentally retarded?
2. In Jordan, what are the instructional behaviors of persons who presently teach the mentally retarded?

These two questions are important to an objective assessment of the status of teacher training in Jordan. The first question addresses the issue of administrative interest, guidance and participation in the training of teachers of

the mentally retarded. The second question addresses the issue of the skill levels of the current group of teachers of the mentally retarded. Answers to these questions are required so appropriate plans for teacher training and effective strategies for implementation of those plans can be devised.

In addition to ascertaining the instructional behaviors of the present group of teachers of the retarded, the following sub-questions will be investigated:

- a. Is there a significant difference in performance between teachers of diploma level of education and more and those of high school level of education and less?
- b. Is there a significant difference in performance between teachers instructing Trainable and Severely Mentally Impaired (TMI/SMI) students and those instructing Educable Mentally Impaired (EMI) students?
- c. Is there a significant difference in performance between the highly experienced teachers and those of low level of experience?
- d. Is there a significant difference in performance between teachers employed in public schools and those employed in private schools?

Limitations of the Study

The limitations of this study are as follows:

1. The sample for this study was taken from teachers of the mentally retarded in Jordan. All policy makers at the special education department, plus a sample of center administrators participated. Therefore, results of the study may not be generalized beyond these populations.

2. An obvious limitation in this study is the question of the teachers' sample size, which may influence generalization of its findings. Bearing in mind the in-depth investigation process employed in the study, this limitation may be minimized.
3. Due to the lack of a valid classification system for mentally handicapped students in Jordan, the researcher used the system of EMI and TMI/SMI to classify teachers of the mentally handicapped accordingly.
4. Due to the limited range of teachers' years of experience and level of education, the researcher classified them into only high and low levels of experience.

Even with these limitations, it is the researcher's opinion that the information contained in this study is representative of the problem and needs of the study.

It is hoped that such research will arouse attention for more in-depth studies within other special education areas, and will serve as a model for further research of this nature. It also will be of practical value to educators, administrators, and policy makers.

CHAPTER II

REVIEW OF LITERATURE

Owing to the novelty of special education for the mentally retarded in Jordan, many aspects of the program need to be improved and in some cases, developed. A significant need appears to be teacher training. This assertion is based on the knowledge that the current group of teachers have had little or no specialized training to teach mentally retarded students. In fact, the majority of teachers of the mentally retarded are either high school graduates or general education graduates with associate degrees.

Pre-service programs have been established, controlled and operated by the University of Jordan and by the Institute for Social Development. However, neither training program has embraced or effectively participated in the in-service training of teachers.

Recent in-service education programs for teachers of the mentally retarded in Jordan, though limited in number, suggest an awareness on part of the government that a need exists. However, such programs apparently have received a low priority in government policy. In addition, the programs that have been offered tend to be theoretical and of little practical assistance to teachers in improving their instructional behaviors, such as, planning, implementing, and evaluating student programs.

It appears then that there are at least three major issues to be explored in the literature. The first is a review of the recent history of the development of U.S. policy concerning special education, and particularly teacher training. The assumption here is that there may be some parallel to policy development in Jordan.

The second issue to be explored is that of instructional process. There are a number of process models reported in the literature and it would be helpful to identify the common elements to determine their potential usefulness to teachers of the mentally retarded in Jordan.

The third issue to be explored is that of in-service training itself. It would be useful to identify the various models used and begin to think about how these models would be applied to the situation in Jordan.

Policies and Special Education

To provide full educational opportunities for handicapped children, it is necessary to establish the basic foundations and policies which lie in great extent in the development of legislation (Abeson, 1972). However, legislation is not easy to obtain, even with influential efforts from parent groups and public awareness groups. Kirk and Gallagher (1983) emphasized that when such initiatives are taken in special education, they place the burden of responsibility on government agencies and encourage and aid schools to carry out their basic functions.

To achieve better understanding of the effects of policies and legislation on special education, the history of U.S. legislation in special education will be briefly discussed. Since the turn of the twentieth century, states have had a limited involvement in subsidizing programs for the handicapped population. As a result of this limited involvement, people appeared before policy making bodies to obtain their assistance on a charity basis (Abeson, 1972)

After World War II, states initiated a major thrust to support services for all handicapped children. This emphasis created significant problems in the late 1940's, and 1950's because of the lack of professional educators in special

education. At that time, it was obvious that the need for teacher training was overwhelming.

In response to this need, PL 85-926 (1958) was passed, providing grants for training professional personnel who would, in turn, train teachers of the mentally retarded. In 1963, PL 88-164 (an amendment to PL 85-926) extended the training of personnel for other handicapping conditions (Hallahan & Kauffman, 1982).

Since then, the federal government has become significantly involved in financing teacher training programs. For instance, at the end of 1960 the federal government established regional resource centers to help teachers develop educational strategies and extended training for leadership personnel to supervise training programs.

Further, the trend to expand teacher training programs was largely determined by the PL 94-142 amendments which provides education for all handicapped children. This law contains a mandatory provision which states that in order to receive funds under the act every school system must make provision for a free, appropriate public education for every child between 3 and 21 years old regardless of how serious his/her handicapping condition. The responsibility for implementing the provisions of this law is shared by local, state and federal governments. This landmark legislation sets forth that the federal government commit itself to financially supporting and helping fulfill their responsibilities toward the handicapped population (Harvey, 1976). Harvey also added that from the standpoint of training, the requirement that special education services provided to handicapped in the least restrictive environment is critical, as is the requirement of an individualized program. These two provisions make it imperative that there be an end to the inadequacy of special education services

representative of the past. Thus, in this regard, personnel training is considered to be a key element in the changes that must be launched according to this law.

In the last few decades, it can be concluded that the United States government has moved from a position of little concern to one of major influence in the education of handicapped children. This progress in legislation helped to reshape the demands for assistance which now are sought on the basis of rights rather than charity (Abeson, 1972; Kirk & Gallagher, 1983).

As discussed in the first chapter, special education in Jordan has witnessed new initiatives in terms of expanding special services to more handicapped children. This movement has developed momentum and reached a stage that requires policy makers to increase their awareness and act effectively.

The historical trend in the U.S. of increased public awareness and lobbying of parent groups resulted in better services to the mentally retarded in terms of provision of education by specially trained teachers as well as other services. In Jordan, a process of improved public awareness of the problem of handicapped has already begun and parent groups have organized to pressure the government for more and improved services to the mentally retarded. With greater public involvement and awareness occurring in Jordan, it may be expected that a receptive climate on the policy-making level may be created which would encourage and facilitate planning for specialized training of teachers of the mentally retarded, and it is hoped, expanded educational programming as well.

Instructional Process

This section reviews the literature on two components of instructional process, namely, instructional process models and instructional strategies and implementation.

Instructional Process Models: Instructional process models identify critical steps which facilitate the desired knowledge, skills, or behavior to be learned in a specific curriculum for a specific target population (Reingeluth, 1983).

There is a substantial literature regarding instructional process. In this study, the review of the literature is limited to the most recent literature of 1968 through 1980. In general the literature suggests a number of rudimentary steps most educational theorists agree upon as necessary to the instructional process. However, they differ somewhat on the extent to which these steps are further broadened into more specific activities or processes. There is also some variation in terms of the addition or deletion of certain steps in the process. The following is a discussion of the steps of the instructional process found in the literature.

1. **Pre-Instruction Data Step**

A beginning step involves gathering data on the target learner population (Davis et. al., 1970) which includes assessment of the entry behavior of the learners and determines the students background and present level of knowledge on the topic (DeCecco, 1968; Kemp, 1977). This step may also include the enumeration of the important characteristics of the learner which was considered to be a separate step, as in Kemp's model. The enumeration of characteristics falls into the aren of entry behavior assessment where skills levels, special abilities, and handicaps are all evaluated. In the Gerlach and Ely (1980) model the data gathering step is acknowledged as an early step in the instructional process, as it is, in most of the models reviewed. Despite that concern, few concrete procedures are provided. This step is designed to allow for planning instructional strategies to fit the specific needs of the learners.

2. Long Term Instructional Goals Step

A recent addition to instructional process model is the consideration and delineation of the long term instructional goal (Kemp, 1977; Gunn & Peterson, 1978). Earlier models did not include this step (DeCecco, 1968; Anderson & Faust, 1974). The appearance of this step is probably related to the passage of PL 94-142 (1975), the special education mandate, which required the identification of annual goals in planning for special education students.

3. Behavioral Objectives Step

Many models include, as an initial step, the behavioral objectives in measurable terms (Anderson & Faust, 1974; Gunn & Peterson, 1978; DeCecco, 1968). Other models (Davis et. al., 1970; Kemp, 1977) include this step as an integral part of their models but not the initial one. These behavioral objectives should flow out of the goals that are prescribed for a given subject area and also from the assessment of the learner population.

4. Task Analysis Step

The next step would be that of task analysis which all models agree upon. While some models (Davis et. al., 1970; Anderson & Faust, 1973) stated this step explicitly, others (Kemp, 1977; Gunn, and Peterson, 1978; Gerlach and Ely, 1980) implied this step by requiring teachers to outline and list subject content. This step includes breaking down skills to be taught in terms of sub-levels of skills. Each step in task analysis should be related to behavioral objectives which help to determine activities and materials to be used (Davis et. al., 1970).

5. Instructional Activities and Strategies Step

Instruction should be designed in terms of specifying strategies, techniques, and activities (Davis et. al., 1970; Gerlach & Ely, 1980). This means designing an instructional strategy or technique for each learning skill and organizing

instructional materials and activities to support those techniques. In the literature, each model tends to state this step in subtly different ways so the previous statements are a synthesis of this step. The use of this step enhances the possibility that behavioral objectives will be achieved. Specific materials, techniques and activities are selected by the teacher to match the behavioral objective and the student.

6. Implementation Step

The next step has two simultaneous functions. One, obviously, is the actual implementation of individualized instruction. Concurrent with this, is feedback to the student and supervision of on-going activities. Gunn and Peterson (1978) were the only theorists to include the supervisory function in their model. This function implies that the teacher must be involved at some level in every classroom activity. Other models emphasized individualized instruction and feedback to the student.

7. Evaluation Step

Student performance must be evaluated to determine if learning has occurred. Where student performance does not meet the stated behavioral objective, a recycling of the instruction process may be required (DeCecco, 1968; Anderson & Faust, 1974; Gerlach & Ely, 1980). Davis et. al., (1970) include this step but emphasized that this should be done within instructional implementation. Anderson and Faust (1974) broaden this step adding that when student performance does not meet the objectives, the instruction should be reviewed and possibly revised before beginning the re-teaching phase. Kemp (1977) and Gunn and Peterson's (1978) include the concept of critiquing the revising the instructional plan where necessary. Thus, all models agree with

some form of learner evaluation while others add to this a phase of plan evaluation.

Instructional Strategies and Implementation

The purpose of this study requires not only looking at what the literature reports on instructional process, but also more specifically what is known about the step of planning activities and strategies for instruction and the implementation of instruction. In terms of instructional behavior and strategies used by teachers in the classroom setting, researchers have various perspectives of implementation. The majority agree that the teacher should have precise behavioral objectives to facilitate effective organization of the materials. Preparation and implementation of clear, organized, and sequenced material are important teacher behaviors that are directly related to student achievement. Successful preparation and presentations of instructional materials will maximize the probability that learning will occur (Mitzel, 1982; Rosenshine, 1979, Ekstrom, 1976).

Some professionals concentrate more on actual student/teacher contact. Ekstrom (1976) emphasizes the importance of dividing students into groups while teaching. Mitzel (1982) and Brophy (1979) add that the teacher, in addition to dividing students into groups, should keep the instruction as individualized as possible. With this intention, teacher/student interaction during a lesson will usually begin with the teacher's presentation, followed by the teacher's questions, followed by the student's response, and followed up with teacher feedback (Mitzel, 1982; Ryon & Phillips, 1982). This pattern of interaction as suggested by these professionals leads to (a) higher student engagement rates, and (b) favorable attitudes from students toward the subject area. In this vein,

Weil and Murphy (1982); Ryon and Phillips (1982; Travers and Jacqueline (1975) and Brophy (1979) view the teacher as the center of teacher/student interaction. The teacher monitors and supervises activities during involvement in lesson such as making the rounds, keeping students on task by showing enthusiasm and using encouragement and reinforcement. In order for the teacher to supervise and monitor the class, s/he should develop skills which allow personal self control in order to be an example to the students. For example, if a student acts out, the teacher must be equipped with skills that produce an appropriate educational response to the problem. In this way, student frustration does not engender teacher frustration. Earlier writers viewed supervision and monitoring of the class in a similar way. Travers and Jacqueline (1975), were concerned with the ability of the teacher to use positive rewards, praise, and to be able to comprehend student ideas and give clarity to statements.

The review of related literature of the instructional process and instructional strategies indicates that most educational and learning models agree that there are common instructional practices and strategies required of teachers in order to function effectively in educational settings.

In-Service Training

The in-service of teachers, that is, the additional training of teachers already assigned instructional responsibilities, has long been of interest to policy makers and administrators of programs. It appears to be a fact that the skill levels of teachers can always be improved. The function of in-service is reviewed as are the various formats employed by in-service trainers.

From an historical perspective, Rubin (1971) states that from 1880 until World War I, summer courses for in-service education in normal schools placed

greated emphasis upon the acquisition of knowledge and skills thought to be important in teaching. After the first World War and until 1930, in-service education programs were greatly affected by the establishment of quantitative standards for teaching certificates. After World War II, in-service education offered courses for teachers to meet certification requirements. According to Wells (1978), in-service training of the future is expected to deal directly, as Rubin (1971) also predicted, with real problems as well as simulation procedures. These procedures would emphasize feedback, supervision and revision in responding to the teachers' problems. In special education, teacher preparation programs are largely a phenomena of the last quarter century. Lampner (1979) pointed out that following landmark federal legislation in 1958 and 1963, extensive in-service programs for special education teachers became available. Sontag (1977) has predicted that the availability of teacher education programs would shift from universities to local school systems and teacher associations. According to this shift, the traditional campus-based instruction criteria would be replaced by performance-based criteria.

In searching for a definition of in-service training, the researcher came across a variety of definitions, some of them general, others more precise.

Hass (1957); Harris and Bessent (1969) perceived in-service education as a broad term which involved all activities designed to improve personnel competencies during service. Howey and Corrigan (1980) defined in-service education in the same broad manner by differentiating in-service from pre-service. In-service includes activities designed to enhance teachers' competencies after receiving their initial licenses and after beginning professional practice.

Harris (1980) defines in-service education as: "Any planned program of learning opportunities afforded staff members of schools, colleges, or other educational agencies for purpose of improving the performance of the individual in already assigned positions" (p. 21).

A more comprehensive and precise definition reviewed by Joyce, Hower, and Yarger (1977) is:

1. In-service education is defined as all of the experiences undertaken by a teacher after beginning professional practice,
2. In-service education is defined as those experiences which are designed to improve the performance of teachers in their assigned responsibilities,
3. In-service education is upgrading the performance of teachers to meet the continuously changing needs and aspirations of students,
4. In-service education is the attempt to help the individual teacher become self-actualizing, and
5. In-service education is the process by which a teacher may meet the requirements for a license to continue in teaching.

The definition that may be the most useful was given by Orrange and Ryn (1975): "In-service education is that portion of professional development that should be publicly supported and 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" (p.47).

The role of in-service training has been discussed extensively. Hass (1957), Harris and Bessent (1969) and Howey (1977) as quoted by Faloughi (1980) identify the following needs and importance of in-service training:

1. Respond to continuing social, educational, and cultural changes in society;

2. Meet the present and continuing shortage of adequately prepared teachers;
3. Enhance personal, general educational knowledge and career progress for teachers;
4. Ensure that all teachers in special education attain the minimum level of competence; and
5. Assist to keep abreast of the vast accumulating knowledge in the field.

In discussing valuable training for special educators, Haring and Bricker (1978) emphasized that "educators for their part have been stimulated to contribute their best efforts in providing quality instruction for the handicapped" (p. 2). Accordingly, Rude (1978) pointed out that "in-service potential is great for affecting the quality of education for handicapped children" (p. 173).

In-service training programs can also be used effectively to develop and maximize parent/teacher cooperation on behalf of exceptional children. McLoughlin (1981) presented an alternative model based upon the concept of joint training for parents and teachers of handicapped children. This model uses interaction topics and practices to ensure effective teacher/parent relationships. In general, it is based on the principles of competency-based education.

In conclusion, teachers who acquire appropriate and qualitative competencies corresponding to the needs of their students will be able to respond positively to changes in situations and maximize the potential of their students. If teachers successfully employ these competencies with handicapped students, the ultimate goal of in-service education will be achieved.

Various methods pertaining to in-service training for teachers have been widely discussed in literature. These methods are directed toward both regular

and special education programs and range from broad to specific forms and avenues.

Joyce, Hower, and Yarger (1977), concluded that in-service teacher education can take many forms:

1. Job placement: it is embedded on the job with the emphasis on "hands on" experience to improve teaching skills while working with children;
2. Job related: it is closely related to the job, but does not take place while teaching takes place; for example, a team of teachers can take a workshop on team teaching;
3. General professional: it consists of experiences to improve general competence, but is not tailored to specific needs;
4. Career/credentialed: it is organized to help one obtain a new credential or to prepare for a new role; and
5. Personal: it facilitates personal development which may or may not relate to teaching.

In special education, in-service training methods may differ from one setting to another according to the need addressed by the people who are involved in such settings. Burke and Snell (1971) presented an active in-service training model which has been employed with educators of the severely handicapped (McBride, 1972; Herbert, 1975 & Snell, 1979). This model is characterized by its one-to-one instructional ratio between trainer or consultant and a teacher in a classroom and in small group sessions after school.

The minicourse approach (two week sessions) is another type of in-service training investigated by Stowitschek and Hofmeister (1974) and supported by Gentry and Wen (1983). These studies proved beneficial in providing new

information and developing new skills for special educators in a short period of time.

In a response to the lack of trained teachers in special education programs in rural areas, Wood et. al., (1982) suggested an itinerant professor model as a new approach to training special education teachers. Contents of such a model could include lectures, videotapes, assignments, and field visits. According to Kelly and Van Vactor (1982), other possible approaches for providing in-service training to remote sparsely populates school districts should include:

1. A self instructional enhancement approach, covering the content of basic in-service offerings without instructional assistance, but based on an approved book of readings.
2. A master teacher approach, specific instructional hours in each week; a master teacher employed under project supervision;
3. A university personnel approach, specific instructional hours each week on site provided to trainees by a university instructor;
4. A university campus approach, specific instructional hours each week provided to trainees in the university.

To implement any of the preceding approaches, cooperation among universities, state and local agencies and instruction resource centers as suggested by Beck (1982) would be invaluable in the assistance of planning, implementation, and evaluating in-service education programs for teachers of exceptional children in Jordan.

Impetus from state agencies, as well as funding and expert assistance, would facilitate the role of the universities in Jordan in the development and implementation of in-service training. The state agencies could use their

supervision and funding powers over the public schools to ensure that the teachers of the mentally retarded participate in in-service training programs. It is conceivable that the resulting improvements in the public schools would entice the private schools to also participate in the training. Of course, the state can also expand regulation to all schools in Jordan (both public and private) to ensure participation in training. The local agencies and schools could also interact with both the university and the state policy-makers in defining their training needs and in development and implementation of the in-service training.

CHAPTER III

DESIGN OF THE STUDY

Introduction

The basic objective of this study was to assess the status of teacher training plans for teachers of the mentally retarded in Jordan. To achieve this objective, the current and future plans developed by policy makers and school administrators were investigated. In addition, current instructional behaviors were studied among a sample of current teachers of the mentally retarded. Chapter I established the need, background, and perspective for the study, and Chapter II the relevant literature support.

This chapter presents the strategy employed in the investigation of teacher training plans and needs in Jordan. The various design topics that will be discussed include the population and how the sample was selected, instrumentation, data collection procedures, the instructional process model, and data analysis.

Population and Sampling Method

The population for this study consisted of policy makers at the Ministry of Social Development, school administrators and teachers of the mentally retarded in Jordan including those working in public and private schools.

As representative policy makers, the chairman of the department of special education in the Ministry of Social Development and his assistant were included. In addition, the director of in-service training unit at the Jordanian Institute for Social Work was also included because, given the current structure

of the Ministry of Social Development, the Institute of Social Work is the governmental entity in which responsibility for in-service training of teachers of the mentally retarded is placed. In order to determine the current role and functioning of the Institute in this regard it was necessary to include their director in the study.

Each school in Jordan is operated by a principal. These individuals have wide ranging autonomy with regard to school direction and programming. They may hire teachers on their own, determine staff development directions, and run the school with only nominal direction and interference from the government. For these reasons, center administrators were determined to be highly influential in teacher training and development plans. So in addition to Ministry level persons, center administrators were included. From the population of 18 center administrators, a decision was made to contact as many as possible. Accordingly, 15 administrators were included in the study.

Determining the instructional practices of teachers in Jordan's schools for the mentally retarded required sampling teachers from the total population of 116 currently teaching in 18 centers throughout the country. Records provided by the Ministry of Social Development (see Table 3.1) indicated that within the government-sponsored schools there were 38 teachers, all of whom are female. In the voluntary centers there were 78 females, but again no male teachers.

Table 3.1
Number, Sex and Distribution of Teachers of the Mentally Retarded According to School Sponsorship.

<u>Type of Schools</u>	<u># of Schools</u>	<u>Number of Teachers</u>	
		<u>Males</u>	<u>Females</u>
Governmental	4	--	38
Voluntary	14	--	78
TOTAL:	18	--	116

A two-step process for sampling among the 116 teachers was employed. First, a demographic survey (see Appendix A.1) was utilized by conducting telephone interviews with the administrator of each center. The interviews were designed to collect data regarding:

1. teachers level of education;
2. level of students;
3. years of experience teaching the mentally retarded; and
4. type of school in which teachers were employed.

Ranges of these variables were constructed to reflect the limitations observed in Jordan. For instance, the majority of these teachers had either a high school or diploma level of education, and were employed in either the public or the private sector. In addition, mentally handicapped students were only instructed in two groups, educable retarded or trainable/severely retarded. Therefore, teachers were classified accordingly. Regarding years of experience,

teachers indicated a range between 0 and 7. It was useful to arrange this range into high (3 or more years) and low (2 or less years).

In general, the demographic survey was employed as a basic tool for selecting the teacher sample for this study. The survey results are displayed in Table 3.2. Teachers were distributed into 16 cells representing the four variables.

Table 3.2
Teacher Distribution by Public and Private Sponsorship, Level of Education,
Years of Experience, and Type of Students Instructed

<u>Sponsor</u>	<u>Education</u>	<u>Experience</u>	<u>Program</u>	
			<u>EMI</u>	<u>TMI/SMI</u>
PUBLIC (Governmental) 38 (33%)	High school or less 16	< 3 years 10	3	7
		> = 3 years 6	3	3
	Diploma or above 22	< 3 years 12	5	7
		> = 3 years 10	4	6
PRIVATE (Voluntary) 78 (67%)	High school or less 37	< 3 years 29	12	17
		> = 3 years 8	3	5
	Diploma or above 41	< 3 years 28	11	17
		> = 3 years 13	3	10

The second step involved the selection of a sample of teachers from the poll of 116. Babbie's (1973) analysis of different degrees of variable representativeness suggests that a decrease in the probable sample error and an increase in precision by reducing variation within groups is gained by implementing a stratification sampling design. Thus, this technique was

employed in the study. To ensure equal numbers selected from the relevant categories of variables, only one teacher from each cell was selected. In essence, teachers were distributed into 16 cells representing the four variables of the study. One teacher was randomly selected from each cell as follows: the teacher available for sampling who had the desired characteristics for each category had their names recorded on slips of paper. From each group of teacher characteristics, the desired number of slips of paper were blindly chosen.

The limited number of teachers selected for study (16) was decided upon due to the nature of the methods employed. Given the necessity of using in-depth interviewing, classroom observation and records review, it was necessary to keep the sample size small enough to fully accomplish the results in a timely and cost efficient manner. Given the geographic location of specific centers as well as the cost and means for traveling to them, 16 was considered to be enough for adequate analysis and optimum efficiency to represent the population. The teachers in the sample carried multiple characteristics along the lines of teacher variables examined. Thus, for each variable of the study, the teachers were divided into two groups of eight.

Instrumentation

A. Data Sources:

Data on current and future plans for teacher training programs on the status of instructional behavior of special educators for the mentally retarded were collected from the following sources:

1. Interviews with the chairman of the special education department, his assistant, and with the director of the in-service training unit at the Institute for Social Work;
2. Interviews with fifteen center administrators for the mentally handicapped;
3. Statistical reports from the Ministry of Social Development;
4. Interviews with sixteen teachers of the mentally retarded;
5. Observations of three separate class sessions of each of the 16 teachers; and
6. Records reviews of three sample student folders from each of the 16 classrooms.

B. Data Collection Forms:

1. The Policy Makers and Center Administrators Interview Form (see Appendix B.1) was designed to identify the present and future plans for training teachers of the mentally retarded in Jordan. It was administered to policy makers in the department of special education, the Ministry of Social Development and to center administrators in the field. This form consisted of three open ended questions designed to elicit their concerns and recommendations regarding the current and future teacher training programs at these levels.

In this form, the questions were designed to encourage each respondent to discuss teacher training from their own perspective. These persons were the appropriate subjects for this level of inquiry since it was their role to guide instruction of the mentally retarded in Jordan. It was anticipated that their responses would provide a context for interpreting teacher data.

2. The teacher performance form (see Appendix B.2) was based upon a model derived from instructional process models and instructional strategies reviewed in chapter two. There are three major categories of instructional behaviors outlined in the model. The categories are: a) PLANNING; b) IMPLEMENTATION; and c) EVALUATION.

Within the category of PLANNING, the variables are as follows:

1. Assessment of entry behavior: pinpointing the entry level behavior at which the student is presently functioning. Combined with task analysis, (3 below) it is possible to decide more precisely at which level the student requires instruction. This assessment is developed from the instructional objectives and goals (curriculum) of the instructional program;
2. Goals for instructions: these are annual goals and statements about broad skills within curricular domains. Annual goals must be appropriate to the student's level of functioning and should order individual needs into priorities to allow for adequate functioning in the community;
3. Task analysis: breaking down specific skills into smaller steps that may be easier for the student to learn. Defined here, it is the process that involves the logical sequencing of a complex task. It also provides a precise description of expected behaviors;
4. Instructional objectives: statements about the specific skills the student must master in order to meet annual goals. These statements include:

- a. **Performance conditions:** what the student will be given or allowed to use during the situation. Such statements are usually introduced by "Given . . ." or "Referring to . . .";
 - b. **Desired performance:** the key element here is to use concrete and action verbs;
 - c. **Specifying criteria for adequate performance:** the achievement level that a teacher considers sufficient for the student to begin work on the next highest specific skill; and
5. **Appropriateness of planned instructional activities and strategies:** descriptions of the basic structural units of planning. The teacher selection and/or design of activities must be derived from the instructional objectives. Strategies describe the procedures that the teacher will employ in achieving instructional goals and objectives such as verbal instruction, prompting, modeling, physical guidance, fading, and reinforcement.

Within the category of IMPLEMENTATION, the variables are as follows:

- 1. **Individualized instruction within small groups:** used as a technique to teach students at different levels of functioning. Since students vary in their functional levels, the instructional program must be tailored to the appropriate level of functioning. However, since it is not realistic, practical, or even desirable to provide one-to-one instruction for each student in the class, it may be helpful to teach students in sub-groups of the total class to allow for individualization;
- 2. **Supervision of learning activities:** the teacher is commonly viewed as the center of the teacher-student interaction in monitoring activities

during lesson involvement such as making rounds, keeping contact with individuals and groups; and

3. **Feedback:** information that is provided to a student about the appropriateness of his/her response. Feedback may also provide information to the student about the learning criteria, or it may merely be used to reinforce or motivate students.

Within the category of EVALUATION, most models agree upon one format of evaluation, namely, formative evaluation. Formative evaluation is a systematic evaluation carried on in connection with instructional planning. Therefore, an objective will be evaluated at the end of each lesson or at prespecified intervals of time. In this type of evaluation, teachers receive feedback on the progress of the student, make necessary modifications in methods or materials, and verify if the student has attained the objective.

From this model, the Teacher Performance Form (see Appendix B.2) was developed. Each step of the model is reflected in the form. Therefore, the form includes 1) PLANNING (containing nineteen items and classified into the following five sub categories: Preassessment, Annual goals, Task analysis, Instructional objectives, and Instructional activities and strategies) 2) IMPLEMENTATION (containing nine items and classified into the following three subcategories: Individualized instruction, Supervision, and Feedback) and 3) EVALUATION (containing only four items).

For each category of instructional behavior (i.e. planning, implementation, and evaluation) one indirect and open-ended question was to be asked of each sample subject. Next, prompts (to be used as required) to assist the interviewee in elaborating upon answers were identified. Examples of these prompts were, "Give me an example . . .," "Tell me more . . .," and "Explain further . . ." In this

way, it was hoped that the subjects would be able to respond as fully as possible without having their responses biased by the interviewer. The interview technique was adopted to allow for responses that would not have been possible with other instruments such as mailed or closed-end questionnaires. Due to the exploratory nature of this study, it was important to encourage in-depth responses by employing this type of instrumentation. Gorden (1980), noted the following advantages in the use of the interview: the interviewer usually has more of an opportunity to control the setting in order to better conduct the interview. He also noted an enhanced ability to interpret and clarify complex questions, to probe for clarification of responses, to evaluate the validity of responses and to ensure to a great extent that the interviewee takes the questions seriously.

In addition to the interview technique, direct observation of teacher behaviors and teacher records were to be conducted. The purpose of the observation was to determine the extent to which instructional behaviors were represented in instructional settings. The purpose of the records review was to determine the extent to which written records (lesson plans, progress reports, data sheets, etc.) reflected instructional behaviors.

This approach, namely, using interview, classroom observation, and records review, to verify the presence of instructional behaviors is not always feasible due to factors of time, cost and the intrusive nature of the approach. However, this process for determining the presence of instructional behaviors is thought to be superior to one utilizing only one or two of the procedures and for this reason the process was adopted.

To validate the content of this form, a pilot study was carried out using three teachers at the Beekman Center in Lansing, Michigan. It was also

reviewed by a research expert in the field of special education. Revisions were made based on the results of the pilot study and suggestions from the expert.

After the completion of the development process both the policy makers and center administrator form and teacher performance form were translated into Arabic for use in Jordan. The translation was done by the researcher and validated for accuracy in translation by three doctoral students at Michigan State University who have fluency in both English and Arabic. These translations were further validated by two experts in Jordan. Following these editing and translation procedures, final drafts were printed.

Data Collection Procedures

All data were collected in Jordan during the spring of 1984 by the researcher. Prior to data collection, the Ministry of Social Development was visited to determine the feasibility of conducting the proposed study. In general, the responses were supportive and encouraging. Official letters were sent to each subject to inform them of the intent of the study and to ask for their cooperation and support.

At all levels of this study, appointments were made with each subject and the purpose was explained to each. Furthermore, participants were informed that the purpose was not an evaluation of their individual instructional process.

Due to limitations of time and difficulties of transportation in Jordan, the researcher conducted phone surveys with the administrator of each center and filled out the demographic survey questionnaire according to their responses. The sample was then selected accordingly.

During the data collection process, each teacher was assigned a four digit code number to be used to identify the final results according to the relevant

subject variables. Then, interviews were conducted with the sixteen teachers representing the sample of this study. Each interview required 30-40 minutes. At the beginning of each interview, the three main questions regarding planning, implementation and evaluation were read without waiting for responses, in order to show the subject the areas of concern that would be discussed. Then, the researcher returned to the first question and allowed the subject to respond as fully as possible. Where required, some prompts were asked, such as, "Tell me more . . .," "Give an example . . .," and "Explain further . . .," for the purpose of helping the subject elaborate on responses.

The same was then repeated for the remaining two questions. At the end of the interview, the researcher verified with the subject that appointments had been made to observe three different class sessions conducted by the subject, to assure that this was still convenient. The appointments were made with the full cooperation of the subjects and were not planned in any way to alter their normal instructional format.

The interview, classroom observation, and record review phases of the investigation process were designed to be conducted on different days. The researcher was based in the city of Zarka and repeated trips to those centers (n=8) which were too far away was not feasible. All three phases therefore, had to be conducted for those centers on the same day. For the other centers, (n=10) there were usually gaps of two or three days between visits.

Direct classroom observations for any three different instructional topics were completed. Without any interference with the flow of the class, every action of the observed teacher which related to the study was recorded. At the end of the observations, teachers were asked to provide written plans for three different classes which were used in the records review.

Interviews with administrators numbered 15 out of 18. Interviews in centers which were quite distant from Zarka were conducted in the same visit as the one to gather data on the teachers' instructional skills. Interviews with administrators in centers close to Zarka were conducted on different days than those used for subject interviews or observations. The format of the interview for center administrators was informal and focused on the three major questions previously identified (Appendix B1). The interviews lasted between 40-50 minutes.

Finally, the interviews were conducted with officials from the Ministry of Social Development, including the chairman of the Department of Special Education, his assistant, and the director of in-service training programs in the Ministry. Each interview was 40-50 minutes duration. The purpose of these interviews was to discuss current and future teacher training programs. Cooperation, coordination and various issues related to future developments in the field were also discussed.

All interviews and direct classroom observations, were conducted between May 14, 1984 and June 30, 1984. The collection of documents took place during this time as well.

Data Analysis

Since the policy makers and center administrators interview form is open-ended and used to investigate the present policies, roles and plans for teacher training, the data do not necessitate numerical scoring. Rather, responses from these interviews on each question were described and analyzed separately.

From the responses of policy-makers, general themes regarding, beliefs about, regulation of and participation in the administration of teacher training

for the instruction of the mentally retarded were identified. It was important to understand their actions to date, what they believe should be done in the future, and what agencies should participate in accomplishing and improving the instructional behaviors of teachers of the mentally retarded in Jordan.

For the responses of center administrators, analysis involved categorizing responses to each question and generating percentages reflecting the proportion and numbers of the administrators within each category. In addition responses were viewed by ranking of percent of respondents to show the level of agreement among center administrators.

The analysis of teachers' performance required first the development of a procedure to score their instructional behaviors within task areas. For each teacher, three phases of investigation, using the same Teacher Performance Form, were accomplished, namely, (1) interview; (2) classroom observation; and (3) record review.

In the interview phase, teachers were scored plus or minus on each instructional behavior, depending on whether or not they mentioned performing such behavior.

For the observation phase of classroom behavior, the researcher observed instruction on a sample of 3 classes. These separate instructional sessions were observed with each teacher. During each observation session the teacher was scored plus for each listed behavior that was performed at least once, during the session. Overall there was a possible maximum score of three for each instructional behavior according to the number of classroom sessions observed. However, data from the 3 sessions were collapsed into one. If the teacher received plus scores during any of the three observations, then only one score for

each behavior thus designated. If no plus scores were given during any of the three observation sessions, then the instructional behavior was scored as a minus.

For the records review phase, the researcher reviewed instructional behaviors in three separate student record plans. In each review, the teacher received a plus score for each instructional behavior that was evidenced at least once in each plan. But, if it was not documented, the teacher received a minus score for the given behavior. Once again, there was a possible maximum score ranging of three for each listed instructional behavior according to the number of record reviews. The three samples were collapsed into one and the teacher was given a plus score for each behavior thus designated. If no plus scores were given in this phase for certain instructional behavior, again it was scored as a minus.

Finally, for each teacher, an overall instructional behavior score was created for each listed behavior. This score was assigned by uniting the scores from the three phases. This score was put on a 0-3 range with zero meaning the behavior was never observed during any of the three phases. A ONE was assigned if the behavior was observed during any single phase. TWO meaning that it was observed in any two phases; and THREE assigned when the behavior was evidenced in all three phases. These scores were obviously limited to the situation in which they were derived.

For teachers' performance, as recorded on the teacher performance form, descriptive statistics (means, standard deviations) were used in order to pinpoint the instructional behaviors exhibited by teachers within the three basic task areas. In addition, teacher performance was analyzed to determine if there were differences by level of education, experience, instructional setting and type of school. To test for significant differences within the variables of the study a

pooled t-test with an alpha level of (.05) was performed, along the variables related to the hypothesis mentioned in chapter four.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The purpose of this study was to assess the status of teacher training, specifically current and future plans developed by policy makers and center administrators, and to assess the current instructional behaviors of teachers of the mentally retarded in Jordan. Each of these areas has been dealt with separately and related findings are reported in three sections.

The first section reports on policy maker responses regarding the current status and future training plans for teachers of the mentally retarded in Jordan. An analysis of their responses was accomplished in this to determine the extent to which they have fulfilled their roles as policy makers.

The second section reports center administrator responses regarding their administrative roles and their perception of the training needs of their teachers. An analysis of their responses was accomplished to better understand their roles and responsibilities regarding teacher training.

The third section reports the results of the interviews, observations, and records review of the sample of teachers of the mentally retarded in Jordan. Descriptive statistics were used to summarize overall teacher performance. T-tests were used to test for significant differences in performance for each variable. Tables containing the raw data are presented in Appendix C.

Responses of the Policy Makers

The researcher met respectively with the following three persons at the Ministry of Social Department: the chairman of the special education

department, his assistant, and the director of in-service unit at the Jordanian Institute for Social Work. These persons were considered to be the policy makers in the field of special education in the country.

Both the chairperson and his assistant responded in the affirmative when asked if there were written policies for teacher training programs. When asked for concrete examples, each suggested that such documents could be gotten from the other. Finally, the Ministry people were unable to produce any written policy for review by this researcher. Rather they admitted that this policy is usually designed in the special education department and implemented in the field with limited cooperation from the special education center at the University of Jordan.

This response will confirm administrators' complaints, cited later in this study, that they were not consulted or included in any plans except for the implementation of in-service teacher training.

Further explanations of the policy were that these training programs were usually held in the summer and designed specifically for teachers in public (government) schools. This leaves a gap in training for private (voluntary) schools which employ the majority (67%) of the teachers of the mentally retarded. If they choose, their teachers can participate in public training, but the government does not require it. This leaves open to question the existence of a striking regulatory gap.

Goals of the training programs, as specified by the chairperson of the special education department and his assistant, were to increase teacher knowledge and to improve their performance in the field. No mention was made of how to motivate teachers to receive this training, or how to use training and

other incentives to combat teacher "burn-out", and keep good teachers in this field.

In addition to the gap here between policy makers' beliefs and those of the administrators, cited later in this study, there was thorough criticism of the existing training programs by the chair of the special education department. He stated that most of these programs were redundant and improperly executed by unqualified people. Obvious in these responses is the existence of tension between policy makers and administrators. It seems that, if the policy makers took a clearer and more active role in the design of training programs, these programs would work better and the tension between the policy makers and the administrators would be lessened.

While the chairman criticized these programs, he did not take responsibility for this problem, even though no clear policy has been promulgated. He said he did not have that power and that officials higher than himself had neglected to formulate a national policy for the training of teachers of the mentally retarded.

In an interview with the director of the in-service training unit at the Jordanian Institute for Social Work, it was found that both his responses and accompanying documentation reveal a formulated policy. Unfortunately, documents showed that the programs conducted were not serving teachers of the mentally retarded in Jordan, but rather, teachers from other Arab countries. This practice, in essence, used the resources of the Institute to generate income from outside of Jordan, as well as create better ties with the countries that were served.

This director also criticized teacher training programs and cited the lack of qualified staff for their design and execution. He also complained of a lack of

appropriate communication with the department of the special education at the Ministry of Social Development who should be the leading participant in the design and execution of such training programs.

In response to a survey about future plans for teacher training regarding the mentally retarded, all three stated they did not have one. In the absence of a national policy, these people are unable in the researcher's opinion to formulate such plans.

In response to a question of what they would suggest for the redesign of teacher training programs, all agreed to the formulation of a central committee representing all higher agencies and workers in the field. The function of this committee would be to survey teacher training needs, design and implement appropriate programs and complete a follow-up evaluation of such training programs. They indicated a preference for long-term training and training for new teachers that could be implemented in the evenings, or in the summer, and that certification and salary increases may be not necessarily tied to completion. Short-term training workshops were suggested for the implementation of in-service. In addition, policy makers were more concerned with practical training than instruction in the theory and philosophy of teaching the mentally retarded.

They also suggested importing experts from outside Jordan to assist in training programs and they also asked to be granted more policy making power than they currently have.

In summary, policy maker responses indicated a lack of leadership and coordination of teacher training in Jordan in regard to education of the mentally retarded. No consistent lines of effective communication between these policy makers and administrators in the field seemed to exist. Further, based on interview results and the lack of written documentation, no specific impetus for

special education teacher training came from these policy makers. This area of need seems to have low priority in current policy-making. However, there was some agreement between these policy makers that something should be done.

Responses of the Center Administrators

Interviews with fifteen administrators of programs for the mentally retarded were conducted by the researcher. These persons represented 83% of the total population of administrators for programs for the mentally retarded in Jordan. In response to the first question "What is the role you can play regarding the training of your teachers," 9 (66%), of the administrators reported they had no role in terms of the nature of training programs. The Ministry of Social Development usually decided what was needed in the field. This practice by the Ministry forced administrators to seek other alternatives considered to be valuable in the training of teachers, such as initiating field trips, holding weekly meetings with teachers, and presenting and discussing theoretical and/or practical reports. This is congruent with the results of interviews with policy makers.

Twelve (75%), of the administrators when interviewed said they held weekly meetings with teachers. During these meetings, the role of the administrator was to coordinate teacher discussions and to make efforts in the development of plans and program activities. Sometimes, they held individual meetings with new teachers or others who need special help of an instructional nature. In all cases, administrators reported that they conduct evaluation of classroom performance. However, evaluation forms were not evident.

Five (33%) of the administrators reported coordination and cooperation with other centers in the field in terms of conducting field trips, exchanging

information and experience related to the teachers' concerns. In contrast, four (27%) other center administrators reported no such interactions. This may be due to practical problems, such as, travel time between centers, post office service, or geographic locations. In other cases it may be a feeling that the philosophy of other center administrators may not be congruent with their own.

Three (20%) administrators said they assigned the training of new teachers to other teachers who were considered to be well-experienced and qualified.

Two (13%) administrators stated that they encouraged, arranged and participated in teacher-parent meetings in order to acquaint teachers with necessary skills in this area. There was a surprisingly low number of centers in which administrators encouraged parental involvement with the teachers. The researcher believes that this is an area of concern that should be expanded to the other centers.

The overall results of center administrator responses on question one gave the impression that these administrators had limited roles in deciding the nature of training programs, despite a voiced need for such a role. Apparently, such programs are arranged by the higher educational agencies , rather than being decided and planned in the field. This practice by the higher educational agencies obliged administrators to search for alternatives such as field trips, weekly meetings, follow-up evaluations in classroom settings, as well as assigning on-the-job training of new teachers to others who they judged to be qualified.

It is the researcher's opinion that these alternatives sought by administrators are justified, since they had never been given their proper role of assistance in planning the training programs.

Question two, a hypothetical question, asked center administrators to imagine that they were designing their own teacher training program and to tell what concerns and recommendations they would have in designing such a program.

All administrators (15) agreed that there was a lack of or miscommunication among the Ministry of Social Development, the University of Jordan and the Jordanian Institute for Social Work and themselves, which resulted in a lack of coordination in teacher training. The administrators felt that the relationship between the centers and the upper level of educators was a critical problem and there were basically three different suggestions given for resolving this problem.

- a. Three (20%) administrators recommended a formulation of a centralized committee of professionals from the field to represent the concerns and needs of teacher training and to be responsible for providing recommendations to appropriate agencies.
- b. Five (33%) others suggested direct relationship with the Ministry of Education in addition to the Ministry of Social Development because it was felt that the Ministry of Education had more experience in training programs than the Ministry of Social Development.
- c. One (7%) administrator took the extreme position that the direction of the centers should be taken away from the Ministry of Social Development and given to a directorate formed by the administrators of the centers themselves.

All fifteen administrators agreed that incentives should be provided to teachers to encourage them to obtain additional training in order to have qualified staff in the field. Two (13%) administrators discussed "burn-out"

among teachers of the mentally retarded and suggested that incentives were needed to keep these teachers and to encourage them to receive additional training. All agreed that the teachers should receive certification and salary increases in return for their additional training.

One-third (5), of the administrators suggested that teachers with additional training should receive promotions to some quasi administrative role such as a supervision of a sub-program within the center. Two (13%) administrators suggested that teachers also be offered opportunities for advanced training outside Jordan as an incentive to get additional training. One administrator suggested the giving of bonuses and letters of thanks in return for their additional training.

Two -thirds (10) of the administrators felt there was a need to design specialized training programs based on the teachers' needs. These programs could be arranged at the University of Jordan or at the Jordanian Institute for Social Work. The administrators disagreed as to whether the training should be on term basis according to the university schedule or individuals according to teachers needs. All these administrators suggested importing experts from outside the country, and to pay transportation and other costs for attendance at training workshops for teachers. It can be noted here that both administrators and policy makers emphasized the importance of importing experts from outside the country to assist in in-service training.

Forty percent (6), of the administrators preferred the establishment of one common training workshop in their centers. This was due to difference between centers in regard to instructional philosophy. These particular administrators wanted the teacher training designed according to their own special philosophy, curriculum and program needs.

Another six (40%) asked for specialized and practical training in the classroom for their teachers. Suggestions were that techniques such as behavior modification should be demonstrated and practiced.

Four (26%) asked for training workshops for administrators themselves in order for them to be competent in implementing training for their teachers. It is believed that this suggestion is realistic bearing in mind that special education in Jordan is relatively new.

As can be seen, responses to the question of designing a new teacher training programs were mostly in agreement. For instance, all administrators agreed to provide a range of incentives by the Ministry of Social Development at the end of each training program in order to protect the field from the high amount of "burn-out" in teachers. In addition to the lack of incentives for teachers, it seems that the administrators were concerned about communication between themselves and the higher agency levels. Therefore, they cited two reasonable and one extreme solution to these crucial problems.

The third question to center administrators asked them to identify specific training needs of their teachers and here they were varied in their views. Some wanted to design specialized programs based on teachers needs. For example, eight (53%) administrators asked for training in the classroom setting specifically in behavior modification suggesting that teachers may have some classroom behavioral problems. Another six (40%) administrators asked for similar training based on common programs and curricula.

Four (26%) of the administrators were even more direct when they suggested training for themselves since they were holding the responsibility to train their teachers. Theoretically, the higher agencies hold this responsibility, in practice the administrators often had to seek their own training opportunities.

The responses to this question revealed a sense of isolation of the centers from the higher educational agencies which was felt by the administrators.

Roughly eighty-seven percent (13) of the administrators suggested training programs for teachers in the areas related to planning long range and instructional goals and designing instructional activities. These suggestions are supported by the findings on teacher performance under "planning" reported in the next section.

Eleven (73%) of the administrators mentioned instructional strategies and techniques as being the second area of concern in the training realm. These administrators were obviously aware of the need for improvement in techniques and strategies of instruction in classroom settings as supported by the findings on teacher performance under "implementation" reported in the next section.

Ten (66%) of the administrators wanted to provide training for teachers in the development of instructional materials to enhance their ability in developing in-expensive, simple and appropriate materials for instructional purposes.

Nine (60%) wanted to design training programs to improve the teachers' ability to conduct appropriate procedures in diagnosis in general and in instructional evaluation in particular. These suggestions are supported by the findings based on teacher performance under "evaluation" reported in the next section.

Eight (53%) of the administrators suggested training in behavior modification techniques. The majority of administrators stating that the training must be practical. Two of these administrators broadened this suggestion to include classroom management rather than behavior modification. This suggests that the teachers are perceived as having problems in successfully guiding the behavior of their students.

Six (40%) specifically asked for teacher training to provide physical education, art, music, and recreation to the students.

One-third (5) asked for speech therapy training for teachers who are working with students having communication problems.

Four (26%) recommended training in counseling techniques and referral procedures so that teachers could help parents understand their childrens' problems and to direct parents to other agencies that can supplement the services of the centers. Genetic counseling was cited as an example.

Another twenty-six percent (4), asked for teacher training in the basic concepts of mental retardation; i.e., nature and definition, classification, mental development, and theories of learning.

In sum, the overall responses attained from center administrators seem to be in great contrast with that of the policy makers, especially those areas concerning roles, incentives, and training strategies.

In contrast, administrator responses seem to be in accord with the findings of teachers' performance to be discussed in the following section. Specifically, eighty percent of administrators suggested training teachers in instructional goals, seventy-three percent wanted training in instruction strategies and activities and sixty percent suggested training in instructional evaluation. These suggestions and others imply the dire need to train teachers in all instructional areas (planning, implementation and evaluation).

Other suggestions ranged from the need in training in the development of instructional materials to training in basic concepts. These suggestions seem to emphasize that much more training is needed.

Instructional Behaviors of Teachers

Sixteen teachers of the mentally retarded were interviewed on the performance of specified tasks in their role as teachers. Observation of their performance in the classroom and records review were also used to rate their performance on a scale of zero (no observed performance) to 3 (maximum observed performance). These scores were then averaged by type of task and teacher variables. Type of tasks evaluated and the number of subtasks within each task grouping were as follows:

- A. Planning (n=19 subtasks)
 - 1. preassessment (n=5 subtasks)
 - 2. annual goals (n=4 subtasks)
 - 3. task analysis (n=3 subtasks)
 - 4. instructional objectives (n=4 subtasks)
 - 5. instructional activities and strategies (n=3 subtasks)
- B. Implementation (n=9 subtasks)
 - 1. individual instructional (n=2 subtasks)
 - 2. supervision (n=4 subtasks)
 - 3. feedback (n=3 subtasks)
- C. Evaluation (n=3 subtasks)

In all, there were thirty-two individual sub tasks were evaluated. Teacher variables used to divide teachers of the mentally retarded into groups were:

- 1. Level of teachers' education
 - a. diploma or above
 - b. high school or less
- 2. Type of students which teachers instructed

- a. educable mentally retarded (EMI)
 - b. trainable and/or severely mentally retarded (TMI/SMI)
3. Years of experience with mentally retarded.
- a. three years or above (≥ 3 years)
 - b. less than three years (< 3 years)
4. Type of school in which employed
- a. public (governmental)
 - b. private (voluntary)

The data in the tables which follow were analyzed using descriptive statistics and tested for significant difference in means using a pooled t-test. The pooled t-test means that we used a pooled estimate for the standard deviation using information from both samples to get the best possible estimate of standard deviation to be used in the test. The t-test was selected because of the size of the sample.

Table 4.1 summarize the findings relative to the instructional behaviors of teachers. (Further details of teacher performance on each sub task area can be reviewed in (Appendix C.1).

Table 4.1
Means and Standard Deviations of Teachers' Performance Presented by Task and Subtask Area

<u>Task, Subtask Area</u>	<u>Teacher Performance</u>	
	<u>Mean</u>	<u>(SD)* (n=16)</u>
PLANNING	.88	(.90)
1. Preassessment	.59	(.93)
2. Annual goals	.61	(.84)
3. Task analysis	1.02	(1.15)
4. Instructional objectives	1.20	(1.34)
5. Instructional strategies and activities	.94	(1.01)
IMPLEMENTATION	.77	(.89)
1. Individual instruction	.78	(1.17)
2. Supervision	.67	(.86)
3. Feedback	.81	(.74)
EVALUATION	.58	(.95)
OVERALL	.80	(.87)

*In this table and subsequent tables, the planning, implementation and evaluation means and standard deviations were generated from all subtasks data in each category and not from each subtask mean. The overall mean was generated from all the data gathered and not from the task areas.

On all tasks combined, the teachers surveyed scored on average (.80) on a scale of 0-3. Of the three basic areas, teachers scored the highest on planning

(0.88) and the lowest on evaluation (0.58) with implementation receiving an average score of (0.77).

Looking at planning, we see that the average of annual goals (0.61) and preassessment (.59) were the lowest areas. The highest score areas were in instructional objectives, task analysis and instructional activities respectively. Even so, the highest areas tended to barely score at the one score level which was also true of the planning mean.

In the area of implementation, the highest mean score was in the area of providing feedback to students (0.81). Individual instruction scored near the implementation mean at (0.78) and supervision scored lowest at (0.67).

Evaluation was averaged from the scores of the four subtasks items. The evaluation mean score was (0.58), the lowest of all the scores of the three major task areas.

Clearly, any teacher training program would necessitate much emphasis on all the task and subtask areas if we wanted to bring them up to the score level 3.

The lowest areas of preassessment, annual goals, supervision and all evaluation tasks would require special emphasis in teacher training. The low scores in these areas may be due to a lack of direction from administrators, and/or a lack of training programs provided by policy makers.

Finally, the size of the standard deviation in comparison to the means indicated that there was sizable variation between teachers in their performances.

We will now move to an examination of the data by teacher variables in order to see if difference along these variables occur in significant amount to justify pinpointing certain portions of the teacher population for training or if

teacher training programs should be designed to meet different levels of ability and performance along these teacher variables.

Instructional Behaviors of Teachers by Educational Level

Data gathered from the 16 teachers of the mentally retarded in Jordan was organized by the level of education they had received. The two basic groups were distinguished by whether they had a high school education or less and by whether they had at least a diploma level of education. The summary results of the scores on instructional behaviors by teacher groups are reported in Table 4.2 (further details of teacher performance on each subtask area by educational level can be reviewed in Appendix C.2).

Table 4.2
Means and Standard Deviations of Teachers' Performance Presented by Task Area and Level of Education (High School or Less and Diploma and More)

<u>Task Area</u>	<u>Level of Education</u>		<u>Difference in Means</u>
	<u>H.S. or less*</u> <u>Mean (SD)</u>	<u>Diploma & more*</u> <u>Mean (SD)</u>	
Planning	.70 (.64)	1.01 (1.10)	.31
Implementation	.72 (.74)	.82 (1.06)	.10
Evaluation	.28 (.80)	.88 (1.05)	.60
OVERALL	.66 (.56)	.95 (1.07)	.29
*(n=8)			

Teachers with at least a diploma level of education scored consistently higher means than the sample mean and, of course, higher than the means of teachers with a high school education or less. Even so, all the means are disappointingly low with only planning by teachers at the diploma level of education reaching an average score of one.

Teachers with high school education or less performed high in implementation (.72) and low in evaluation (.28). Teachers with diploma or better performed high in planning and low in implementation. The differences in means between the two groups were smallest in implementation and greatest in evaluation.

As a group then, teachers with high school or less education will need somewhat more training than those with more education, but they all need more training in order to improve the performance level. If emphasis were to be placed on a task area of training, the training of high school level teachers in evaluation activities would certainly take priority, given the low score of (.28) this group averaged for this activity. Closer examination of sub tasks areas of each task area revealed other areas of concern in teacher training. Table 4.3 shows in detail the performance scores of each teacher group within each task area.

Table 4.3

Means and Standard Deviations of Teachers' Performance by Task Area, Subtask Area, and Level of Education (High School or Less and Diploma or More)

<u>Task Area</u>	<u>Level of Education</u>		<u>Difference in Means</u>
	<u>H.S. or less*</u> <u>Mean (SD)</u>	<u>Diploma & more*</u> <u>Mean (SD)</u>	
PLANNING	.70 (.64)	1.01 (1.10)	.31
1. Preassessment	.28 (.41)	.90 (1.21)	.62
2. Annual goals	.28 (.28)	.94 (1.09)	.66
3. Task analysis	1.08 (1.11)	.96 (1.25)	-.12
4. Instructional objectives	1.22 (1.48)	1.19 (1.28)	-.03
5. Instructional strategies and activities	.79 (.92)	1.08 (1.14)	.29
IMPLEMENTATION	.72 (.75)	.82 (1.06)	.10
1. Individual instruction	.69 (1.03)	.88 (1.36)	.19
2. Supervision	.66 (.73)	.69 (1.03)	.03
3. Feedback	.83 (.82)	.79 (.71)	-.04
EVALUATION	.28 (.80)	.88 (1.05)	.60
OVERALL	.66 (.65)	.95 (1.07)	.29
*(n=8)			

In the planning phase of instruction teachers with at least diplomas scored highest in the planning activity of instructional objectives and lowest in preassessment. Teachers with high school or less education scored highest in

instructional objectives and lowest in preassessment and annual goals. Curiously enough, in task analysis and instructional objectives, those with high school or less scored slightly higher on average than did teachers with at least a diploma level of education. If subtask areas within planning were to be pinpointed for special emphasis in training of high school education level or less teachers, they would be preassessment, annual goals and instructional activities in planning. Diploma level teachers would receive special emphasis on preassessment, annual goals, and task analysis. Of course, all subtask areas both groups were low enough on the 0-3 scale to merit special instruction. The differences between teacher group means were greatest in the subtask areas of preassessment and annual goals even though these were low scores for both groups within the task area of planning.

Within the task area of implementation, teachers with at least a diploma scored highest in individual instruction and lowest in supervision, although there was less internal variation in the implementation scores for this group than there was for planning activities. All three scores were sufficiently low to merit more emphasis in training for instruction implementation. Teachers with high school or less education scored highest on feedback and lowest on supervision; but all implementation subtask areas had very low scores for this group, suggesting that more emphasis be put on training for this group as well. No subtask areas within evaluation were specifically cited to make similar comparisons.

To understand if there was a significant difference between the two teacher group means for performance of all tasks, a pooled t-test for independency of means was performed. The following hypotheses were tested.

H_0 : There is no significant difference in the mean score of overall teacher performance between teachers of diploma level of education or more and teachers of high school education or less.

H_A : There is a significant difference in the mean score of overall teacher performance between teachers of diploma level of education or more and teachers of high school level of education or less.

The alpha level was set at (.05). The pooled t-test results were (.67) which was not significant at the alpha level of (0.5) when compared to the tabulated t-value of (1.76). Thus, we failed to reject the null hypothesis of no significant difference in the means by level of teacher education. So teacher training programs overall need not be designed to take into account difference in the educational level of the teacher.

More detailed investigation of the raw table (Appendix C.2) seems to give the answer for failing to reject the null hypothesis in this variable. Of eight diploma teachers, there were six nonspecialized with only a diploma in elementary teaching. Two other teachers had high scores which may be due to one's seven years of experience, and the other's special education diploma.

Instructional Behaviors of Teachers by Type of Students Taught

Data gathered on the performance of 16 teachers of the mentally retarded in Jordan were further examined according to the variable of type of students taught. The teacher groups were characterized by whether the teacher primarily taught the educable mentally retarded (EMI) or the trainable and severely mentally retarded (TMI/SMI). The teachers' performance scores on these variables are summarized below (for further details of teacher performance on each subtask area by type of student taught can be reviewed in Appendix C.3).

Table 4.4

Means and Standard Deviations of Teachers' Performance by Task Area and Type of Students Taught (EMI, TMI/SMI)

<u>Task Area</u>	<u>Type of Students Taught</u>		<u>Difference in Means</u>
	<u>EMI*</u> <u>Mean (SD)</u>	<u>TMI/SMI*</u> <u>Mean (SD)</u>	
Planning	.43 (.37)	1.29 (1.05)	.86
Implementation	.43 (.51)	1.1 (1)	.58
Evaluation	.22 (.34)	.94 (1.24)	.72
OVERALL *(n=8)	.41 (.37)	1.18 (1.04)	.77

Teachers of the more severely retarded group tended consistently to have higher means than teachers of the less severely retarded. Even so, we once again have scores that range from a low of (.22) for EMI teachers on evaluation to a high of (1.29) for planning by TMI/SMI teachers. Both scores may be considered low and indicate that more training on all task areas are needed for both teacher groups, with teachers of the EMI needing even more training and assistance to improve their performance.

Teachers of the TMI/SMI performed highest on planning (1.29) and lowest on evaluation (.94). Teachers of EMI performed highest on planning and implementation (.43) and lowest on evaluation (.22). The differences in group means were greatest in planning (.86) and smallest in implementation (.58).

As a group, teachers of EMI will require more training than the other teachers, but both groups clearly need more training to bring their performance up to an adequate level in all three task areas.

Table 4.5 presents teachers' performance by task and subtask areas and is helpful in identifying specific needs.

Table 4.5

Means and Standard Deviations of Teachers' Performance by Task and Subtask Area and by Type of Students Taught (EMI, TMI/SMI)

<u>Task Area</u>	<u>Type of Students Taught</u>		<u>Difference in Means</u>
	<u>EMI*</u> <u>Mean (SD)</u>	<u>TMI/SMI*</u> <u>Mean (SD)</u>	
PLANNING	.43 (.37)	1.29 (1.05)	.86
1. Preassessment	.20 (.24)	.98 (1.21)	.78
2. Annual goals	.41 (.3)	.81 (1.16)	.40
3. Task analysis	.54 (.75)	1.50 (1.31)	.96
4. Instructional objectives	.63 (.99)	1.78 (1.45)	1.15
5. Instructional strategies and activities	.46 (.71)	1.41 (1.08)	.95
IMPLEMENTATION	.43 (.51)	1.1 (1)	.58
1. Individual instruction	.13 (.35)	1.44 (1.35)	1.31
2. Supervision	.41 (.52)	.94 (1.08)	.53
3. Feedback	.67 (.67)	.96 (.83)	.29
EVALUATION	.22 (.34)	.94 (1.24)	.72
OVERALL *(n=8)	.41 (.37)	1.18 (1.04)	.77

From this table we can see that for teachers of EMI students, preassessment and annual goals were the lowest subtask areas within planning. For teachers of TMI/SMI students, preassessment and annual goals were also the lowest subtask areas within planning. The highest planning subtask areas were task analysis and instructional objectives for both teacher groups. For the TMI/SMI teachers these were the subtask areas that came closest to reaching the score level of two with scores of (1.50) and (1.78) respectively. Differences between group means were greatest in the areas of instructional objectives and task analysis, even though there were high scores within groups.

In the area of implementation, the teachers of the TMI/SMI students scored highest on individual instruction and lowest on supervision. Conversely, the teachers of EMI students scored highest on feedback and lowest on individual instruction. This may be due to the individualized instruction skills needed for TMI/SMI and to the perception of the value of feedback for the less severely retarded. The difference in group means was greatest in the area of individual instruction and smallest in feedback. Evaluation scored a low for both groups. Any training program would require training of both groups with special emphasis on annual goals, supervision and feedback for teachers of the TMI/SMI students, and on preassessment, annual goals, individual instruction and evaluation for teachers of EMI students. Once again, it clear that both groups require training and other forms of assistance in order to upgrade their performance.

A pooled t-test was performed for the aggregate means of both teacher groups to determine whether there was s significant difference between teachers by type of students taught. The following hypotheses were tested:

H_0 : The mean performance of teachers of TMI/SMI students is not significantly different from the mean performance of teachers of EMI students.

H_A : The mean performance of teachers of TMI/SMI students is significantly different from the mean performance of teachers of EMI students.

The alpha level was set at (.05). The pooled t-test results were (1.83) which was significant. Thus we reject the null hypotheses in favor of the alternative hypothesis. Therefore, teachers of TMI/SMI students had significantly higher scores than teachers of EMI students. There are those who would assume that the better equipped teachers would be assigned to the TMI/SMI students, but this was not the case in Jordan. Thus, to interpret this result, it can be suggested that teachers of the more severely retarded may find their instructional behaviors more challenged by the lower response levels of the trainable and severely mentally retarded, eliciting higher performance from them in their instructional behaviors. We would expect that the teachers assigned to the TMI/SMI students would be the better skilled teachers in each center; but in fact teacher assignment tends to occur by chance in these centers, so the difference in teacher performance must come from the differing interaction of teacher and student by student levels.

Instructional Behaviors of Teachers by Years of Experience with MR

The results of the teacher performance survey were organized according to the years of experience to determine if teacher years of experience had any effect on performance. The summary results are in Table 4.6. (Further details of teacher performance by years of experience on each subtask can be reviewed in Appendix C.4).

From Table 4.6 we see that teachers with three years or more experience consistently had larger means for performance than did teachers with less than 3 years experience. It is interesting to note that for both groups the highest

performance was in the area of planning and the lowest performance was in evaluation.

Teachers with less than 3 years of experience scored much lower on performance with their highest in planning (.48) and lowest in evaluation (.19). Clearly, both groups need training to improve their performance with the less experienced teachers needing more emphasis. Both groups need special attention in training for evaluation.

Table 4.6
Means and Standard Deviations of Teachers' Performance by Task Area and Years of Experience (< 3 years and ≥ 3 years)

<u>Task Area</u>	<u>Years of Experience</u>		<u>Difference in Means</u>
	<u>< 3 years*</u> <u>Mean (SD)</u>	<u>≥ 3 years*</u> <u>Mean (SD)</u>	
Planning	.48 (.38)	1.24 (1.10)	.76
Implementation	.25 (.46)	1.20 (1.03)	.95
Evaluation	.19 (.35)	.97 (1.21)	.78
OVERALL *(n=8)	.41 (.34)	1.20 (1.07)	.79

Table 4.7
Means and Standard Deviations of Teachers' Performance by Task and Subtask Area and Years of Experience (<3 years and > = 3 years)

<u>Task Area</u>	<u>Years of Experience</u>		<u>Difference in Means</u>
	<u>< 3 years*</u> <u>Mean (SD)</u>	<u>>=3 years*</u> <u>Mean (SD)</u>	
PLANNING	.48 (.38)	1.24 (1.10)	.76
1. Preassessment	.28 (.3)	.9 (1.25)	.62
2. Annual goals	.25 (.27)	.97 (1.07)	.72
3. Task analysis	.54 (.75)	1.50 (1.31)	.96
4. Instructional objectives	.78 (1.12)	1.63 (1.48)	.85
5. Instructional strategies and activities	.58 (.79)	1.29 (1.13)	.71
IMPLEMENTATION	.25 (.46)	1.20 (1.03)	.95
1. Individual instruction	.25 (.46)	1.31 (1.44)	1.06
2. Supervision	.22 (.43)	1.13 (.97)	.91
3. Feedback	.58 (.66)	1.04 (.79)	.46
EVALUATION	.19 (.35)	.97 (1.21)	.78
OVERALL *(n=8)	.41 (.34)	1.20 (1.07)	.79

To pinpoint the problem areas within task areas Table 4.7 gives the performance scores for subtasks areas as well as task area scores.

From this table, we can see that teacher scores with 3 or more years of experience were lowest in subtask areas of preassessment, annual goals, feedback, and in evaluation in general. The same was generally true of teachers with less experience, except that they are lowest in the implementation subtask areas of supervision and individual instruction. The differences in group means were greatest in the subtask areas of task analysis, individual instruction and supervision.

To determine if the difference in overall performance means was significant enough to suggest different designs in training for each group, a pooled t-test was performed. The following hypotheses were tested:

H_0 : There is no significant difference in means for teacher performance by years of experience

H_A : There is a significant difference in means of teacher performance by years of experience in the favor of highly experienced teachers.

The alpha level was set at (.05) with 14 degrees of freedom. The results of the pooled t-test were (1.98) which was significant. Taking into account the difference in years of experience, the t-test results for both level of education and for years of experience suggest that it is experience rather than prior training that explains differences in teacher performance, with more experienced teachers performing their tasks better than less experienced teachers.

Instructional Behaviors of Teachers by Type of School

Data on teacher performance were gathered and organized according to the type of school in which the teachers were employed, namely public (governmental) or private (voluntary). The summary results are reported in Table 4.8. Further details of teachers' performance on each subtask area by type of school can be reviewed in Appendix C.5.

Table 4.8
Means and Standard Deviations of Teachers' Performance by Task Area and Type of School (Public and Private)

<u>Task Area</u>	<u>Type of School</u>		<u>Difference in Means</u>
	<u>Public*</u> <u>Mean (SD)</u>	<u>Private*</u> <u>Mean (SD)</u>	
Planning	1.05 (.83)	.67 (.95)	.38
Implementation	.94 (.80)	.60 (1.00)	.34
Evaluation	.75 (.98)	.41 (.95)	.34
OVERALL *(n=8)	.98 (.80)	.63 (.96)	.35

In Table 4.8 we can see that for both public and private school teachers the highest scores were in planning and lowest in evaluation. The differences in their performance was greatest in planning, and public school teachers consistently performed higher than private school teachers. Even so, their higher performance of (1.05) in planning relates to a score of one. This, once again, is inadequate performance, suggesting that much training is needed even for public school teachers, who are theoretically better regulated and trained by the Ministry of Social Development which has only four schools to sponsor.

To pinpoint the problem areas in each subtask area of performance, Table 4.9 was developed.

Table 4.9
Means and Standard Deviations of Teachers' Performance by Task and Subtask Area and Type of School (Public and Private)

<u>Task Area</u>	<u>Type of School</u>		<u>Difference in Means</u>
	<u>Public*</u> <u>Mean (SD)</u>	<u>Private*</u> <u>Mean (SD)</u>	
PLANNING	1.05 (.83)	.67 (.95)	.38
1. Preassessment	.70 (.88)	.48 (1.03)	.22
2. Annual goals	.59 (.84)	.63 (.90)	-.04
3. Task analysis	1.33 (1.22)	.71 (1.05)	.62
4. Instructional objectives	1.63 (1.49)	.78 (1.11)	.85
5. Instructional strategies and activities	1.21 (.91)	.67 (1.01)	.54
IMPLEMENTATION	.94 (.80)	.60 (1.00)	.34
1. Individual instruction	1.13 (1.25)	.44 (1.05)	.69
2. Supervision	.84 (.79)	.50 (.95)	.34
3. Feedback	.92 (.79)	.71 (.72)	.21
EVALUATION	.75 (.98)	.41 (.95)	.34
OVERALL *(n=8)	.98 (.80)	.63 (.96)	.35

It can be seen that public school teachers scored highest on the subtask areas of task analysis and instructional objectives and lowest on preassessment and annual goals within the task area of planning. In implementation, they

scored highest on subtask area of individual instruction and lowest on the subtask area of supervision.

Private school teachers scored highest on the subtask area of instructional objectives and lowest on the subtask area of preassessment goals within the task area of planning. In implementation, they scored highest on the subtask area of feedback and lowest on the subtask area of individual instruction. Evaluation represented the lowest score across all task areas.

Difference in performance means in planning were greatest in the subtask area of instructional objectives. It is notable that there was little difference between the groups in subtask areas of preassessment and annual goals in planning, thus suggesting a universal weakness here. In implementation, the difference was greatest in the subtask area of individual instruction. The difference in evaluation means was a little different from the overall group means difference.

A pooled t-test was performed to determine if the type of school which employed had an impact on over-all teacher performance scores. The following hypotheses tested were:

H_0 : There is no significant difference in teacher performance by type of school in which employed.

H_A : There is a significant difference in teacher performance by type of school in which employed with public schools being considered more efficient.

The alpha level was set at (.05) with 14 degrees of freedom. The resulting t-score for performance by type of school was (.80) which was not found to be significant when compared to the tabulated t-value of (1.76). Thus, we can say that the type of school in which teachers were employed did not significantly influence teacher performance. This result is of interest because it was

expected that public schools, being regulated by the state would yield better performances than private schools which were unregulated. The role of state regulation does not seem to have induced a significant increment in the quality of teacher performance.

In summary, teacher performance scores were universally low with the best scores clustering around the level of one on a scale of 0-3. Variables which correlated to even lower scores were: teachers of the educable mentally retarded, teachers with less than 3 years experience, and teachers employed in private schools. There were significant differences in teacher performance by type of student taught and years of experience. This suggests that the demands of teaching the more severely retarded may require better skill, and these skills therefore produced better performances. In addition, teachers of the more severely retarded may find their instructional behaviors more challenged by the lower response levels of these students and therefore, the difference in teacher performance may come from the differing interaction of teacher and student by student levels. Education and type of school were not significant variables, suggesting that prior education was consistently inadequate and the government regulation did not enhance instructional behaviors in the public schools.

CHAPTER V

SUMMARY, DISCUSSION, AND CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to summarize the study, discuss the findings in relationship to the purpose of the study and the relevant literature, and to offer conclusions and recommendations.

Summary

The purpose of this study was to assess the status of teachers training plans for teachers of the mentally retarded in Jordan. To accomplish this purpose the current and future plans of policy makers and center administrators were investigated. In addition, the instructional behaviors of teachers of the mentally retarded were determined.

This study was thought to be important because special education is relatively new in Jordan's schools and the number of teachers trained to work with the mentally retarded is limited in spite of the fact that new programs continue to open in an effort to meet the need for service.

The subjects for the study included three known educational policy makers, 15 of 18 center administrators and a sample of teachers selected from the total population of teachers of the mentally retarded in Jordan.

Policy makers and center administrators were interviewed and their responses recorded, while teachers were interviewed, their instruction observed, then classroom records reviewed. Teacher data were recorded on an instrument designed for the purpose.

The responses of policy makers and center administrator were analyzed and reported as were the teacher data. The teacher data were further analyzed to

determine the significance of performance to date, in level of education, degree of retardation of students taught, experience, and type of school in which one teaches.

The major findings of the study were:

Policy Maker Level

1. Policy makers do not lead or coordinate training programs for teachers of mentally retarded in Jordan.
2. Policy makers do not communicate effectively with the field of special education.
3. Policy makers cannot provide evidence of any plans for teacher training programs, present and future.
4. Policy makers appear to have given teacher training programs a low priority in current plans.
5. Policy makers support formulating a centralized committee of representatives of all higher level agencies and of workers in the field to be given the task of redesigning teacher training programs.

Center Administrators Level

1. Center administrators are not usually consulted or included in government plans for in-service training of their teachers.
2. Center administrators confirm that there is little communication between them and policy makers.
3. Center administrators, in the absence of government policy, usually act on their own initiative when it comes to in-service training for their teachers.

4. Center administrators recommend that incentives be provided to teachers of the mentally retarded to encourage them to obtain additional training.

Teacher Level

1. Teacher performance is low in most instructional behaviors.
2. Teacher performance was highest in planning and lowest in evaluation.
3. Teachers with diploma or more education had somewhat greater performance than teachers with less education. But this difference was not significant according to the statistical testing used.
4. Teachers of trainable/severely mentally retarded students had significantly higher performances than teachers of the educable mentally retarded.
5. Teachers employed in public schools had somewhat greater performance than teachers employed in private schools. But this difference was not found to be significant when statistically tested.
6. Teachers with more experience had higher performance than teachers with less experience.

Discussion

Special education programs in Jordan are considered to be in an early stage of organization. In recent years, the country has witnessed several developments as confirmed by Qaryouti (1983) and Dauod (1981). Despite these developments, this study has determined that policy governing the special education programs, particularly teacher training is not existed and further that the instructional behaviors are at a low skill level. These findings will be discussed.

Findings of policy makers responses revealed that there is a striking regulatory gap of in-service education. This gap is due to the obligatory

inclusion of only teachers from the four identified state schools. This number leaves another fourteen schools that may participate voluntarily, but which go unregulated. The regulatory gap extends to the funding, developing and implementation of teacher training programs even in those schools the state can legally serve. This situation may be due to the lack of clearly defined laws and regulations regarding services to the handicapped in Jordan which would both impel and guide policy makers toward effective training programs. This situation is in contrast to the regulatory strengths in this area presently found in the U.S., as discussed earlier when the policies on special education were reviewed.

In addition to the regulatory gap, policy makers believed that in-service training programs must be routinely implemented as part of teacher responsibilities without offering incentives to participation. This neglect of teachers' personal needs by the policy makers was made evident by not including incentive and motivation techniques in past programs. Despite increased public awareness and pressure, and despite the voiced sentiments of the people in the field, Jordanian policy-makers remain out of touch with the needs and sentiments of administrators and teachers. There are new initiatives for training programs in Jordan, as discussed by Qaryouti (1983), but there has been no attempt to use the knowledge and experience of teachers in the field to increase and reshape teacher training programs. This may reflect a bias on part of the policy makers regarding who may be considered an expert in the field, and who may not.

Findings from center administrator responses appear to contradict policy maker responses in areas such as roles, incentives and in-service training strategies. These incentives and in-service training strategies have been

discussed by numerous authors as reviewed earlier (Rubin; 1971; Wells, 1978; Lampner, 1979; Harris & Bessent, 1969; Snell, 1979; Stowitschek & Hofmeister, 1974; Wood & et. al., 1982, and Kelly & VanVactor, 1982).

Clearly, center administrators are closer to the reality of teaching the mentally retarded and the problems to be solved, as well as the strengths and weaknesses of their own teachers than are policy makers. Therefore, the fact that they support the idea of teacher incentives stems from a pragmatic knowledge of the dynamics involved in executing effective in-service training programs. Given the existing pressures on their teachers, it makes sense to expect that the added burden of in-service training would be best accepted if incentives such as pay raises and certification were offered (Corrigan & Howey, 1980; Edelfelt & Johnson, 1975; and Boucebci, and Brau, 1981). But, in fact the responses from center administrators in Jordan showed their limited roles in deciding the nature of incentives and contents of in-service education programs. Despite the voiced need for such roles, these roles were usually given away and filled by higher agency levels.

Views of center administrators in terms of redesigning in-service program and contents were varied as reported earlier. The most significant obstacle expressed by these administrators was the lack of and miscommunication between centers and higher agency levels. Also, most center administrators seem to be aware of needs, but are frustrated in their attempts to secure such training due to regulatory and communication gaps. In other words, the lack of leadership in policy and teacher training may be borne out by low teacher performance.

In general, it can be concluded that at present, Jordan does not have a national policy of training programs for special education teachers as also found by Qaryouti (1983). In addition, it was clearly stated by all three policy makers that future national policy has also not been formulated, nor have long term goals. Effective training programs would best be accomplished if first there were a commitment to the formulation of policy and specialized training of teachers of the mentally retarded. A national commitment similar to the U.S. programs in 1958, 1963, 1968, 1976 (Hallahan & Kauffman, 1982) may be what is required in the case of Jordan. Thus, it is hoped that studies such as this one, along with demands from the affected community placed on the government, could result in policies being made and specialized training being supported and implemented.

The results of the teachers' performance on the teacher performance form which derived from the instructional process model and instructional strategies reviewed earlier confirm the low level of instructional behaviors of teachers of the mentally retarded in Jordan. This conclusion supports Qaryouti's (1983) finding that the existing special education services suffer from a severe shortage of trained teachers (p. 128). However; a sizable variation in teacher performance can be noted. This variation resulted from a few teachers performing most of the tasks well, while the majority met few of the performance expectations.

While the differences which were significant at .05 alpha indicate that differing levels of teacher training could be constructed to meet differing levels of need, the fact that the raw performance scores of the high performing teachers were generally low, indicate that training should be extensive and very

basic for all teachers. The significant differences mentioned above are more useful as a guideline to indicate that:

- a. Teacher performance was more greatly affected by experience than by prior training. According to Rude (1978) a combination of experience and in-service training provided special education teachers with the best foundation for becoming better teachers. Therefore, years of experience is considered to be an effective element in teacher performance. Results of teacher performance according to the level of education, may be due to the nonspecialized level of education of these teachers in general. In the total population, there were only seven teachers found by the researcher to have specialized training in special education. This confirms the necessity of creating a specialized in-service training program for these teachers who are, in general, at a low level of training. This low level may also be due to the novelty of special education in Jordan, as was indicated by Qaryouti (1983). In addition, in the teacher sample, only one teacher had seven years of experience in teaching the mentally retarded students. Half of the sample had two years or less of experience, with the other half ranging from 3 to 7 years of experience. The experience factor is exacerbated by the special needs involved in instructing mentally retarded.
- b. Teachers in public schools performed with no significant difference from those in the private sector, suggesting that the governments' role to date is not very prominent. This once again is due to the lack of regulatory inputs for and definition of governmental responsibility to the needs of the handicapped population, in contrast to that of the U.S. It may also be that public regulation is no more effective in its current state as that of regulation of private agencies.

- c. Teacher performance was more greatly influenced by type of students instructed. Therefore, teachers who instructed TMI/SMI performed more highly than teachers who instructed EMI. This may be due to the necessity of these skills to deal effectively with more severe cases, or it may be that the best skilled teachers were assigned by chance to teach these students. It is also possible that teachers of the more severely retarded may find their instructional behaviors more challenged by the lower response levels of these students.

Conclusions and Recommendation

The following conclusions and recommendations seem warranted based on the findings of the study:

1. Jordan does not appear to have a national policy in teacher training in the area of special education. Recommendations to facilitate such policy development include:
 - a. The Ministry of Education must initiate action in the planning, implementation and evaluation of in-service education for teachers in special education. This recommendation is based on the fact that the Ministry of Education is currently the only government agency has regulatory responsibility to provide education for all Jordanian citizens including the handicapped and their teachers.
 - b. Center administrators should encourage and facilitate an effective relationship with parents of handicapped children. This recommendation recognizes that parent roles involve not only supporting in the home, the lessons provided to their children in the classroom, but also the important role of parent organizations to

influence governmental policy in education for the handicapped children (MacMillan, 1983). In the U.S., such lobbying played an important role in shaping policy and this could also occur in Jordan.

- c. Center administrators should encourage the development of awareness, advocacy and self advocacy groups in conjunction with parent groups to highlight the need for improved teacher training programs.
- d. Center administrators as a group should participate in the efforts to create a national policy in teacher training by lobbying the national media to support this concept.
- e. Center administrators should continue to pursue their strategy of coordination and cooperation efforts in improving teacher's instructional behavior until a national policy for this purpose is formulated and implemented.
- f. Centers for training the mentally retarded should be supervised and their efforts to provide service to students monitored and evaluated.
- g. The government should create a functional, centralized committee with authority to arrange collaborative efforts on behalf of special education, particularly teacher training. This committee should have an equal voice and adequate power to deal with members representing all higher agency levels, the special education field and if possible, the Ministry of Education. Responsibilities of this committee should include, at least, program planning, implementing and evaluating teacher training programs including in-service

training. It is hoped that such a committee would enhance communication and understanding of roles and responsibilities among all parties.

Decisions to initiate policy and policy change should be justifiable and tuned to existing economic limitations and the public mood. Such decisions for change will not make significant improvements unless they come from the coinciding interests of all who have stake in the result of all who have a stake in the result of the change (Edelfelt and Johnson, 1975). Therefore, the policy makers at the Ministry of Social Development must take a stronger role in shaping and improving teacher training programs. However, they must not neglect or ignore the ideas and desires of the center administrators and teachers who will be affected by the policies. In addition, coordinated efforts with the universities in Jordan are required if the university is expected to participate in the in-service training programs.

2. Center administrators of programs for the mentally retarded in Jordan recognize the deficiencies of teacher training, are aware of the implications for their programs, and agree that the situation must be alleviated. Recommendations to facilitate improvement in teacher training and the on-the-job performance of teachers include:

- a. In-service programs must be designed to take place in the contexts most suitable to the acquisition of needed skills. These contexts may be the school classroom, the college campus or a summer workshop. The programs should include both long and short term in-service options and incorporate the use of incentives techniques for participants. The most effective approach would consider a combination of all these techniques

with provision for individualizing an approach to meet a teacher's specific need.

- b. Each center administrator should function as the educational leader of the center program. Their responsibility must include analyzing teachers' performance through structured observation, and planning and implementing in-service activities to improve teacher performance as needed. It is likely that center administrators may require in-service training themselves in order to assist their teachers in improving their instructional behaviors.
 - c. Centers administrators should use the highly experienced teachers to support beginning teachers.
 - d. Center administrators as a group should organize and coordinate in-service not only as an economy measure, but also to facilitate the exchange of information and ideas among staff. Such group efforts could result in securing consultant services to help organize and implement in-service at the program level.
 - e. Consideration should be given to expanding the application of the instructional behaviors identified in this study to other than the traditional instructional areas of the curriculum. For example, in-service education for both teachers and administrators could be designed to include the areas of recreation and leisure activities for the retarded.
3. As a group, teachers of the mentally retarded in Jordan appear to have minimal basic instructional skill. Recommendations to enhance the skill level of these teachers include:
- a. In-service training for teachers must focus on the instructional behaviors known to be essential to effective teaching. The instructional process

model developed from the review of literature would be useful in this regard.

- b. In-service training for teachers must include a provision for incentives to encourage participation. The most powerful and just incentive would be certification in return for teacher training (Coorigan & Howey, 1980; Edelfelt & Johnson, 1975; Boucebci, and Brau, 1981).
- c. In-service training for teachers must focus on classroom management techniques and organizing the classroom for effective instruction.
- d. Center administrators should organize in-service training activities to include not only basic information on mental retardation, but also physical education, speech therapy, needs of parents, agencies servicing the retarded, and other such curricular and related information.
- e. Center administrators should design staff meeting to include an in-service component, such as, teachers sharing instructional ideas with each other.

Implications for future research: this study was limited in size and scope by a variety of constraints. Clearly, in the future, this study may be replicated to include a larger sampling of teachers of the mentally retarded in Jordan. Such replication, would allow for longitudinal comparisons, and to look for progress in teacher training in this area of disability. Further study may also include teachers of other disability groups. Such explantation would allow for comparison of teacher training between service provided to teachers of different disability groups.

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APPENDICES

APPENDIX A₁

The Demographic Survey Questionnaire for Teachers
of the Mentally Retarded in Jordan

Name: _____

Sex: _____ Male _____ Female

Level of teachers education:

_____ High school and below
 _____ Diploma (specify)
 _____ Bachelors degree (specify)
 _____ Above B.A. (specify)

Number of years in teaching mentally retarded students _____

Place of work: City _____
 Governate _____

Name and address of the school _____

Type of sponsorship:

_____ Public
 _____ Private
 _____ Jointly

Type of students teachers' instructed:

_____ Mild
 _____ Moderate
 _____ Severe/Profound

APPENDIX B₁

Policy Makers and Center Administrators
Interview Form

Policy Makers' Level

1. Is there any written policy for teacher training programs? If yes, explain.
2. Do you have any future plans for teacher training? If yes, explain.
3. If you were in the position to redesign a teacher training program, what changes would you make and what strategies would you use?

Center Administrator's Level

1. What is the role you can play regarding the training of your teachers?
2. What concerns do you have about teacher training? If you were in a position to design a teacher training program, what recommendations would you make?
3. In what professional areas do you feel the teachers you supervise need additional training?

APPENDIX B₂

TEACHERS PERFORMANCE FORM

PLANNING

Describe the procedures and resources you use to determine what to teach individual students?

Standards and Criteria for PlanningPreassessment

1. _____ consider previous assessment in instruction
2. _____ identify the present level of functioning
3. _____ use educational assessment tools
4. _____ report the results of each test
5. _____ conduct individualized assessment

Annual Goals

6. _____ implement goals which are ordered into priorities to promote appropriate function in the community
7. _____ goals are derived from the curriculum developed by the department of special education or the school
8. _____ goals specify knowledge, skill, or behavior the program expects the students to learn
9. _____ goals reflect an observable educational or related service needed

Task Analysis

10. _____ task analysis must be clear and complete
11. _____ task analysis must be internally consistent (does not require doing two incompatible things at the same time)
12. _____ logical in sequence, from the easier to the more complex steps

Instructional Objectives

13. _____ specify performance conditions
14. _____ specify desired performances that will facilitate the achievement of the annual goals
15. _____ specify the criteria for adequate performance
16. _____ logically sequenced from the easier to the more complex

Instructional Activities and Strategies

- 17. _____ must be related to goals and objectives to facilitate their attainment
- 18. _____ use clear directions, rules, and safety provisions
- 19. _____ determine the strategies used for each activity

IMPLEMENTATION

Once you decide what to teach, can you describe the methods and strategies you find most effective?

Standards and Criteria for ImplementationIndividualized Instruction

- 20. _____ design and implement learning objectives, activities, and strategies for each student
- 21. _____ divide students into homogeneous groups when feasible

Supervision

- 22. _____ often keep contact with individuals and small groups
- 23. _____ reduce frustration through task assistance
- 24. _____ encourage and motivate participation
- 25. _____ reduce potential distractions

Feedback

- 26. _____ provide immediate feedback of results for students
- 27. _____ correct for faulty behaviors
- 28. _____ use verbal and non-verbal reinforcement

EVALUATION

Based on your program construction and implementation, how do you determine the value of your instructional program?

Standards and Criteria for EvaluationEvaluation

- 29. _____ produce an ongoing evaluation for student performance
- 30. _____ specify educational evaluation tools
- 31. _____ report results of evaluation
- 32. _____ modify goals, objectives, amterials, and strategies based on ongoing evaluation

Prompts combined with questions:

- 1. Give me an example
- 2. Tell me more about that.
- 3. Explain further.

APPENDIX C₁

"RAW SCORES DATA OF TEACHERS' PERFORMANCE"

Task, Subtask	1111	1121	2111	2121	1211	1221	2211	2221	1112	1122	2112	2122	1222	2222	EX	EX2	$\bar{X}$	$\bar{X}^2$
PLANNING	21	1.63	.47	.42	1.26	1.79	.37	2.56	.32	.05	.47	.37	.26	2.95	14.1	24.37	.88	.9
Preassessment	4	0	.6	0	0	1.2	.8	2.6	1.2	.05	.4	.2	.26	3	9.4	18.6	.59	.93
1	0	0	0	0	0	2	2	2	0	0	2	0	0	3				
2	0	0	0	0	0	2	2	2	0	0	0	0	0	3				
3	0	0	0	0	0	2	2	2	0	0	0	0	0	3				
4	0	0	0	0	0	0	2	2	0	0	0	0	0	3				
5	2	0	0	0	0	0	0	3	0	0	0	0	0	3				
Annual Goals	.25	0	.5	1	0	.5	0	2.5	.75	.25	.5	.25	.5	2.75	9.75	16.56	.61	.84
6	0	1	0	0	0	2	0	3	0	0	0	0	0	3				
7	0	0	0	0	0	0	0	3	0	0	0	0	0	3				
8	0	0	1	2	0	0	0	2	2	1	2	1	0	2				
9	1	0	0	2	0	0	0	2	1	0	0	0	0	3				
Task Analysis	.33	2	0	0	2	3	.66	2.67	0	0	.66	1.33	.66	3	16.33	36.33	1.02	1.15
10	1	2	0	0	3	3	1	2	0	0	1	0	0	3				
11	0	3	0	0	2	3	1	3	0	0	1	0	1	3				
12	0	1	0	0	1	3	0	3	0	0	0	2	0	3				
Instructional Objectives	0	3	.75	.25	3	3	0	3	.25	0	.5	.25	.25	3	19.25	50.06	1.2	1.34
13	0	3	1	1	3	3	0	3	0	0	1	0	0	3				
14	0	3	1	0	3	3	0	3	0	0	1	0	0	3				
15	0	3	0	0	3	3	0	3	0	0	0	0	0	3				
16	0	3	1	0	3	3	0	3	0	0	0	0	0	3				
Instructional Activities & Strategies	0	2	.33	1	2	1.66	.33	2.33	.33	0	.33	0	0	3	14.97	29.38	.94	1.01
17	0	3	1	1	3	2	1	3	1	0	1	0	0	3				
18	0	0	0	0	3	3	0	1	0	0	0	0	0	3				
19	0	0	0	2	0	0	0	3	0	0	0	0	0	3				
IMPLEMENTATION Individualized Instruction	.11	1.56	.44	0	1.44	1.78	.33	1.89	0	.11	.56	.11	.22	3	12.33	21.31	.77	.89
20	0	1	0	0	1	3	1	3	0	0	0	0	.5	3	12.5	30.25	.78	1.17
21	0	2	0	0	0	3	2	3	0	0	0	0	0	3				
Supervision	.25	1.5	.25	0	1.25	1.75	0	1.75	0	0	.5	.75	.75	3	10.75	18.44	.67	.86
22	1	3	0	0	3	2	0	3	0	0	0	0	0	3				
23	0	0	0	0	0	1	0	3	0	0	0	0	0	2				
24	0	3	1	0	2	1	0	3	0	0	0	0	0	3				
25	0	0	0	0	0	0	0	3	0	0	0	0	0	3				
Feedback	0	2	1	0	2	1	.33	1	0	.33	1	.66	.33	3	12.33	18.74	.81	.74
26	0	3	3	3	3	3	0	3	0	0	0	0	0	3				
27	0	0	0	0	0	0	0	3	0	0	0	0	0	3				
28	0	0	0	0	0	0	0	3	0	0	0	0	0	3				
EVALUATION	0	0	1	.25	0	2.25	.25	2.25	0	0	0	.25	0	2.75	9.25	18.94	.58	.95
29	0	0	2	1	0	3	1	3	0	0	0	1	0	3				
30	0	0	0	0	0	3	0	3	0	0	0	0	0	3				
31	0	0	0	0	0	3	0	3	0	0	0	0	0	3				
32	0	0	2	0	0	0	0	3	0	0	0	0	0	2	12.85	21.69	.80	.87
TOTAL	.15	1.19	.53	.28	1.15	1.85	.34	2.34	.39	.1	.44	.29	.22	2.97	12.85	21.69	.80	.87

APPENDIX C₂

APPENDIX C₃

**"RAW SCORES DATA OF TEACHERS' PERFORMANCE
ACCORDING TO THE TYPE OF STUDENTS
INSTRUCTED"**

ACCORDING TO THE TYPE OF STUDENTS INSTRUCTED*																	
Test, Subtest Area	ENR (1)					ENR (2)					ENR (3)					ENR (4)	
	1111	1121	1131	1141	1151	1112	1122	1132	1142	1152	1113	1123	1133	1143	1153	1163	
PLANNING	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Preassessment	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Annual Goals	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Test Analysis	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Instructional Objectives	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Instructional Activities & Strategies	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Implementation	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Supervision	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
Feedback	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
EVALUATION	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
TOTAL	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	

APPENDIX C₄

APPENDIX C₅

