

THE EFFECTS OF A TRAINING PROGRAM IN IMPROVING
INSTRUCTIONAL COMPETENCIES FOR SPECIAL
EDUCATION RESOURCE ROOM TEACHERS
IN JORDAN

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EDUCATION RESOURCE ROOM TEACHERS
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by

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Dedication

I dedicate this humble work to the springs of loyalty, affection and virtue, my father and mother; to my dear brothers and my sister, who spared no effort in helping me during my school years; to my loyal companion, my wife, Majdoleen, who has always been there for me; to my dear daughters Rahiq, Dunia, and Ru'a.

Suhail Mahmoud Al-Zoubi

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LIST OF ABBREVIATIONS

CBTE	Competency-Based Teacher Education
PBTE	Performance- Based Teacher Educational
UNRWA	United Nations Relief and work Agency for Refugees
UNESCO	United Nation Education, Scientific and Culture Organization
UNICEF	United Nations Children's Fund
GUVA	General Union of Voluntary Associations
LD	Learning Disabilities
PSTP	Pre-service training program
ISTP	in-service training program
E/BD	emotional and behavioral disorders
DLD	Division for Learning Disabilities
CEC	Council for Exceptional Children
CBM	Cognitive behavior modification
IEP	Individualized Educational Program
IIP	Individualized Instructional Plan
NJCLD	National Joint Committee on Learning Disabilities
VTC	vocational training corporation
PET	prevocational education teachers
AAC	Augmentative and Alternative Communication
MHER	Ministry of Higher Education and Research
KR-20	The Kuder-Richardson Formula 20
NECGD	nonequivalent control group design
pre-AT	pre-achievement test
pre-OS	pre-observation scale
post-AT	post- achievement test
post-OS	post- observation scale
MOE	Ministry of Education

KEBERKESANAN SUATU PROGRAM LATIHAN DALAM MENINGKATKAN KEMAHIRAN PENGAJARAN UNTUK GURU-GURU BILIK SUMBER PENDIDIKAN KHAS DI JORDAN

ABSTRAK

Tujuan utama kajian ini adalah untuk menilai keberkesanan suatu program latihan dalam meningkatkan kemahiran pengajaran untuk guru-guru bilik sumber pendidikan khas di Jordan. Modul program latihan yang dibina oleh penyelidik mengandungi sebelas unit latihan, yang merangkumi empat domain: perancangan, pengajaran dan pengurusan bilik darjah, penilaian, dan kemahiran diri dan profesional. Tiga instrumen telah dibangunkan untuk menilai kemahiran pengajaran, iaitu: ujian pencapaian, skala pemerhatian di bilik darjah, dan protokol temuduga. Instrumen ini diaplikasikan bagi ujian-sebelum (pretest) dan ujian-selepas (posttest) pada kedua-dua sampel kajian.

Populasi kajian terdiri daripada 87 orang guru bilik sumber daripada tujuh kawasan pendidikan di wilayah Irbid, Jordan. Sampel kajian terdiri daripada 50 orang guru lelaki dan guru perempuan yang dipilih berdasarkan prosedur pensampelan rawak berstrata. Sampel dibahagikan kepada dua kumpulan yang sama, iaitu 25 orang setiap kumpulan. Kemudiannya, satu kumpulan dipilih secara rawak sebagai kumpulan eksperimen, dan satu kumpulan lagi sebagai kumpulan kawalan. Guru-guru dalam kumpulan eksperimen didedahkan dengan modul program latihan selama lima minggu. Sebaliknya, guru-guru dalam kumpulan kawalan didedahkan dengan program latihan konvensional yang disesuaikan dan dikendalikan oleh Kementerian Pendidikan Jordan, juga selama lima minggu. Reka

bentuk kumpulan kawalan tidak setara (ujian-pra dan pasca-ujian), merupakan pendekatan yang popular bagi penyelidikan statistik eksperimen, digunakan dalam kajian ini.

Kajian ini menggunakan kedua-dua kaedah kuantitatif dan kualitatif. Analisis kuantitatif dijalankan menggunakan analisis kovarians (ANCOVA) untuk menilai keberkesanan program latihan dalam meningkatkan kemahiran pengetahuan dan prestasi. Keputusan menunjukkan bahawa secara statistiknya terdapat perbezaan yang signifikan pada aras $p < .05$ di antara min prestasi kedua-dua kumpulan dalam ujian selepas-pencapaian dan skala selepas-pemerhatian, yang menunjukkan kelebihan kepada kumpulan eksperimen. Analisis varians (ANOVA) 4-hala pula menunjukkan bahawa secara statistiknya tidak terdapat perbezaan yang signifikan pada aras $p < .05$ di antara min prestasi kedua-dua kumpulan dalam ujian selepas-pencapaian dan skala selepas-pemerhatian berdasarkan gender, pengkhususan, kelayakan, dan pengalaman mengajar.

Dengan kata lain, keputusan analisis data kualitatif yang diperoleh daripada pemerhatian di bilik darjah dan kaedah temuduga dengan kedua-dua kumpulan, menunjukkan bahawa prestasi kumpulan eksperimen secara signifikan lebih baik daripada kumpulan kawalan dalam peningkatan kemahiran pengajaran yang diukur.

**THE EFFECTS OF A TRAINING PROGRAM IN IMPROVING INSTRUCTIONAL
COMPETENCIES FOR SPECIAL EDUCATION RESOURCE ROOM
TEACHERS IN JORDAN**

ABSTRACT

The purposes of this study were to construct a training program based on instructional competencies and to measure its effects in improving these competencies for special education resource room teachers in Jordan. The researcher constructed the training program module. The module, which consisted of eleven training units, covered four domains: planning, instruction and classroom management, evaluation, and personal and professional competencies. Three instruments were developed to measure the instructional competencies, namely, an achievement test, a classroom observation scale, and interviews protocol. These instruments were applied to the sample of the study as both pretest and posttest.

The population of the study consisted of 87 resource room teachers working in seven educational directorates within Irbid governorate, Jordan. The sample of the study consisted of 50 male and female teachers chosen according to the stratified random sampling procedures. The participants of the sample were distributed into two equal groups, with 25 teachers in each group. After that, one group was randomly chosen to be the experimental group, and the other one to be the control group. The teachers in the experimental group were attached with the training program module for five weeks; whereas the teachers in the control group were exposed for the same period to the conventional training program adopted

and conducted by the Jordanian Ministry of Education. The nonequivalent (pretest and posttest) control group design, which is a popular approach to the quasi-experimental statistical research, was used in the study.

This study used both quantitative and qualitative methods. The quantitative analyses were carried out using analysis of covariance (ANCOVA) to measure the effects of the training program in improving knowledge and performance competencies. The results revealed that there were statistically significant differences at the level $p < .05$ between the means of the two groups' performance on the post-achievement test and the post-observation scale, favoring to the experimental group. The 4-way analysis of variance (ANOVA) showed no statistically significant differences at the level $p < .05$ between the means of the two groups' performance on post-achievement test and post-observation scale attributed to gender, specialization, qualification, and teaching experience.

On the other hand, the results of qualitative data analysis, that utilized classroom observation and interview methods held with the two groups, also showed significantly better performances of the experimental group teachers than of the control group in improving the measured instructional competencies.

Chapter One

Introduction

1.1 Introduction

This study aims at constructing and measuring the effects of a training program based on instructional competencies for special education resource room teachers in Jordan. This chapter discusses the background of the study, specifies the statement of the problem, the conceptual framework, the research objectives, the research questions, the research hypotheses, the research framework, as well as the significance and the limitations of the study. Finally, the chapter presents the operational definitions adopted by the researcher.

1.2 Background of the study

One of the most important factors that influence a country's abilities to be economically competitive is the quality of its human resources, and therefore, of its education and training system, which is central to the development of its human resources.

In every educational system, the availability of abundant, qualified and dedicated teachers constitutes a significant resource to which educational planners and administrators devote considerable efforts. The concern for teacher supply in the right quality and quantity is largely due to the well-accepted maxim that teachers are the kingpins of the educational program, for it is they who determine the

direction of the system and ensure its success. Hence, a competent and effective teacher is one of the key elements in the success of the teaching and learning process (Aromolaran, 2005). Thus, it is essential to continuously evaluate the process that leads to teacher preparation in order to prepare teachers who are able to conduct the duties dependent on them towards handling the challenges imposed by the present era (Voorhees, 2001).

The educational system at all levels seeks to employ teachers with high skills and competencies, especially with regard to the teaching and learning process in the classroom. As a result, teacher preparation is carried out during the pre-service and in-service stages in accordance with fundamentals specified by the educational philosophy prevailing in the society. The purpose of this educational philosophy is to develop teachers with skills, attitudes, and values that qualify them to carry out the requirements of the teaching process such as to teach students in accordance with specific educational plans that take into consideration various educational stages, students' characteristics, abilities, attitudes, needs, and the nature of the educational materials. In addition, during the professional preparation process, teachers are exposed and trained with appropriate methodologies to use in their own classrooms (Hadidi, 1993; Tileston, 2004a).

Educational systems also seek to include children with special needs side by side with their normal peers by providing educational services that help them to invest their skills and abilities to achieve the healthy development that leads to self-achievement (Al-Khateeb, 2004; Tileston, 2004b). The teacher should,

consequently, help each student to reach conformity and adaptation with the surrounding environment. The teacher should, therefore, use the educational methodologies in a successful educational way. Teaching at special education centers must be individualized, and must also move away from traditional methods (Al-Zuhairy, 1998).

Teachers' training programs are necessary in order to upgrade their skills, knowledge and performance, to enable them to be more effective. According to Davis and Davis (1998), a teacher-training program is a process through which skills are developed, information is provided, and attitudes are nurtured, in order to help teachers to be more become efficient in their work. Thus, training comes in as a solution to the lack of performance of the teachers or when there is need to effect change in the way things have been done (Mathekga, 2004).

Gravett (2001) argues that training program can be perceived as a systematic development of certain necessary skill patterns in order to reach a certain level of competency in their execution of day-to-day tasks. Therefore, training is about identifying, assuring and helping planned learning in the key areas that enable teachers to perform current or future jobs. It is aimed at both improving performance and capacity (Burse, 1997). Thus, training programs have to equip teachers with valuable skills acquired through training that they deem necessary at their various schools (Kennedy, 1991).

Furthermore, training programs play a pivotal role, as it is through training that teacher's skills and attitudes can be changed for their own betterment. Therefore, training programs are of vital importance to teachers and to governments to pass on the latest innovations in teaching methods/strategies and new curricula (David, 2001).

There are two programs for teacher training: pre-service and in-service. In pre-service training program (PSTP), teachers often have to attend compulsory courses according to rules established by curricular to obtain a diploma or first degree. Such training is provided by formal education institutes, which prepare future professional for job (Carroll & Jobline, 2003).

In-service training programs (ISTP) are any vocational training acquired during employment, and undertaking to engage in such training is usually part of appointment agreement between trainer and trainee. Traditionally, teacher development was confined to in-service courses, however, a range of activities relating to both the formal and informal school process should be included in teacher development. Moreover, much of conventional ISTP was unsuccessful. This led to the recognition that development should begin with teachers' evaluation of their own practice and the identification of their training needs (Schofield, 1994). Malone, Straka, & Logan (2000) are of the opinion that ISTP is a necessary extension of PSTP with the aim of enhancing awareness, knowledge, skills and competencies.

ISTP programs help teachers expand their current knowledge of a subject/phase, gain new knowledge, and engage with colleagues at their school and other schools. ISTP programs are necessary to re-orientate teachers to new goals and values, to train them in new teaching and learning methods, to prepare them to cope with curriculum change, and to provide them with the knowledge and skills to teach new learning areas (Conco, 2004). ISTP programs also help teachers develop their own work thoroughly. They become more conscious of strategies for curriculum change and development, as many teachers enter the teaching profession without having received sufficient ISTP, though they may acquire basic skills in research and decision-making at various levels (Carl, 1995). A study conducted by Rojewski and Schell (1995), concerned with the adequate practical educational experience with which future teachers would be provided, find that teacher preparation courses must go beyond basic skills and knowledge, that teachers need more courses with practical experience, not just lecture classes.

Hayes (2000) argues that ISTP is a mechanism through which innovation in education continues to be introduced. Thus, ISTP is essential to update teachers about recent instructional development and curriculum innovation. This is also in line with the general purpose of ISTP, which is to be introducing new ideas and approaches to schools. Consequently, ISTP should be multifaceted in order to cater for the diverse needs of teachers. Indeed, stage theories of teacher development suggest that teachers at different stages of their career may have different in-service training needs (Moyer & Husman, 2000). Dilts (2002) holds that ISTP programs help teachers: (i) to be better able to handle difficult students, to

develop a great understanding of different learning styles; (ii) to enhance learners' self-esteem and therefore their desire for positive reinforcement; and (ii) to become more creative, imaginative and stimulating in their presentation.

ISTP programs are specifically essential in preparing special education teachers. In a study examining the training needs for special education teachers, Westat and Rockville (2002) indicate that the needs of teachers include teaching diverse students and using technology in instruction. It is for this reason that many countries run special education programs to develop comprehensive plans for training teachers who are working in the field of special education.

Indeed, the importance of teacher preparation has generally emerged because it prepares teachers and provides them with the competencies necessary for achieving success in their work; and this led to the emergence of the concept of Competency-Based Teacher Education (CBTE) in the field of Special Education. This movement has had an enormous effect in preparing teachers for teaching children with special needs (Al-Khateeb, 2004; Wendel, 1982). CBTE is aimed at providing teachers with the knowledge, skills, and attitudes to enable them to recognize and solve complex problems in their domain of study or future work (Hoogveld, Pass, & Jochems, 2005).

The CBTE movement came as a response to traditional educational methodologies used in teacher education. This movement arose as a result of criticism directed towards traditional teacher educational methodologies where outputs depended on

the amount of knowledge and the ability to retrieve it (Huizen, Oers & Wubbels, 2005). Consequently, the program of enhancing teacher competency level has become the key issue for teacher preparation during in-service training. The (CBTE) depends on analyzing the learning/teaching process into a group of competencies that every teacher must acquire in order to increase his/her chances of successful achievement of objectives. (King, King, & Rothwell, 2001).

1.3 Statement of the Problem

Special education teachers are required to be generally competent in many areas. Especially important are competencies in interpersonal skills, including counselling and presenting teaching services for students with special needs (Branch, 1990). According to Fallon and Hammons (1998), most pre-service training programs indicate that special education teachers are not required to take training courses in either counselling nor interpersonal skills. PSTP also lacks modern educational strategies such as the use of modern educational aids and instructional design (Collins & White, 2001). This has also negatively reflected on the students and their performances.

One of the factors that show the need for this study is that PSTP does not necessarily guarantee success in the teaching profession. There is an enormous gap between theory and practice. Jones and Black (1995) suggest that universities should offer more practicum courses that prepare teachers to work with students with special needs. Thus, special education teacher preparation programs depend

on field training, which offers an extra opportunity for the trainees to acquire various skills (Norman & James, 1992). They need pre-service training strategies that depend on continuity in light of the new roles for teachers (Deilors, 1996).

ISTP is still considered an important factor in preparing special education teachers since it is gaining more attention due to several factors, such as the increase in the number of the handicapped. However, the teachers find themselves having to deal with the variety of missions and roles the teachers must perform, the continuous changes that the educational technology has brought about, and the great gap between pre-service training and practicum in the field of special education (Cooper & Hunt, 1979; Renitta et al., 2004). However, ISTP must be based on models of adult learning and designed to encourage transfer of training from the in-service to the classroom by "helping the learner learn how-to-learn rather than merely transmitting content" (O'Brien, 1992, p.422).

The need for skilled and qualified staff originates from the fact that special education teachers are seen as among the most important elements in the teaching and learning process (Frieman, 2001). It is apparently very important that these teachers should possess the competencies, abilities, knowledge, and skills necessary to carry out the teaching process in an effective and efficient way (Khuzai, 2001; Rosenberg, Sindela & Hardman, 2004). In this case, ISTPs are necessary in order to improve skills, knowledge, and performance competencies of teachers (Fitch & Kopp, 1992; Renitta et al., 2004a).

Generally speaking, the issue of improving strategies used for teaching children with special needs has not received the attention it deserves (Duchnowski et al., 2006). However, special education programs in Jordan have largely developed during the past few years. This development was obvious in establishing special schools and special education centers that provide special services to children with special needs, in addition to the development that accompanied teacher-training programs for special education. Nevertheless, the development that the special education field in Jordan has witnessed was quantitative more than qualitative (Al Nabteety & Jaber, 1996).

The present researcher has always been of the opinion that the need to enhance quality special education could be achieved by the training of teachers through ISTP, to help them sharpen their skills of teaching students with special needs and to keep them posted on curriculum changes and the implementation of such curricular change. It was against this background of the study that the researcher has realized the need to conduct this study. Indeed, the problem of this study was personally witnessed by the researcher during his teaching experience (for more than 10 years) with students who suffered from diverse learning disabilities. The problem was confirmed further during the many short-term workshops for resource room teachers in Jordan in which the researcher participated (and, in his capacity as a member of the Jordanian Association for Learning Disabilities, he presented many lectures in the field of special education). As mentioned above, the researcher has observed the educational reality of resource room teachers and has practically depended on personal interviews with teachers.

Jordan and other developing countries lack research dealing with the in-service preparation and training of special education teachers, which usually undergo conventional training programs during pre-service. The theoretical side of these programs is still more prominent than the practical side. Besides, lecturing is still the prevailing method in these conventional training programs. There are no indications of any in-service training programs being designed based on teachers' training needs for special education resource room teachers (Al-Khateeb, 2004).

Indeed, the field of special education in Jordan is still short of well-trained educational staff that possesses the necessary teaching skills and competencies. The majority of teachers working with children with special needs in Jordan have indeed never received the appropriate training in special education during their pre-service training programs (Hadidi, 1990; 1993). Yet, there is a great need for skilled and qualified staff to help children with learning disabilities, and to keep up with the fast pace of development in the field of special education, especially with the increasing numbers of children joining the various special education centers, and the increasing demand on special education services for students of learning disabilities, using the resource room as an educational alternative. The Department of Special Education in the Ministry of Education in Jordan mentioned that the number of students with learning disabilities is 53,000 students (Ministry of Education, 2007).

In one study carried out in 1984 by the Queen Alia Fund for Social and Voluntary Work, it was found that 80% of special education teachers in Jordan had never

received any type of pre-service training in instructional planning and student evaluation in relation to teaching children with special needs. Furthermore, several studies in Jordan mentioned that special education graduates and those working in the schools of special education expressed their unhappiness with the content of the pre-service training programs (Al-Khateeb, 2004). On the other hand, Al-Weher and Abu-Jaber (2007) recommended continuing in pre-service teachers training programs in Jordan, but with some modifications of its components to include a greater percentage of academic and practicum courses.

Hadidi's studies (1990 and 1993) show that the field of special education in Jordan is short of teachers with experience and appropriate professional training. Consequently, Hadidi recommends in-service training programs to enhance and develop the skills and the competencies of teachers. However, Khuzai (2001) mentions the differences in the level of resource room teachers' mastery of effective teaching skills such as planning, instruction, classroom management, behavior modification, and evaluation.

Al-Zuhairy (1998) shows that teachers' practice of some instructional competencies was low. This inept practice of instructional competencies consequently negatively affects students' achievement in the resource room. This can be related to the fact that the PSTP of special education teachers are limited to the general educational preparation and not depends on the academic and professional preparations.

Most special education teachers in Jordan never received appropriate pre-service training which focused on practicum side (Hadidi, 1993, 1990). Besides, all in-service training programs adopted and conducted by the Jordanian Ministry of Education are designed for teachers in general, whether they teach students with special needs or normal students. Accordingly, it is found that there is dire need for designing in-service training programs for resource room teachers in Jordan. Hence, the problem of this study comes from this serious need for an in-service training program specifically designed for Jordanian special education resource room teachers. This study therefore has a number of important purposes: (i) to develop the list of instructional competencies necessary for resource room teachers, (ii) to construct a training program based on instructional competencies and to implement it, and (iii) to measure the effects of the training program in improving instructional competencies.

1.4 Conceptual Framework

Teacher training programs are commonly categorized into two types: pre-service and in-service. Carroll and Jobling (2003) report that PSTP is more academic in nature, provided by formal education institutions (responsibility of individual universities) and based on specific curricula. Yet, because the in-service training program (ISTP) is a form of training and education of teachers who are already serving the school system, it can offer the training and education needed to under-trained teachers. Different courses offered can be either credit or non-credit, and can be provided through workshops, seminar, conferences, short courses, and long courses (Bagwandeem & Louw, 1993). ISTP develops critical competencies

and skills to respond to the task and job responsibilities. Malone (1984) defines the ISTP as a program designed to strengthen the competencies of teachers while they are in the job. Orlich (1989) defines ISTP to include any specific and planning program to improve teacher's knowledge, skills, understanding, and performance in their present role and it is designed with the main goal of developing skills and competencies of teachers in order to enable them to fulfill immediate educational pressures.

Joyce and Showes (cited in Tzong, 1998) point out two purposes for in-service training program: (i) improving the teaching, which can be focused on tuning our present skills or learning better ways of teaching; and (ii) mastering new teaching strategies, to put alternative curriculum in place. Fitch and Kopp (1990) also show that in-service consists of programs designed to upgrade skills and knowledge understanding of teachers to enable them to be more effective. Consistent with this definition, it can be seen that almost all in-service training programs are specifically designed to develop personal and professional growth for the individual in-service teachers within a respectful, supportive, and positive organizational climate.

Lourdusamy and Kim (1992) categorize the ISTP for teachers into three kinds: (i) enrichment programs, for raising and updating the level of expertise and knowledge of teachers, (ii) familiarization programs, for orienting and updating teachers' knowledge and competencies related to the implementation of new curricula or new roles and practice, and (iii) specialization programs, for training

teachers in guidance and counselling, health and physical education, educational technology, and other special education program.

Elam (cited in Abdulhamied, 1982) had identified some essential elements for a teacher education program that is competency-based. Among the elements are: (i) competencies (inclusive of knowledge, skills and behavior) demonstrated by students and derived from the explicit conception of the teacher's role; (ii) assessment of the student's competency, done in the evaluation of the student as the primary source of evidence; (iii) student rate of progress, which is demonstrated via competency rather than by time or course completion, and (iv) the instructional program, which is intended to facilitate the development and evaluation of the student achievement.

Borich (1977) and Cooper et al. (1973) categorize teacher training programs based on CBTE into three types: (i) knowledge competencies (where a knowledge competency means a cognitive understanding derived from the instruction process or subject-matter content that the teacher is expected to demonstrate); (ii) performance competencies (which are the behaviors the teachers demonstrate in the classroom, especially, according to Borich, ongoing teaching behaviors); and (iii) consequence competencies (which are the outcome of the teaching and learning process between the teacher and his students).

On the other hand, Houston (cited in Saeed & Mahmood, 2002) and Clark (2000) identify and categorize CBTE into five stages: (i) cognitive competencies, which

relate to knowledge and intellectual skills and abilities that are expected of the learners; (ii) performance competencies, wherein the learner demonstrates that he or she can do something; (iii) consequence competencies, to bring change to others; (iv) affective competencies, which are expected attitude and values that tend to resist the specificity and are more difficult to assess than the first three stages; and (v) exploratory competencies, which includes activities that provide opportunities for teachers to learn about teaching.

Furthermore, for Lerner (2003), the teachers in the resource room are in need of two kinds of competencies: (i) competencies in knowledge and skills, which include the professional knowledge base that learning disabilities educators want, and (ii) competencies in human relationship abilities, such as cooperation, which require teachers to be helpful, deferential, empathic, and open. The first, scientific job requires competencies in assessment and diagnosis, curriculum, teaching practices, managing student behaviors, planning the teaching and learning environment, as well as monitoring and evaluation. Learning disability teachers must also know theories of learning and must possess strategies for teaching oral language, reading, writing language, mathematics, behavior management, social and emotional skills, and pre-vocational and vocational skills. As for competencies in human relationships, teachers must be able to institute good relationship with others, remembering to display appropriate responses to another's phase of professional improvement. A positive and eager attitude, combined with a readiness to learn from others, is necessary. As they work with others, learning

disabilities teachers must be able to manage personal stress, stay calm in time of crisis, and respect divergent points of view.

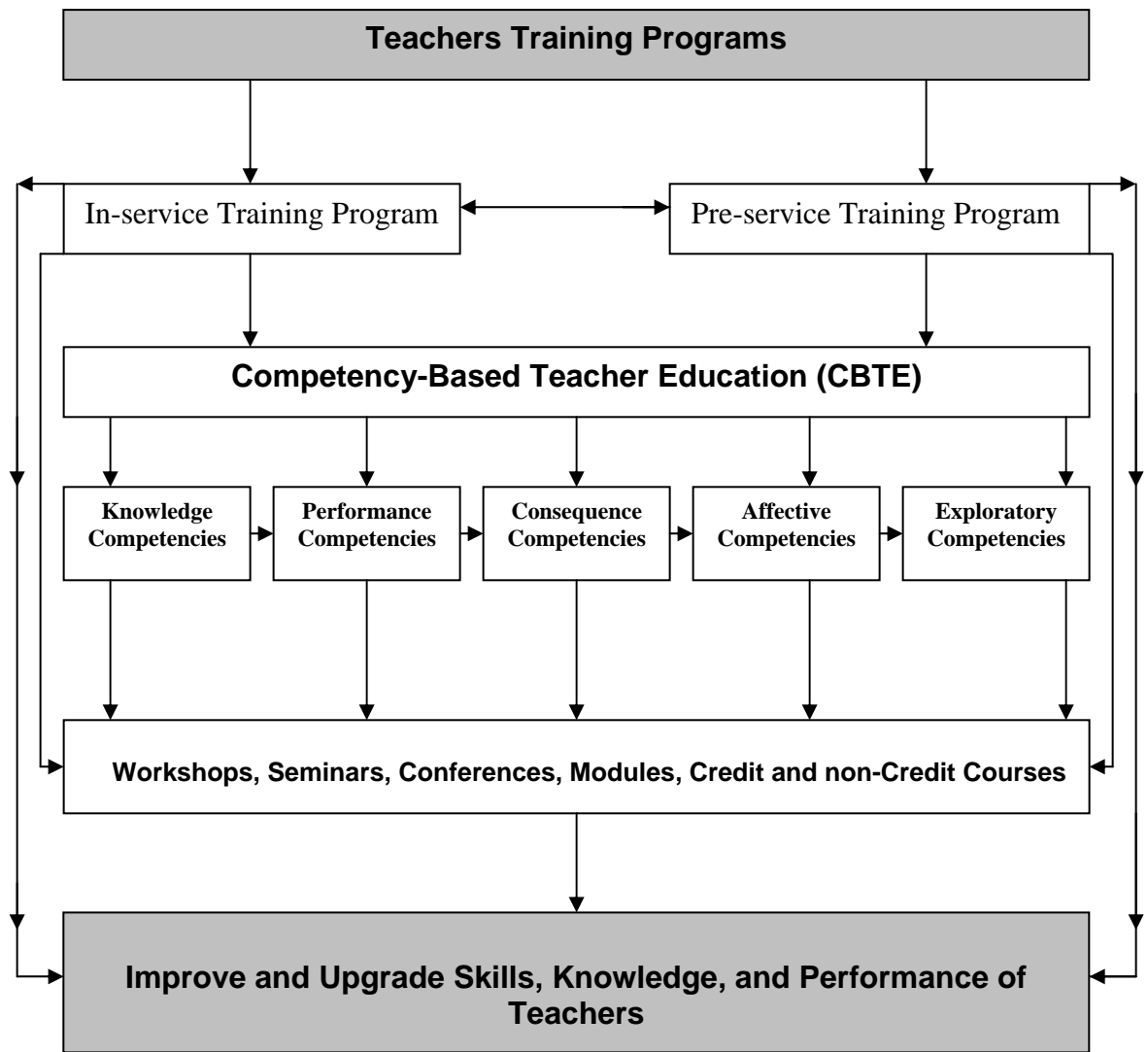


Figure 1.1 Conceptual Framework

Figure 1.1 above shows how teacher-training programs are divided into two types: pre- and in-service training programs. The PSTP aims to prepare the teachers academically through the formal educational institutions, whereas the ISTP aims to improve the teaching and learning process in the classroom. Both the PSTP and the ISTP can be designed through Competency-Based Teacher Education (CBTE). The CBTE deals with five types of educational competencies, which are knowledge, performance, consequence, affective, and exploratory competencies. Teachers can be fed with these educational competencies through workshops, seminars, conferences, modules, and credit and non-credit courses. Their acquisition of these educational competencies can enable them to achieve planning, teaching, classroom management, evaluation, and human relationship skills. The final output of both the PSTP and the ISTP based on CBTE, the figure shows, is to improve and upgrade the skills, knowledge, and performance of teachers, and to develop the teaching and learning process in the classroom.

1.5 Research Objectives

The following are the main objectives of the study:

- (i) To determine the instructional competencies necessary for resource room teachers in Jordan.
- (ii) To construct a training program based on instructional competencies for resource room teachers.
- (iii) To measure the effects of the training program module in improving the knowledge and performance competencies for resource room teachers.

- (iv) To evaluate the effects of the training program module in improving the personal and professional competencies for resource room teachers.
- (v) To examine the differences in knowledge and performance competencies according to gender, qualification, specialization, and teaching experience.

1.6 Research Questions

This study aims at answering the following research questions:

- (i) Does the training program have any effect in improving knowledge competencies of resource room teachers?
- (ii) Does the training program have any effect in improving performance competencies of resource room teachers?
- (iii) Are there any significant differences between the means of experimental and control groups in the post-achievement test according to gender, qualification, specialization and teaching experience?
- (iv) Are there any significant differences between the means of experimental and control groups on the post-observation scale according to gender, qualification, specialization and teaching experience?

1.7 Research Hypotheses

In order to answer the questions of the study, the following hypotheses were put forward:

- (i) There are no statistically significant differences at $p < .05$ between the experimental and the control groups in the post- achievement test.
- (ii) There are no statistically significant differences at $p < .05$ between the experimental and the control groups in the post- observation scale.
- (iii) There are no statistically significant differences at $p < .05$ between the means of experimental and control groups in the post-achievement test according to gender, qualification, specialization and teaching experience.
- (iv) There are no statistically significant differences at $p < .05$ between the means of experimental and control groups in the post-observation scale according to gender, qualification, specialization and teaching experience.

1.8 Research Framework

The research framework below describes the special education teacher-training programs in Jordan.

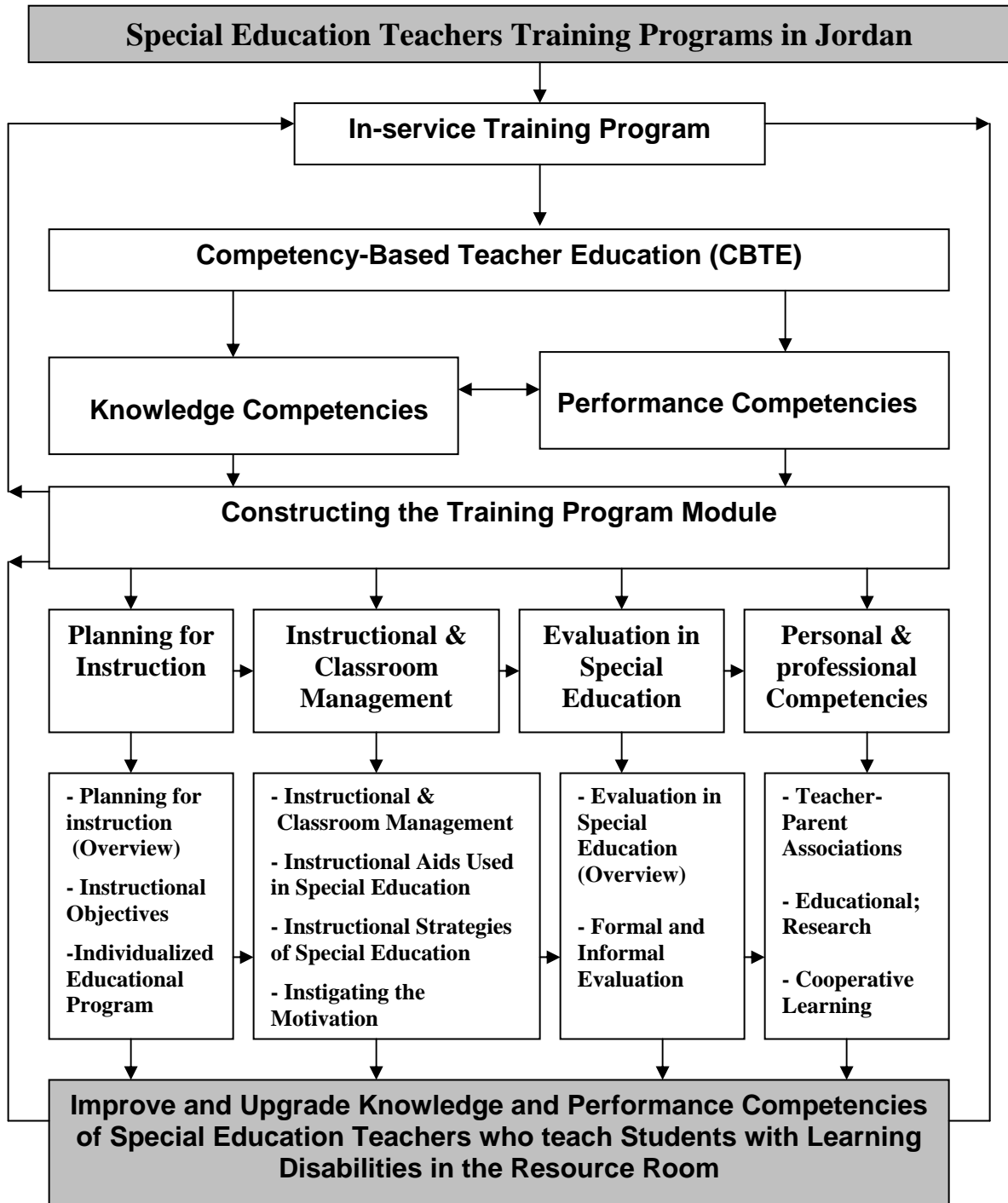


Figure 1.2 Research Framework

Figure 1.2 above describes the special education teachers training programs in Jordan, where there are two programs for training special education teachers, which are PSTP and ISTP. The research framework focuses on the ISTP for its significance in the preparation of special education teachers, as illustrated in the conceptual framework. The research focuses on two types of educational competencies, which are: (i) knowledge competencies: specifying knowledge and intellectual abilities or skills demonstrated by the teacher; and (ii) performance competencies: specifying objectives required by the teacher to demonstrate ability and to perform actions. The researcher has constructed a training program module based on these two instructional competencies (knowledge and performance competencies). The module has four dimensions (planning, instruction and classroom management, evaluation, and professional and personal competencies). Each domain includes a group of training units (see Appendices 5 and 6). The four dimensions of the module are evaluated with three instruments: an achievement test, a classroom observation scale, and interviews protocol in order to measure the level of teacher's knowledge and performance for these competencies. The output of the research framework is to determine if the ISTP which is based on CBTE, modules, and workshops can effectively improve and upgrade knowledge and performance competencies of special education teachers.

1.9 Significance of the study

The present study is significant for the following reasons:

- (i) It defines the instructional competencies necessary for resource room teachers in Jordan by reviewing the related educational literature as well as by investigating teachers' opinions in the resource room.
- (ii) It develops a training program based on instructional competencies in order to develop teachers' instructional competencies.
- (iii) It supplies professionals at private and public universities and colleges, and at the Ministry of Education, with information necessary for designing training programs for in-service teachers.
- (iv) It helps researchers conducting similar research on teachers in the resource room in other governorates in Jordan, other than Irbid.
- (v) The training program is expected to contribute to developing instructional competencies and to the practice of these competencies, which will positively affect the educational process.

1.10 Limitations of the Study

This study is limited to teachers specialized in resource room.

- (i) This study is limited to a restricted number of resource room teachers in the Educational Directorate in Irbid governorate.
- (ii) This study is limited to a number of instructional competencies, only those related to planning, instruction and classroom management, evaluation, and professional and personal competencies.
- (iii) This study is limited to knowledge and performance competencies for resource room teachers.
- (iv) This study is limited by the time of the implementation of the achievement test, the classroom observation scale, the interviews, and the training program, between June and September of 2006.

1.11 Operational Definitions

1. **Instructional Competencies:** These describe the ability to perform the duties assigned to the teacher at a particular mastery competency level that guarantees the achievement of desired objectives and makes the desired change in learners' behavior. These competencies are included in a list prepared by the researcher. They include planning, instruction and classroom management, evaluation, and professional and personal competencies.
2. **The training program module:** A program developed by the researcher to improve the instructional competencies of resource room