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Full Length Research paper

The Effects of a Training Program in Improving Instructional Competencies for Special Education Teachers in Jordan

Suhail Mahmoud Al-Zoubi* and Majdoleen Sultan Bani Abdel Rahman

Faculty of Education, Najran University, Kingdom of Saudi Arabia (KSA)

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The purpose of this study was 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 sample of the study consisted of 50 teachers. The participants were distributed into two equal groups, with 25 teachers in each group. The teachers in the experimental group were attached with the training program module; whereas the teachers in the control group were exposed to the conventional training program. The results of (ANOVA) revealed that there were statistically significant differences between the two groups' performance on the post-achievement test and the post-observation scale, favoring to the experimental group. The results of qualitative data analysis, that utilized interview methods showed significantly better performances of the experimental group teachers than of the control group in improving the personal and professional competencies.

Keywords: Resource room teachers, instructional competencies, In-service training program, Jordan.

INTRODUCTION

Teachers' training programs are necessary in order to upgrade teachers' skills, knowledge and performance, also 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 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). Furthermore, training programs play a crucial role, as it is through training that teachers' 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 et al., 2003).

In-service training programs (ISTP) 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; Al-Zoubi et al., 2010). 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).

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

*Corresponding author email: suhailalzoubi@yahoo.com

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.

ISTP aims at changing the behavioral skills, and the capabilities of the teachers after they start working at schools. According to Nielson (1979) the ISTP have been used to repeatedly to educate teachers about exceptional students. The main objective of this training program is to enhance the teachers' performance and help them acquire new knowledge and skills. This training usually takes different forms, such as training workshops, courses offered by the educational institutions or local agencies where the teachers work, or even courses offered by the institutions of higher education, such as college course work (Monjan and Gassner, 1979; Killoran et al., 2001).

According to Jones and Lowe (1990) the effective ISTP should have at least two potential outcomes: (i) change of teachers' classroom practice, and (ii) change in teachers' belief and attitudes. According to Salleh (1995), ISTP is widely used to keep teachers up-to-date on various educational areas. These programs development activities are commonly used as means to enforce responsible self-renewal for teachers and schools. Furthermore, ISTP include workshops, curriculum development sessions, peer observation, independent study, and self-assessment. At the school level, it might include specific training and educational courses in counselling. These techniques are typical short-term strategies used for changing individual teachers and other staff members.

Gemo (2004) categorized ISTP into five sections: (i) induction or orientation training: this type of training supplements whatever per-service training the new personal might have had, and is given immediately after employment to introduce the new extension staff members to their positions. It begins on the first day the new employee is on the job; (ii) Foundation training: provide newly recruited people with professions knowledge about official rules and regulations; (iii) Refresher training: is aimed at updating knowledge of various categories of staff members. This training deal with new technical information in method's courses; (iv) on-the-job training: is the routine scheduled training included as part of day-to-day staff activities; and (iiv) career training: is designed to upgrade knowledge and skills through out the career of staffs members.

Lourdusamy and Kim (1992) categorize the ISTP for teachers into three kinds: (i) enrichment programs, for raising and updating the level of skill 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. (iii) specialization programs, for training teachers in guidance and counselling, health and physical education, educational technology, and other special education program.

In fact, 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 leads 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 (Wendel, 1982). CBTE aims 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 et al., 2005).

The CBTE movement came as a response to traditional educational methodologies used in teacher education. This movement arose as a resent of criticism directed towards traditional teacher educational methodologies where outputs depended on the amount of knowledge and the ability to retrieve it (Huizen et al., 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 et al., 2001).

Borich (1977) categorize teacher training programs based on Competency-Based Teacher Education (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 and Mahmood, 2002) categorize CBTE into five stages: (i) cognitive competencies, which are related to knowledge and intellectual skills and abilities that are expected of the learners; (ii) performance competencies, in which 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; (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 requires

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.

Ismail et al. (2009) measured the effect of a training module in improving knowledge competencies for special education teachers in Jordan. The module consisted of 10 training sessions, covered three domains, namely, planning, instruction and classroom management, and evaluation competencies. The sample of the study consisted of 50 teachers. The participants of the sample were distributed into two equal groups, with 25 teachers in each group. The teachers in the experimental group were attached with the training module for five weeks; whereas the teachers in the control group were exposed for the same period to the conventional training adopted by the Ministry of Education in Jordan. The results of (ANCOVA) revealed that there were statistically significant differences between the means of the two groups' means on the post-achievement test, favoring to the experimental group.

Bataineh et al. (2010) identified the core competencies belonging to general education teachers who teaching students with learning disabilities in Jordan. The sample of study consisted of 320 male and female teachers. The results revealed that teachers' competencies of classroom management on a subscale ranked first, and that teachers' competencies of definitions, characteristics, assessing, and rights of students with learning disabilities came in the last rank. The results also indicated that there are a significant differences due to the interaction between gender and teaching experience.

Al-Natour et al. (2008) investigated the assessment practices used by resource room teachers in Jordan to determine eligibility for learning disability, and to identify assessment obstacles. 150 resource room teachers were randomly selected out of 455 to complete a survey designed to serve the purpose of the study. Results indicated that most teachers rely heavily on teacher-made tests of academic achievement to make appropriate decisions. Curriculum based assessment; students' response to intervention (RTI) and dynamic assessment were found to be the least practices used by teachers. Results also indicated statistically significant differences in assessment practices for teachers' qualification but not for teacher's gender. Concerning the obstacles faced by teachers both variables showed no significant differences. Implications of these findings for assessment practices and for future research in Jordan are provided.

Al Khatib (2007) evaluated the effect of a training program on Jordanian classroom teachers' knowledge of the characteristics and needs of students with learning disabilities. The study also investigated whether such training influenced teachers' acceptance of including these students into their classroom.60 teachers were divided into two equal groups with 30 teachers in each. The researcher constructed a training program based on increasing teachers' knowledge of the characteristics and needs of students with learning disabilities. The experimental group was enrolled into the training program for 6-weeks. The results revealed that the training program had significant effects on both teachers' knowledge of the characteristics and needs of students with learning disabilities and their acceptance of including these students into their classroom.

Khrais (2005) conducted a study that aimed at identifying the effect of a training program in modifying parental attitude towards their learning disabled children. The study conducted on 40 (20 male and 20 female) parents in Irbid city, they were assigned to two equal (20 in the control group and 20 in the experimental group) attitude scale were administered to the two groups as pretest and post test. The experimental group received a group counselling program. The results revealed the effect of the training program in modifying parental attitudes toward their disabled children learning.

Khuzai (2001) evaluated the mastery level of effective teaching skills among resources room teachers in Amman, Jordan. The sample of the study consisted of 50 resources room teachers. A classroom observation scale was used. The results of (ANOVA) revealed that there were statistically significant differences in mastery level of teaching skills among resources room teachers related to specialization. In addition, the significant differences favored of teachers in the filed of special education. The results showed also no statistically significant differences related to teaching experiences.

Hoogveld et al. (2005) conducted a study to determine the differential effects on the design of learning tasks for CBTE of a teacher training with a classical approach. His sample consisted of 25 teachers (15 men and 10 women). The result shows that the classic condition performed significantly better than the alternative condition, and a significant difference between conditions in favor of classic condition. The authors stated in the discussion of the results that the overall design and in particular, the design of learning tasks was better when teachers were trained with the classic approach with a product-oriented example and practice than with mere process-oriented worked examples.

Patel and Khamis (2005) presented an augmentative and alternative communication (AAC). The training program given to 20 special education teachers in a Palestinian Arab society in Israel. The training program contained educational workshops interleaved with on-site supervision. Instructional aims integrated creating awareness, imparting knowledge, and assisting teachers to increase and use AAC within their classrooms. Prior to training, they administered a questionnaire to evaluate teachers' knowledge, practices, and attitudes in relation

to AAC. The questionnaire was re-administered and individual interviews were conducted post-training program to establish the program's impact on knowledge, practices, and attitude barriers. Teachers' responses revealed that training program helped them to address barriers to AAC intervention.

In a survey research on the competencies needed by special education directors Wigle and Wilcox (2002) constructed some skills of measuring teacher competency. Each skill was used as an item to which the respondents were to indicate his/her level of competency by checking either (i) skilled, (ii) adequate, or (iii) inadequate. Among a set of 240 surveys sent to a sample of general education administrators, another 240 surveys sent to a sample of special education directors and a final set of 240 surveys sent to a sample of special educators. The results shows that (i) 55% of special educators reported having more than 11 years experience and 58% of the special education directors reported having 21-30 years of experience; (ii) special education directors reported higher overall level of competencies than either of the other two subgroup in the study; (iii) 21 of the 24 skills for which a statistically significant relationship was found and (iv) finally the levels of self reported competency (skilled, adequate, inadequate) within each group in the study were equally found between the groups.

The results of Brownell et al. (2005) has vividly shown that teachers need specific competencies for the advancement of their knowledge and skills, among those mentioned by Mary and others are program characteristics that include extensive field experience, collaboration, and program evaluation, although the ways in which programs incorporated these components varied. Furthermore, many programs emphasized in Mary's study encompass cultural diversity. Moreover, Fifty-two (81%) of the program description described how personnel collected information for evaluating the quality of the students, the effectiveness of the program, or both. Evaluation methods, however, varied widely and focused on different outcomes, including direct assessment techniques, such as observation of teaching performance, and indirect assessment techniques. Such as students' teacher satisfaction, faculty perceptions, of the program, and cooperating teachers and administrators' perceptions of the student-teachers and program. Almost half the programs had some observation mechanism for evaluating the classroom performance of prospective teachers. These teacher educators viewed teacher learning as the collective examination of multiple knowledge bases, including, but not limited to, knowledge generated by expert.

In another empirical study, Gilberts and Lignugaris-Kraft (1997) search for classroom management competencies address to teacher ability to manage the educational environment, and directly manage and assess students' classroom behavior. In that study classroom management competencies are divided into four categories address the educational environment: (i) arrangement of the physical environment to facilitate student management, (ii) formulation of a standard for student behavior in the classroom, and two categories address teachers' management and behavioral assessment; (iii) implementation of strategies to increase appropriate behavior or reduce inappropriate behavior, and (iv) assessing the effectiveness of the implemented strategies. In these programs, teacher educators used a variety of strategies to help students examine their beliefs about instruction; integrate the knowledge; acquire academic, social and cultural knowledge about their students; and reflect on the impact of their instruction.

Statement of the Problem

Special education teachers are required to be generally competent in many areas especially in 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 or 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 shows 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) suggested 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.

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).

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). 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.

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.

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 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.

METHODOLOGY

Population and Sample

The population of the study composes 87 female and male teachers working in the resource room in Irbid governorate, Jordan. They are distributed within seven Educational Directorates. The sample of the study consisted of 50 teachers, of which 27of them are male teachers, and 23 are female teachers. All 50 teachers chosen according to the stratified random sampling, therefore, the sample of the study divided into two equal groups, with 25 teachers in each group. After these procedures, one group was randomly chosen to be the experimental and the second as the control group. The teachers in the experimental group enrolled into the training program module based on instructional competencies for five-weeks; whereas, the teachers in the control group exposed for the same period to the conventional training program adopted by The Jordanian Ministry of Education.

Research Instruments

The research Instruments developed to measure the instructional competencies were included in (i) a classroom observation scale checklist, (ii) an achievement test, and (iii) the interview protocol.

(i) classroom observation scale checklist

In order to measure the level of performance competencies among the resource room teachers, a classroom observation checklist was developed. The checklist was given to a group of referees for validation and modification purposes. The final version of checklist includes forty (40) different items or competencies; therefore, the checklist was categorized into three distinct dimensions: planning, Instruction and classroom management, and evaluation. The inter-raters reliability is the constancy of the agreement and disagreement among the observers concerning the observed subjects, for testing the inter-raters reliability in this study, ten (10) resource room teachers (pilot study) were randomly selected and each was observed by four (4) different observers. The overall percentage of the inter-raters reliability (0.771), which is a reasonably satisfactory percentage.

(ii) achievement test

An achievement test was constructed to measure the level of knowledge competencies among resource room teachers in terms of instructional competencies in three categories (planning, instruction and classroom management, and evaluation). The researcher has distributed the achievement test in its primary form to a group of experts working in the field of special education; several educational supervisors and some of resource room teachers in order to revise the tests' content, language, and the appropriateness of the alternatives. Therefore, the number of achievement test questions became (50) questions. Test-retest reliability used, the test was implemented on 10 teachers. Then, the test was implemented again after two weeks on the same individuals. The Person Coefficient Correlation between the two implementations was (0.82), and is considered as a good pointer for the reliability of the test.

(iii) The Interview Protocol

The interview protocol is used for the purpose of verifying the details and information the researcher has gained

Table 1. Means and standard deviations by the two groups

Dependent Variables	Group	N	Mean	SD
pre-achievement test (AT)	Control Group	25	30.68	3.388
	Experimental Group	25	27.76	4.639
pre-observation scale (OS)	Control Group	25	108.12	9.329
	Experimental Group	25	114.96	8.244

Table 2. T-test results of the two groups' scores on pre-AT and pre-OS

Dependent Variables					
Pre-AT	**F**	**Sig.**	**T**	**df**	**Sig.**
Equal variances assumed	1.743	.193	2.542	48	.014*
Equal variances not assumed			2.542	43.928	.015
Pre-OS	**F**	**Sig.**	**T**	**df**	**Sig.**
Equal variances assumed	.266	.608	-2.747	48	.008*
Equal variances not assumed			-2.747	47.284	.008

(*) statistically significant differences at p<.05

from another source. After the preparation phase of the interview protocol guide for resource room teachers (which is in its primary form contained 15 questions) it was presented to a number of referees. The classroom observation scale checklist and the achievement test were also presented to them in order for them to judge the appropriateness degree of the items and the guide questions in terms of measuring what they are meant to measure. The interview protocol guide was verified according to the referees opinions and observations. At the end, they pulled out five (5) questions until it reached only 10.

The Training Program Module

The training program module was developed in order to upgrade skills, knowledge, and understanding and enhance the instructional competencies of resource room teacher in the field of planning, instruction and classroom management, evaluation, and personal and professional competencies. In order to prepare the module, the researcher reviewed the previous literature related to instructional competencies and the resources related to training.

In addition, studies related to the instructional competencies and the preparation of training programs were also reviewed. The researcher also reviewed the plans and the programs of the training department put forward by the Jordanian Ministry of Education in order to prepare and train new in-service teachers on the competencies and skills in all educational fields. The module consists of four domains: (1) The Planning for Instruction Competency. This domain consists of three training units: Instructional planning , Instructional objectives, and The individualized educational program; (2) The Instructional and Classroom Management Competency consists of four training units: Classroom management, Instructional aids used with children with learning disabilities, Instructional strategies in special education, and Motivation; (3) The Evaluation Competency, this domain consists of two training units: Evaluation in special education, Formal and Informal Evaluation; and (4) Professional and Personal Competencies, this domain consists of three training units: Teacher - Parent Associations, Educational Research, and Cooperative learning.

RESULTS AND DISCUSSION

The t-test analysis was run to determine whether the difference between the means of the experimental and the control groups on the pretest are statistically different, and to investigate the equivalence between the experimental and the control groups on the pre-achievement test (pre-AT) and pre-observation scale (pre-OS). Table 1 summarizes the descriptive statistics for the dependent variables (achievement and performances) of the two groups.

Therefore, to examine whether there is a significant statistical difference at p <.05 between the groups' mean scores and to test the assumption that the participants across the two groups are equivalent in term of the level of knowledge and performance competencies, t-test technique was conducted. Table 2 presents the results of the t-test.

Table 2 presents the results of the t-test, showing the overall differences in the performances of the two groups at pre-AT. These significant differences are in favor of the

Table 3. Means, standard deviations, and adjusted means of post-AT groups

Group	N	Mean	SD	Adj. Means
Control Group	25	33.24	3.41	33.154[a]
Experimental Group	25	42.16	2.32	42.246 [a]
Total	50	37.70	5.35	37.70 [a]

Note. a. Covariates appearing in the model are evaluated at the following values: pre-AT= 29.22.

Table 4. Summary of analysis of covariance (ANCOVA)

Source	Type III Sum of Squares	df	Mean Square	f	Sig.
Pre-achievement test as covariance	2.775	1	2.775	.322	.573
Group	910.914	1	910.914	105.673	.000*

(*) statistically significant differences at p<.05

control group (F= 1.743, P= .014). Furthermore, Table also shows differences in the performance of the two groups at pre-OS, and the differences are in favor of the experimental group (F=.266, P=.008). This means that the two groups are not equivalently homogenous in their performances on the pre-AT and pre-OS prior to the beginning of the training program (treatment). Therefore, the assumption that the two groups are equivalent in term of the level of knowledge and performance competencies is rejected.

Results of the first question: Does the training program have any effect in improving knowledge competencies of resource room teachers?

To investigate the effect of the training program in improving the knowledge competencies of resource room teachers, an achievement test was developed. It was a multiple-choice test consisting of 50 questions. The achievement test was conducted as a pretest and posttest to the control and the experimental groups. Table 3 presents overall means, standard deviations, and adjusted means are calculated.

Table 3 presents overall means, standard deviations, and adjusted means of the post-AT for the control and the experimental groups. This table shows that the mean of the experimental group is 42.16, which is greater than the mean of the control group 33.24. This shows that there is a difference in the means of the two groups, which are 8.92. In order to examine any significant differences at p <.05 between the control and the experimental groups on the post-AT, the analysis of covariance (ANCOVA) is conducted. Table 4 illustrates the results of analysis of covariance (ANCOVA) technique between the adjusted mean scores on the post-AT.

Table 4 presents the results of analysis of covariance (ANCOVA). It shows that there are statistically significant differences between the adjusted means of the control and the adjusted means of the experimental groups on the post-AT, in favor of the experimental group attributed to the training program module.

Results of the second question: Does the training program have any effect in improving performance competencies of resource room teachers?

To determine the effect of the training program in improving the performance competencies for resource room teachers, classroom observation scale was developed. It was the five-point Likert Scale that consists of 40 items. The scale represented the level of practice by the observed resource room teachers on a particular item/competency. The classroom observation scale was conducted as a pretest and posttest for the control and the experimental group's members. The means, standard deviations, and adjusted means of the post-observation are calculated as shown in Table 5.

Table 5 presents overall means, standard deviations, and adjusted means of the control and the experimental groups of the post-OS. This table shows that the mean of the experimental group is 160.64 which is higher than the mean of the control group, which is 111.64. In order to examine if there are statistically significant differences at p<.05 between the control and the experimental groups on the post-OS, the analysis of covariance (ANCOVA) technique was conducted. Table 6 illustrates the results of analysis of covariance (ANCOVA) between adjusted mean scores on the post-OS.

Table 6 presents that there are statistically significant differences between the performances of the two groups, in favor of the experimental. The mean of the

Table 5. Means, standard deviations, and adjusted means of post-OS

Group	N	Mean	SD	Adj. Means
Control Group	25	111.64	1910.7	113.090 [a]
Experimental Group	25	160.64	37.59	159.190 [a]
Total	50	136.14	126.40	136.140 [a]

Note. a. Covariates appearing in the model are evaluated at the following values: pre-OS= 111.54

Table 6. Summary of analysis of covariance (ANCOVA)

Source	Type III Sum of Squares	df	Mean Square	f	Sig.
Pre-Observation scale as covariance	668.364	1	668.364	9.045	.004*
Group	22956.410	1	22956.410	310.654	.000*

(*) statistically significant differences at p<.05

Table 7. Pre-interview transcript analysis summary

	Personal and professional competencies: Question:	Responses	Freq (0f 50)	%
1.	Needs for developing competencies	Designing instructional objectives, Individualized training program, instructional strategies, standardized evaluation	38	76
2.	Means to Acquire competencies	self-training 30%,Workshops 60% ,Others 10%	44	88
3.	Self-evaluation abilities	High vs Low	40	80
4.	Need for an effective in-service training program	Yes vs No	46	92
5.	The importance of students-teacher close relationship	Starting friendly relations with the students, based on mutual respect between the teacher and the learners	36	72
6.	The use of Cooperative Learning Strategies	A small number of the sample emphasized cooperative learning	20	**40**
7.	Teacher-Parents relationships	A small number of the sample cooperate with the parents regarding problems related to their children in the resource rooms	16	**32**
8.	Developing own instructional materials	A moderate percentage of the sample work to use the material of the environment	32	64
9.	Conducting research related to special education	A small number of the sample conduct research regarding special education	12	**24**
10	Interactions among teachers, supervisors and administrators	There are mutual frequent visits between teachers in the resource rooms, the teachers of the regular rooms and administration	34	68

experimental group is 160.64, and the mean of the control group is 111.64.

Results of the third question: Does the training program have any effect in improving personal and professional competencies of resource room teachers?

The qualitative data were used in this study as pre and post-interviews with the control and the experimental groups. Table 7 summarizes the pre-interviews that were conducted for the experimental and the control groups.

It's clear from the interviewees' responses during the pre-interview (see table 7) that they: Want to have training on designing instructional objectives, the individualized educational program, instructional strategies, instructional aids, and standardized evaluation, need to develop their competencies (76%), can satisfy this need on their own and using workshops (60%), need an in-service training program (92%), emphasized the importance of the friendly relationships with learners

(72%), assured the existence of the friendly relationship with the regular teachers and the administration (68%), showed that they have the ability to use the materials available in the local environment (64%), showed a low response on developing cooperation spirit among learners using cooperative learning, displayed a low response on cooperation with the parents regarding their children in the resource room, and conducting research in the field of special education.

In order to investigate the effect of the training program module in developing the personal and professional competencies, the post-interviews were conducted for the experimental and control groups. In short, after the completion of the training program with the experimental group members, they have achieved their objectives of developing the achievement and the performance competencies. It is clear that the training program has developed the knowledge and the performance skills of the resource room teachers. The analyses of the data of the post-interviews for the experimental group members support the results of the study. On the other hand, the analysis of the post-interviews transcripts of the control group participants showed that there is still need to promote: cooperation among learners in the resource room through the use of cooperative learning methodologies, cooperation between the teachers and the parents in matters related to their children in the resource room, and research in the field of special education. However, results related to the control group showed that the conducted the conventional training program did not meet their training needs. The program is a general program and is based on lectures method.

CONCLUSION

The discussions of the qualitative and the quantitative results revealed the importance of in-service training programs, especially who adopt the workshop method aiming at enhancing the performance of the teachers and improving their educational proficiency in order to help them acquire the skills and the knowledge plus keeping them informed about the latest developments in the educational field. It was also found that there are significant effects of the training program module based on instructional competencies in improving the knowledge, performance, professional, and personal competencies of the experimental group teachers. These effects can be attributed to content of the training program module. It included instructional experiments, activities, and instructional skills, which helped provide the teachers with the appropriate instructional competencies to develop their knowledge and performance. Furthermore, the training teachers programs based on CBTE play an important role in upgrading skills, knowledge, and performance of teachers to be more effective. Moreover, it was mentioned in the introduction of this study. The in-service training programs have improved the competencies and skills for special education teachers, the training program was presented through workshop which used module method.

Ysseldyke and Algozine (1982) indicated that in-service training programs are important methodologies used to develop and improve teachers' skills in order to enhance their instructional competencies and provide them with the latest about educational developments.

The training program module was adapted and organized in a way that is according to define criteria in term of the content and structure. In addition to the instructional and the evaluation activities, the discussion sessions among the teachers themselves and between the teachers and the trainer had a great impact on increasing interaction between the trainees and the training program. It also enhanced the teachers' knowledge of instructional methodologies and developed various instructional competencies. The display of the live models and learning by observation had effective effect on improving the instructional competencies of the teachers. The training program included video, demonstrations; data show presentations, and practicum observations by personal visits to resource rooms.

RECOMMENDATIONS

In the light of the results of the study, the searcher recommends the following:

1. The classroom observation checklist scale should be adopted as an evaluation tool for the special education teachers.
2. The Jordanian Ministry of Education is invited to make use of the training program module in training in-service special education teachers.
3. Universities in Jordan are recommended to use such training program module to help designing pre-service teacher training programs.
4. The MOE should design in-service workshops for special education teachers in Jordan.

REFERNCES

Al Khatib J (2007). The impact of training on general education teachers' knowledge and acceptance of inclusion of students with learning disabilities in Jordan. Insights on Learning Disabilities. 4: 13-21.

Al Nabteety K, Jaber F (1996). Ministry of Education services for students with learning disabilities. J. Teacher's Message. 37:179.

Al-Natour M, AlKhamra H, Al-Smadi Y (2008). Assessment of learning disabled students in Jordan: current practices and obstacles. Int. J. Spec. Educ. 23: 68-75.

Al-Weher, M, Abu-Jaber (2007). The effectiveness of teachers preparation programs in Jordan. In Tony R and Richard. B (Eds). Hand book of teacher education. Netherlands: Springer.

Al-Zoubi S, Bani Abdel Rahman M, Ismail H (2010). The Effect of in-Service Training Program in Improving Performance Competencies

for Learning Disabilities Resource Room Teachers in Jordan. Educators Digest. 10: 4-11.
Bataineh S, Dababneh K, Baniabdelrahman A (2010). Competencies of learning disabilities for general education teachers in regular classroom in Jordan. University of Sharjah. J. Humanit. Soc. Sci. 7: 27-45.
Borich G (1977). The appraisal of teaching: concepts and process. Menlo Park, California: Addison-Wesley Publishing Company.
Branch R (1990). Some thoughts on improving instruction. Instruct. Dev. 1: 2-7.
Brownell M, Ross D, Colon E, McCallum C (2005). Critical features of special education teacher preparation: A comparison with general teacher education. J. Spec. Educ. 38: 244-251.
Carl A (1995).Teacher empowerment through curriculum development. Cap Town: Juta & Coltd.
Carroll A, Jobling A, Forlin C (2003). The impact of teacher training in special education on attitudes of Australian pre-service general educators towards people with disabilities. Teacher Educ. Q. 65-79.
Collins L, White G (2001). Leading inclusive program for all special education students: a pre-service training program for principals, 10-14 April 2001, Seattle. Washington: U.S. Department of Education.
Conco Z (2004). How effective is in-service training for teachers in rural schools. Unpublished master thesis. University of Pretoria.
David C (2001). Characteristic and competencies of teachers of gifted learners. Roeper Rev. 23: 1-8.
Davis S, Davis B (1998). Effective training strategies. San Francisco: Barrett-Koehler Publishers.
Dilts R (2002). Training, modeling and consulting. Santa Cruz: CA.
Duchnowski A, Kutash K, Sheffield S, Vaughn B (2006). Increasing the use of evidence-based strategies by special education teachers: A collaborative approach. Teach. Teach. Educ. 22: 838-847.
Fallon M, Hammons J (1998). Training rural special educators to transition to the workplace: Lessons for small teacher education Programs. (ERIC Document Reproduction Services No.: ED417152).
Gemo A (2004). An assessment of human resource development programs in Mozambique's. Unpublished Master's Thesis. University of Pretoria.
Gilberts G, Lignugaris-Kraft B (1997). Classroom management and instruction competencies for preparing elementary and special education teachers'. Teach. Teach. Educ. 13: 597-610.
Hadidi M (1990). In-service training needs of special education teachers in Jordan. Dirasat. 17: 145-172. (in Arabic)
Hadidi M (1993). Effectiveness of in-service training programs provided for special education teachers in Jordan. Dirasat. 20: 170-194.
Hoogveld A, Pass F, Jochems W (2005). Training education teachers for instructional designs of competency-based education: Product-oriented versus process-oriented worked examples. Teach. Teach. Educ. 21: 287-297.
Huizen P, Oers B, Wubbels T (2005). A Vygotskian perspective on teacher education. J. Curriculum Stud. 37: 267-290.
Ismail H, Al-Zoubi S, Bani Abdel Rahman M, Al-Shabatat A (2009). Competency Based Teacher Education (CBTE): A Training Module for Improving Knowledge Competencies for Resource Room Teachers in Jordan. Eur. J. Soc. Sci. 10: 166-178.
Jones K, Black R (1995). Teacher preparation for diversity: A national study of certification requirements. J. Vocat. Tech. Educ. 12: 42-52.
Jones V, Lowe M (1990). Changing teacher behavior: effective staff development. Adult Learn. 7: 8-10.
Khrais M (2005). The effect of a training program in modifying parental attitude toward their learning disabled children. Unpublished Master's thesis. Yarmouk University.
Khuzai A (2001). Mastery level of effective teaching skills among resource room teachers. Unpublished Master's thesis. The University of Jordan.
Killoran J, Templeman T, Peters J, Udell T (2001). Identifying paraprofessional competencies for early intervention and early childhood special education. Council of Exceptional Children. 34: 68-73.
King S, King M, Rothwell W. (2001). The complete guide to training delivery: A competency-based approach. New York: American Management Association.
Lerner J (2003). Learning disabilities theories, diagnosis, and teaching strategies (9th ed.) Boston: Houghton Mifflin.
Lourdusamy M, Kim Tan S (1992). Malaysia In H.B. Leavitt (Ed.), Issues and problems in teacher education: an international handbook. Westport: Greenwood Press. Pp. 179-192.
Mathekga A (2004). The impact of in-service training: A reassessment of the cascade model. Unpublished Master's thesis. University of Pretoria.
Monjan S, Gassner S (1979). Critical issues in competency based education. New York: Pergamon Press Inc.
Nielson L (1979). An in-service program for secondary learning disabilities teachers. J. Learn. Disabil. 6: 70-74.
Patel R, Khamis R (2005). An AAC training program for special education teachers: A case study of Palestinian Arab teachers in Israel. Augmentative and Alternative communication. 21: 205-217.
Saeed M, Mhamood K (2002). Assessing competency of Pakistan primary school teachers in mathematics, science and pedagogy. Int. J. Educ. Manage. 16: 190-195.
Salleh A (1995). In-service training needs assessment for Malaysian secondary school teachers. Unpublished doctoral dissertation. University of Michigan.
Wendel E (1982). Competency-based teacher education: What has survived in New York? J. Teach. Educ. 33: 28-33.
Westat I, Rockville M (2002). Local administrators' role in promoting teacher quality. SPeNSE summary sheet. (ERIC Document Reproduction Services No.: ED469460).
Wigle S, Wilcox D (2002). Special education directors and their competencies on CEC identified skills. Educ. 123: 276-280.
Ysseldyke J, Algozzine B (1982). Critical issues in special and remedial education. New York: Houghton Mifflin.