

In-Service Training of Secondary Level Teachers: a Follow up of Teachers' Performance in Comparative Perspective

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Abstract

It was a follow-up study of teachers training in comparative perspective. The study was delimited to all Trained Graduate Teachers (TGTs) working in Federal Government Secondary Schools of Islamabad who received in-service training during years 2005–2009. Out of 1265 TGTs 32 INSET TGTs (with in-service education and training) and 32 NON-INSET TGTs (without in-service education and training), 64 colleague teachers, 256 students and 32 head teachers were selected as sample. One observation schedule and three five point Likert rating scales were used to collect the data on four selected parameters i.e. Classroom Management, Teaching Methodology, Use of AV Aids, and Evaluation Techniques. Mean scores, t-test and SD were applied. Out of five, four null hypotheses were rejected at 0.05 level of significance. It was concluded that the performance of INSET TGTs was comparatively better than the NON-INSET TGTs. The recommendations for training for working teachers and improvement of training contents were made.

Keywords: In-service Training, Secondary School Teacher, Teachers' Performance, Follow-up Study

1. Introduction

Unprecedented developments in instructional technology and contents brought significant changes in the realm of education, particularly in teacher education. A working teacher needs to be updated and refresh with reference to his knowledge and professional skills which are imparted through the training. Every society devises the in-Service training for this purpose. Federal Directorate of Education, Islamabad conducted in-service teachers training for Trained Graduate Teachers.

This follow up study was conducted to see the impact of in-service teachers training by formulating the hypothesis that there is no difference between the performance of Trained Graduate Teachers with in-service training and without in-service training. It was basically casual-comparative research in which impact of already conducted in-service training was found. The main objective of study was to compare the performance of Trained Graduate Teachers with in-service education and training (INSET) and those Trained Graduate Teachers who did not receive such training (NON-INSET).

2. Development of Teacher Education in Pakistan

Teacher education in Pakistan remained in different shapes according to the national needs. It is being improved by structure and function day by day. Historically its origin has been discussed by Siddiquee (1991, p. 21) as "teacher training in Pakistan can be traced back to 1804 when two teacher-training institutions were established at Lahore and Karachi and these two institutions provided non-formal teacher training programmes. In 1854 the institution at Karachi was made a normal school and it began to offer J.V. (Junior Vernacular) certificate. The institution at Lahore was made normal school and offered J.V. certificate in 1856. In 1947 when Pakistan came into being, the Junior Vernacular (JV), Senior Vernacular (SV), Certificate in Teaching (CT), Oriental Teacher (OT) and Bachelor in Teaching (BT) were the programmes for training of the teachers for different stages."

A gradual change appeared in this reference in Pakistan. Now a day a number of Teacher Training Institutes, Govt. Colleges for Elementary Teachers, Govt. Colleges, of Education and University Institutes/Departments/Faculties of Education are providing the training of teachers for different school levels. Besides the formal pre-service and in-service teachers training institutions a great contribution has been made also by the non-formal education system e.g. Allama Iqbal Open University and Preston University.

Mehmood (2008, p.38) states that teacher education in Pakistan is shaping well and still it needs improvement according to modern trends in education and teacher education at primary and graduate levels. As Iqbal (1996) has stressed that the graduate of teacher education programme in Pakistan should be possessor of intellectual competence, maker of effective and efficient decisions, builder of a warm classroom environment, seeker of alternative strategies, possessor of professional pride and consumer of research.

3. In-Service Education and Training of Teachers (INSET)

Academics dictionary of education (2002, p. 158) described the in-service training of teachers as;

Job related instruction and educational experiences are available to employees. In-service training programmes are usually offered during normal working hours. Activities designed to improve the knowledge and skills of employees and the quality of services, especially the instructional practices. In-service training is directed at those individuals who are basically qualified and employed by school systems. It can be presented in variety of formats.

1. In-service teacher training enhances the performance of a teacher. A teacher feels enrichment with new additions of ideas, concepts and activates. In-service Training improves the overall personality of a teacher and enables them how to respect personality. In-service training (INSET) improves the aspects of overall performance of a teacher. It is necessary for a teacher to update his/her profession. Sharif (1960, p. 78) has discussed it in the following words;

In-service education of teachers refreshes all those techniques, activities and learning experiences which are organized to increase their professional effectiveness..... In-service education activities may be of different types; group or individual, formal or non-informal. These may range from regular courses of study, educational workshops, lectures, discussions, interviews and supervision of individual study of the professional literature by teachers themselves.

So in-service education and training of teachers INSET has become a compulsory feature for every teacher who wants to keep himself well performed, competent, and distinguished among his peers. It is being emphasized the need of continuous in-service training and Education of the teacher, Nelson (1993) cited in Mehmood (2008, p. 35) states that;

There are three main reasons or purposes for a continuous improvement of the total professional staff. The first reason is that all teachers and administrators must constantly study in order to keep up with advances in subject matter and in the theory and practice of teaching. Continuous education is needed to keep the profession abreast of new knowledge and to release creative abilities. The second reason is to give the much-needed help to teachers who are new in a particular school to those who are entering a new responsibility or a new field of work within the profession. The third reason for in-service education is to eliminate deficiencies in the background preparation of teachers and other professional workers in education.

3.1 Modes of In-Service Education and Training of Teachers (INSET)

Hussain (2011, p. 33), has identified two basic approaches underlying INSET: the defect approach and the growth approach. The defect approach seeks to identify defects observed in the teacher and aims to remove those defects by the strategies and methods devised by the trainer. Those adopting this approach characters defects in the teacher with 'obsolescence' and 'inefficiency.' They believe that obsolescence can be taken care of by organizing traditional courses at college/university whereas teacher inefficiency can be taken care of by improving supervisory practices, competence-based teacher education or use of pupil performance test.

According to Mehmood (2008, p. 45) in the literature, seminars, workshops, refresher courses,

conferences, correspondence courses etc. are mentioned by the educationists as methods/strategies of in-service training.

Thus, in-service education includes all those courses and activities in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skill. Organization of in-service education, however, is not the task of one single individual or one single unit or organization; various organizations and institutions are collectively concerned with the noble mission of uplifting the teaching profession by bringing out the desirable changes in the curriculum, pedagogy, and teacher's attitude towards teaching

3.2 Institutions imparting pre-service/In-Service Teacher Education/Training (INSET)

There are several in-service training programmes. The most significant ones are (i) Directorate of Staff Development (DSD) (ii) Agha Khan Central Education Board refresher courses; (iii) AIOU Primary Teacher Orientation Course and (iv) Learning modules of Non-formal Wing of Ministry of Education. The in-service training of government primary teacher is being conducted mainly through various donor-funded projects, including the Teacher Training project, Primary Education project improving the Learning Environment (PEP-ILE) in NWFP, Sind Primary Education Development Programme, Baluchistan Primary Education programme, while Punjab is training middle school heads and teachers through Middle Schooling Project (Abbasi 1995).

3.3 In-Service Teacher Training By Federal Directorate of Education Islamabad

Islamabad Capital Territory has 317 Primary and secondary schools under Federal Directorate of Education (FDE) Islamabad. About 3419 male and female teachers and 317 head teachers are working in these schools in urban and rural sectors. Although the teachers working in these institution are trained and possess required qualification but they need continuous training to refresh and update their knowledge, attitudes and skills.

3.4 Objectives of In-Service Teacher Training of Secondary School Teachers

INSET was designed to bring significant changes to the classroom performance of a trained graduate teacher (TGT). Among others following were the main objectives:

- a) To make the teacher familiar with new teaching method of teaching.
- b) To enable the teachers to use modern instructional technology in the classroom.
- c) To enable the teachers for proper management of classroom.
- d) To enable teachers in applying modern evaluation techniques in the class (Federal Directorate of Education 2005, p.13).

4. Performance of a Teacher

Performance of teacher is comprised of different aspects. The capabilities, competencies, results, affects and outcomes of some body's work are called his performance. When it refers to a teacher, it means that how does a teacher perform his professional duties in the school. Sultana (1998, p.34) cited in Shah (2007, p. 47) defined that teacher performance refers to observable behaviors, both verbal and non-verbal.

It means the performance is a teaching behavior of the teacher, which some times appear as result or in the form of students' achievement. But the students' achievement is not considered as sum total of the performance of a teacher, it may be considered just as an aspect of teachers' performance because there are so many other variables, which involve in the students' achievement.

4.1 Classroom Management

Classroom management is a skill that consists of a number of aspects necessary for creating a desirable atmosphere for effective teaching and learning. There are so many aspects related to the classroom, which should be kept in view by a teacher while teaching in the class. Taking care of the seating arrangement, developing favorable climate for learning, class cleanliness, managing the time properly, taking care of students' movement, activities and class discipline etc are different angles of this skill which are the basic need of teacher. Am teacher can never perform better without applying such

managerial skills.

Bhutta (2004, p.46) has discussed that activities of the teacher, which promote a feeling of confidence and security in children usually, yield positive effects on the kind of learning that occurs in the classroom. The knowledge of what constitutes good human relations and the ability to put this knowledge to effective use appear to be basic remarks of the effective teacher.

Another aspect known as the classroom communication is considered to be the one of the most important communication from occurring in society. Mayor (1987, p. 237) states that the oral interaction which occurs in the classroom affects the personality development, intellectual development and social development of students and teachers.

The purpose of communication in classroom is to encourage and support learning which can be defined as a process of acquiring knowledge or changing attitudes, behavior and beliefs in some way.

Although the roles of teachers and students are separately defined in a classroom but for effective teaching, apart from being a sender a teacher needs to be constantly receiving verbal and non-verbal messages from students (responders). As Perrot (1982, p. 39), Shah (2007, p. 45) and Mehmood (2008, p. 43) say that it is important that the teachers should not ignore the significant emotional content of what pupils are saying and doing any more than they would ignore important cognitive statements.

4.2 Teaching Methodology

Mehmood (2008, p. 39) states that teacher's performance in lesson planning, set induction, testing the previous knowledge, introduction of lesson, use of blackboard, question-answer techniques, use of simple language, caring the learners listening, reading and writing skills, explanation of difficult concepts, use of challenging questions, recapitulation after teaching, assigning the home work, regular evaluation of the students' work, keeping the student's record separately, method of teaching etc, are different angles of teacher's methodology, who takes care of these indicators, is considered a successful teacher.

Bhutta (2004, p.49) has argued that making decisions and planning for instructional strategies is a critical step in teaching because planned activities improve student outcomes. Studies Brophy 1979, Evertson et al. 1980, Good 1979, Hunter 1981, Rosenshine 1987, Stallings 1980, cited in Frazee (1995, p. 205) found that students learn basic skills faster and score higher on standardized tests when they receive instruction directly from the teacher in an organized manner.

So the effective teaching and desirable learning depend upon the way and methodology of teaching and it is considered as an influence and indicator of the performance of a teacher.

4.2 Use of Audio Visual Aids

Akbar (2000, pp.295-296) has mentioned that visual materials specifically and sensitively impress the real world and that is the sentential characteristics of audio visual teaching aids. There is wide variation among the teaching visual materials over how specific and sensitive their impression might be, while charts and graphs merely illustrate the relation and change of thing, movies and television present moving images, sounds and voice in a highly realistic way. Both are similar in that the sensory linkage between media and object presented is such that what is presented and can be understood through the visual and auditory senses. All such materials are audio visual materials.

Walkin (1987, p. 26) has stated that main effort of any teacher in instructions is to make the change, clearly communicate the ideas, capture the content and clarify the obscure for the learner. Hence we have almost universal reliance of teacher upon the spoken word. Most of the day for teachers is filled with periods of explanation and discourse to point that the teaching profession has been accused for perpetuating verbalism in the schools. We use definitions and, too often rote memory in the quest of the goals for the day.

Bano (2004, pp.17-18) has added that the leaning environment has to be suitably designed. Designing the environment mean to create maximum opportunities for children to observe and work with several things which contribute to their understanding of man and the world looking at pictures , listening to recording of speech of great men or songs or great singers or the voices or birds and animal, playing with educational toys with building block looking at the pictures are some of the interesting activities which provide concrete learning experiences to children and help them to develop new attitude towards

learning.

Ashfaq (1998, pp. 24-28) listed these aids as non projected visual aids and projected aids and then gave discussed the ways of using these aids e.g. chalk boards, bulletin boards, flannel boards, charts, graphs, still pictures and posters, models, globes, maps, real objects

4.4 Evaluation Techniques

Evaluation provides information that is used for a verity of educational designs. The main emphasis in class room evaluations is, however, on the pupil and his or her learning process. Evaluation as defined by Gay (1985, p. 67) may be explained as a systematic process of collection and analysis of data to make decision in the light of predetermined objectives. The evaluation process includes both measurement and non-measurement techniques for describing changes in pupils' performance as well as judgment concerning the desired ability of the change. Evaluation also plays an important role in teachers' performance and students' learning. Hussain (2011, p. 48) stated that teachers should be aware of the fashion of evaluation and assessment and its need and importance in teaching-learning process.

5. Objectives of the Study

Following were the objectives of the study:

- a) To develop teachers' minimum performance criteria.
- b) To follow up the performance of Trained Graduate Teachers with in-service education and training (INSET/TGTs) on the aspects of:
 - i. Classroom management
 - ii. Teaching methodology
 - iii. Use of AV aids
 - iv. Evaluation techniques
- c) To follow up the performance of Trained Graduate Teachers without in-service education and training (NON-INSET/TGTs).
- d) To compare the performance of Trained Graduate teachers (TGTs) with and without in-service training (INSET/TGTs and NON-INSET/TGTs).

6. Hypotheses of the Study

Following Null hypotheses were formulated and tested.

1. There is no significant difference between the performance of Trained Graduate Teachers with in-service education and training (INSET/TGTs) and Trained Graduate Teachers without in-service education and training (NON-INSET/TGTs) on the aspect of their classroom management.
2. There is no significant difference between the performance of Trained Graduate Teachers with in-service education and training (INSET/TGTs) and Trained Graduate Teachers without in-service education and training (NON-INSET/TGTs) on the aspect of their teaching methodology.
3. There is no significant difference between the performance of trained graduate teachers with in-service education and training (INSET/TGTs) and trained graduate teachers without in-service education and training (NON-INSET/TGTs) on the aspect of the use of audio-visual aids in the class.
4. There is no significant difference between the performance of trained graduate teachers with in-service education and training (INSET/TGTs) and trained graduate teachers without in-service education and training (NON-INSET/TGTs) on the aspect of their knowledge and skill application of evaluation techniques.
5. There is no significant difference between the performance of trained graduate teachers with in-service education and training (INSET/TGTs) and trained graduate teachers without in-service

education and training (NON-INSET/TGTs) on the aspect of their over all performance as viewed by their head teachers.

7. Procedure of the Study

It was basically a casual- comparative study and required a survey to collect the data.

7.1 Population

The population of the study was consisted of 1265 Trained Graduate Teachers serving in 56 boys 39 girls Federal Government Secondary Schools of Islamabad.

7.2 Sample

Thirty-two Trained Graduate Teachers (TGTs/SSTs) with 05 years teaching experience were selected by stratified random sampling technique as a sample from those who received in-service training under Federal Directorate of Education Islamabad. Another sample of thirty-two in-service Trained Graduate Teachers of same qualification and experience having no in-service training were also selected by stratified sampling technique. Both samples of the teachers included equal number of male and female Trained Graduate Teachers.

Four students taught by each sample teacher, comprising of 256 students, 64 teacher's colleagues (two colleagues against each sample teacher) and 32 heads teachers were also selected by stratified random sampling technique.

7.3 Instruments

Three Likert type five point rating scales (for students, colleague teachers and head teachers) and one observation schedule were developed, pilot tested, validated and used to collect the data.

8. Data Collection

The data were collected personally through observation schedule during live classroom teaching taught by the 64 sample TGTs/SSTs about their performance. Rating scales were personally got filled from the 64 colleagues, 32 heads and 256 respective students of the sample teachers.

9. Analysis of Data

The collected data were organized to make comparisons between performances of sample teachers. Mean scores were compared with Minimum Performance Criteria (MPC) and t-test was used. On the basis of analysis, findings were drawn, conclusions were reached and recommendations were made accordingly.

10. Findings

10.1 Classroom Management

The mean scores of INSET TGTs group on observation schedule, students' opinion and colleagues' opinion were 3.13, 3.63 and 3.34 as compared to 2.88, 3.27 and 3.29 of NON-INSET TGTs respectively, which were better against minimum performance criteria scale i.e. 2.6-3.5. It proved that INSET TGTs performed better than NON-INSET TGTs on the aspect of their classroom management. The obtained t-values on observation schedule, students' opinion and colleagues' opinion were 1.23, 3.56 and 1.57 respectively which were statistically not significant at 0.05 level in case of observation schedule and colleagues' opinion. So as a whole the null hypothesis was accepted, this shows that in-service training of teachers has no significant effect on the performance of teachers on classroom management.

10.2 Teaching Methodology

The mean scores of INSET TGTs group on observation schedule, students' opinion and colleagues' opinion were 3.30, 3.82 and 3.70 as compared to 2.64, 3.48 and 3.19 of NON-INSET TGTs

respectively, which were better against minimum performance criteria scale i.e. 2.6-3.5. It proved that INSET TGTs performed better than NON-INSET TGTs on the aspect of teaching methodology. The obtained t-values on observation schedule, students' opinion and colleagues' opinion were 3.67, 3.13 and 2.24 respectively which were statistically significant at 0.05 level. So the null hypothesis was not accepted, this shows that in-service training of teachers has significant effect on the performance of teachers on teaching methodology.

10.3 Use of Audio Visual Aids

The mean scores of INSET TGTs group on observation schedule, students' opinion and colleagues' opinion were 3.18, 3.59 and 3.58 as compared to 2.59, 3.30 and 3.11 of NON-INSET TGTs respectively, which were better against minimum performance criteria scale i.e. 2.6-3.5. It proved that INSET TGTs performed better than NON-INSET TGTs on the aspect of use of audio-visual aids during teaching in the class. The obtained t-values on observation schedule, students' opinion and colleagues' opinion were 4.16, 2.58 and 3.64 respectively which were statistically significant at 0.05 level. So the null hypothesis was not accepted, this shows that in-service training of teachers has significant effect on the performance of teachers on use of audio-visual aids.

10.4 Evaluation Techniques

The mean scores of INSET TGTs group on observation schedule, students' opinion and colleagues' opinion were 3.08, 3.83 and 3.65 as compared to 2.56, 3.42 and 3.26 of NON-INSET TGTs respectively, which were better against minimum performance criteria scale i.e. 2.6-3.5. It proved that INSET TGTs performed better than NON-INSET TGTs on applying evaluation techniques. The obtained t-values on observation schedule, students' opinion and colleagues' opinion were 3.30, 2.33 and 3.84 respectively which were statistically significant at 0.05 level. So the null hypothesis was not accepted, this shows that in-service training of teachers has significant effect on the performance of teachers on applying evaluation techniques.

10.5 Overall performance as viewed by Head Teachers

The mean score of INSET TGTs group on Head Teachers' opinion was 3.06 as compared to 2.60 of NON-INSET TGTs, which was better against minimum performance criteria scale i.e. 2.6-3.5. It proved that as a whole INSET TGTs performed better than NON-INSET TGTs as viewed by their Head Teachers. The obtained t-value 2.79 was statistically significant at 0.05 level. So the null hypothesis was not accepted which shows that in-service training of teachers has significant effect on the performance of teachers.

11. Conclusions/Results

The minimum performance criteria (Table-1) were developed on four selected indicators of teachers' performance, on the basis of which the comparison of performance was made and following conclusions were drawn:

- i. Trained Graduate teachers with in-service training (INSET/TGTs) performed better on the aspects of teaching methodology, use of audio-visual aids and application of evaluation techniques in the class which shows the effectiveness of in-service teacher training.
- ii. Trained Graduate Teachers with out in-service training (NON-INSET/TGTs) did not perform better on the aspects of teaching methodology, use of audio-visual aids and application of evaluation techniques in the class which indicates that they need in-service teacher training in these aspects.
- iii. There was not positive impact of in-service education and training (INSET) on secondary school teachers' performance regarding classroom management, which demands training of all working teachers.

11. Discussion

Report of Commission on National Education, Govt. of Pakistan Ministry of Education (1959, p.378.) describes as, "In-service teacher training is meant to indicate the habits of regular study in critical

thinking and to conduct some practical research in the field of education.” It seems that this purpose has been met by the training on which this follow-up study was conducted.

The results related to the teaching methodology, use of audio-visual aids and application of evaluation techniques in the class show the effectiveness of in-service teachers’ training. These results support the findings of Landseer (1987, p. 173) cited in Mehmood (2008, p.123) as in-service training programmes act as capsule of energy which prevent teachers from different diseases and alive them for training.

In-service teacher education and training enhances the professional skills, teaching methodology and develops teachers’ attitudes. Similarly Akbar (2005, p.117) said INSET concludes all those educative and training activities engaged by Primary and Secondary teachers and principals, following their initial professional certification and intended mainly or exclusively to improve, their professional knowledge skills and attitudes, and order, they can educate children. Hussain (2004) found that; “the performance of trained teachers through in-service training programme was better than without in-service trained teachers”.

In-service teacher training should continue for all trained graduate teachers by Federal Directorate of Education Islamabad as results of this study proved its effectiveness.

That is also one of the objectives of this follow up study, to bring change in activities and contents of future in-service education and training of teachers (INSET), according to Williams (1999, p.73) cited in Hussain (2011, p. 67) evaluation should be a component of every INSET kept for these ends;

- a) To provide the data that will assist the development of other INSET activities.
- b) To identify the future needs for INSET.
- c) To enable participants to enhance their learning.
- d) To establish whether the aims and objectives were achieved.

The future in-service teacher training programme needs revision in case of contents in case of deficiency and duration while seeing its effectiveness. The well planned and relevant in-service teacher training programme is needed. This result of the study also supports an evaluation study of 50 elementary and secondary teachers Spencer Hall (1982, p.151) as cited in Bhutta (2004, p.59) received negative criticism on the formal progress of in-service training of teachers, half of the teachers gave mixed responses, among remaining complaint INSET programmes unplanned, irrelevant to the demands of their work, unconnected to each other or to the teacher’s work over time.” The deficiencies in content of in-service training courses, selection of participants and regarding duration should be removed. The in-service teacher training should be relevant to demands of their work especially in case of moral development and the aspect of classroom management beside the other aspects of performance.

12. Recommendations

Following recommendations were made:

- i. Every trained graduate teacher should be given in-service teacher training especially on the aspect of classroom management with activity based input.
- ii. The secondary school teachers without in-service teacher education and training should be provided in-service training in their respective subjects along with the aspects of use of audio visual aids, evaluation techniques and teaching methodology.
- iii. Further research should be conducted with a larger sample to study the retention impact of in-service training of trained as well as untrained teachers.

References

- Abbasi, M. H. (1995). *Teacher Education in Pakistan*. Country Paper, Islamabad: Ministry of Education.
- Academic’s Dictionary of Education. (2002). New Delhi: Academic Publishers.

- Akbar, Aysha (2000) Analysis of Zone Proximal Development (ZPD) in Graduate Teachers Training Programme of AIOU and Development of a Strategy to Achieve ZPD Incidence Using Delphi Technique (Unpublished Doctoral Dissertation). Islamabad: Faculty of Education, AIOU, Pakistan.
- Akbar, A. (2005). A Comparison of Programmed Instruction and Conventional Method of Teaching Algebra to 9th Class Students (Unpublished Doctoral Dissertation), Lahore: IER, University of the Punjab, Pakistan.
- Ashfaq, M. (1998). A Study to Evaluate the Availability and Utilization of Teaching Aids at Secondary School Level (Unpublished M. Ed Thesis). Rawalpindi: University of Arid Agriculture.
- Bano, S.(2004).A study of the importance and usages of low cost/no cost teaching material in teaching of general science at elementary level (Unpublished thesis of M. Ed). Islamabad: National University of Modern Languages.
- Bhutta, M. A. (2004). Effects of Teachers' Professional Qualifications on Students' Achievement at Secondary Level in District Okara (Unpublished M. Phil Thesis). Islamabad: Department of Teacher Education, Faculty of Education, AIOU, Pakistan.
- Frazer, B. M. & Rudnitski, R. A. (1995). Integrated Teaching Methods: Theory, Classroom Applications and Field Based Connections. New York: Delmar Publisher an International Thomson Publishing Company.
- Federal Directorate of Education. (2005). A Manual for INSET of TGTs. Islamabad: FDE, Ministry of Education, Pakistan.
- Gay, L. R. (1985). Educational Evaluation and Measurement, Columbus: Charles E. Merrill Publishing Company.
- Government of Pakistan. (1959). Report of Commission on National Education. Karachi: Ministry of Interior, Education Division.
- Hussain, M. (2004). A comparative Study of the Performance of Trained Primary School Teachers with and without In-Service Training in Hazara Division and Development Strategy for Future (Unpublished M. Phil Thesis). Islamabad: Allama Iqbal Open University.
- Iqbal, Dr. M. Z. (1996). Teachers Training: The Islamic Perspective. Islamabad: Institute of Policy Studies and International Institute of Islamic Thought.
- Khan, S. A. (2000). Evaluation of the Performance of Secondary School Teachers in the Subject of English in Rawalpindi Division (Unpublished M. Phil Thesis). Rawalpindi: UIER, University of Arid Agriculture.
- Mayor, F. (1987). A History of Educational Thought, Ohio Charles: Merrill Books.
- Mehmood, K. (2008). Follow up Study of In-service Teacher Training Courses at Secondary level in Federal Government Institutions (Unpublished M. Phil Thesis). Islamabad: Department of Secondary Teacher Education, Faculty of Education, Allama Iqbal Open University.
- Nazuk, N. (2009). An Evaluation of Effective Use of Audio Visual Aids in Government Primary Schools of Rawalpindi City (Unpublished MA Education Thesis). Islamabad: Department of Secondary Teacher Education, Faculty of Education, Allama Iqbal Open University.
- Shah, S. M. A. (2007). A Comparison between the Performance of In- Service Promoted and Directly Selected (By the Public Service Commission) Secondary School Teachers in Rawalpindi District (Unpublished M. Phil Thesis). Islamabad: Allama Iqbal Open University.
- Sharif, H. M. (1960). A Suggested Programmes of In-service Education for Teachers in Pakistan. Lahore: I. E. R. University of the Punjab, Pakistan.
- Siddiquee, M. A. (1991). In-service Teacher Training. New Delhi: Asish Publishing House 8/81, Punjab Bagh, India.
- Walklin, L. (1987). Instructional Techniques and Practice. The Both Press Avon G.Britain:
- Williams, J. (1999) An Introduction to Teaching and Training: In G, Nicholls, (Ed) Learning to Teach, London: Kogan Page Limited.

Tables

Table 1: MINIMUM PERFORMANCE CRITERIA/SCORE/SCALE

S. No	Aspects	Weightage		
		<i>MP. Score (Scale)</i>	<i>GP. Score (Scale)</i>	<i>BP. Score (Scale)</i>
1	Classroom Management	12-14 (2.6-3.5)	15-17 (3.6-4.5)	18-20 (Above 4.6)
2	Teaching Methodology	48-56 (2.6-3.5)	57-72 (3.6-4.5)	73-80 (Above 4.6)
3	Use of Audio-Visual Aids	21-25 (2.6-3.5)	26-32 (3.6-4.5)	33-35 (Above 4.6)
4	Evaluation Techniques	24-28 (2.6-3.5)	29-34 (3.6-4.5)	35-40 (Above 4.6)

Key to the Scale: *MP score: minimum performance score GP Score: Good performance Score BP Score: Better performance Score*

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