

# IMPACT OF MICRO TEACHING SKILLS ON THE PERFORMANCE OF PARIMARY SCHOOL TEACHERS

Syed Manzoor Hussain Shah<sup>1</sup>, Rehana Masrur<sup>2</sup>

<sup>1</sup>EPPSL Department and <sup>2</sup>Faculty of Education, Alama Iqbal Open University, Islamabad

## ABSTRACT

Education is back bone in the development of a society and teacher has a pivotal role in the education system. Every society invests in the teacher education by developing the teachers' potential in teaching methodologies and strategies to ensure maximum outcomes from the system. In Pakistan primary teacher's education has been a pivotal consideration of different national and international institutions. These institutions have been continuously contributing to develop the teacher's proficiency at elementary level. The present study was designed to see the impact of micro teaching skills learned through different in service training programs on the performance of the elementary school teachers. The sample of the study consisted 210 elementary teachers (105 with in-service training and 105 without in-service training). The performance of the teachers was observed by the researcher and research assistants through observation scheduled. The observation scheduled comprised eight teaching skills. The study concluded that in-service trained teachers utilized microteaching skills hence their performance was comparatively better. The study recommended to continue in-service training programs on teaching methodologies and strategies for elementary school teachers by establishing independent cell at district level.

---

## INTRODUCTION

Education is an indispensable ingredient of development and a fundamental right of every individual. Education is a social process, which ensures the development of an individual from a similar and lower position to a more complex and higher one. Its function of preparing people for development has, therefore become more difficult to discharge because of the extremely rapid changes taking place and the constantly increasing complexity and diversity of their forms. Jafar (1990) says that:

Foremost principle of education is that it should be harmonious, coordinated and a synthetic experience as a result of mutual and co-operative effort of the society, the teachers and the educated men. It should be an accepted and agreed form of activity of individual as well as of collective nature, and in essence should amount to an idealistic interpretation of the cultural experience or of the social heritage of the existing generation to the coming ones.

**Importance of Primary Education**

The elementary education is backbone and basic foundation of further education. Primary education is a reasonable and cheaper means, which inspires the people to accept the change and enjoins them to think critically. It simulates the capabilities of the individuals by which they change economical, social, political, moral and cultural systems, prevailing the society and summon for independent and prosperous life. It has been analyzed through extensive research studies that return of primary education is higher than that of higher education. Therefore, primary education needs more attention and inputs to raise its standards and quality. Primary education plays a vital role in the producing civilized citizen and pioneers to lead the nation through crises.

**The System of Primary Education**

The present system of education of Pakistan is the heritage of the pre-partitioned British India. The system of education followed in colonial India was introduced by the British, primarily for turning out clerks and subordinates necessary for carrying on the administration of the country under the

British masters in the colonial set up. At least that was the objective at the initial stage after replacement of Persian by English as the Court language in 1935. The aim gradually expanded after the establishment of the Calcutta University in 1958 and other Universities later on. The consensus of opinion has been that since the existing system was designed by the alien rulers to serve their own imperialistic ends, it can hardly be expected to cater for the requirements of an independent and democratic Islamic state. Thus the existing system of education is not the result of a natural growth but was transplanted root and branch by foreign rulers. It has outlined its utility and does not suit the genesis of Pakistan. In Pakistan, the administration of education is a provincial responsibility. This is so far school education as well as in the field of teacher education. The Federal Ministry of Education exercises over all policy control with the detailed administration of the services being devolved to the four provincial governments. At the Federal level there is a curriculum wing whose functions include over all development of the national curriculum for schools and teacher education

institutions. At provincial level the respective ministries also have their curriculum bureau. In short primary education is a subject, placed on the concurrent list of the Federal Government for policy formulation, coordination, and development and administration rest with the provinces. Primary education covers the first five grades for age group 5-9. A primary school for a locality of 500 populations is envisaged in different policies; however the target in practical has never been achieved so far. Supervision of primary education rests with the provinces. The administrative models differed from province to province, however the lower echelons was same for all the provinces. With the devolution of power at district level, now the supervisory structure of primary education in each province is the same i.e. Executive District Officer (EDO) is responsible to run the day to day affairs of the primary education with the assistance of his subordinates in a defined hierarchy. The responsibilities of evaluating and promoting of students from class I to V still lie with the ADO. A student is certified to join 6<sup>th</sup> class in elementary or secondary if he qualifies

the final examination at the end of 5<sup>th</sup> class.

### **Teacher Education**

It is a fact that the teacher occupies the most crucial position in the entire spectrum of educational activities. It is also a fact that the teacher is a changing agent of the society. We can meet the challenges of the present century if our teacher is dedicated to his profession and is well equipped with modern teaching techniques. Today the task of a common teacher has become challenging. Education is a dynamic force and is controlled by a teacher. The teacher holds a central position in education system. He contributes significantly in character building of the individuals. He helps in transmitting values held by the adult generation to next generation. He plays key role in educating the citizens. Hence the future of the nation depends, to a very large extent upon the quality of the teachers. No doubt quality of education is closely related to the improvement of educational objectives, policies programs, curricula, facilities, equipment and administrative structure but it is only the teacher who puts life into this skeleton. In the words of Ryan (1994)

If competent teacher can be obtained, likelihood of attaining desirable educational outcomes is substantial on the other hand, although schools may have excellent material resources in the form of equipment, buildings and textbooks and although curricula may be approximately adopted to community requirements if the teacher is misfit or indifferent to their responsibilities, the whole program is likely to be ineffective and largely wasted.

Keeping in view the pivotal role of teachers due attention should be paid while recruiting them. Only those candidates be preferred who have high commitment to the teaching profession. The quality of education is directly related to the quality of its teachers. Qualitative improvement in education depends upon proper training of teachers. The teacher cannot play any of their roles unless properly trained. To meet the expectations and aspiration of the nation a teacher therefore, must possess creative abilities and professional skills to enable him/her to discharge his duties according to needs of society and nation for that he has to undergo special sort of training and

education. Since teaching is a lifetime profession and there is a rapid explosion of knowledge it is not sufficient to provide training to teachers once in their life span. Therefore continuous education for teachers has become necessary. Lawton (1990) has emphasized the need for continuous education of teachers as following;

The professional teachers need opportunities for continuous education not only to update their subject expertise and rethink their methods, but also to develop as human beings and professionals in a variety of ways. Part time research into the process of teaching and learning should be a high priority for them. Only if measures such as these are taken will young people get the quality teaching that they need and deserve.

According to Siddiqui (1991) "teacher education is perceived as a continuous process, which consist of three distinct but closely interrelated consecutive stages (a) pre-service education (b) Induction and (c) in-service education and training". Teacher education must cover various aspects of teacher's profession being a multi dimensional activity. Aggarwal (1990) also looks at

teacher education as a continuous process. For him it is a lifelong process of many dimension and facts. He described teacher education as provision of;

Knowledge, skill and ability which is relevant to the life of teacher as a teacher. This definition implies that teacher education is a multidimensional activity and encompasses various aspects of a teacher's life and work. Its aim is not to teach the teacher how to teach, but to make an effort to enkindle his initiative, to reshape his attitude and to remodel his habits in such a way that the personality of the teacher is molded in the right form.

It is important, as well that the teacher training should not only be effective, but it should also be compatible with the value system of the society. In this way the effectiveness of teacher training and its relevance with social setup are both equal important. According to Iqbal (1996).

In a country like Pakistan, which owes its very existence to an ideology based on religious faith, it is even more important that the teacher education is planned and directed in accordance

with the tenants of its faith. The teacher training should produce teachers who fear God, comply with Shariah, possess sound personal character and are a model personality for the student.

According to Ryan (1994) a competent teacher can enhance the likelihood of attaining desirable educational outcomes while on the other hand, although the schools may have excellent material resources in the form of equipment, buildings and textbooks but incompetent and indifferent teachers can make the whole program ineffective and largely wasted.

### **Teacher Education in Pakistan**

According to Siddiqui (1991) "teacher training in Pakistan can be traced back to 1904 when two teacher training institutions were established at Lahore and Karachi and these two institutions provided non formal teacher training programs". In 1954 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 a normal school and offered J.V certificate in 1956. Pakistan Educational Conference 1947 expressed concern about teacher education and recommended revision of teacher

education programs to make them compatible with changing needs. Commission on National Education in 1959, made a serious effort to rationalize the system of education. After the 1971 crisis, the entire education system was reviewed. Curricula were revised to match the age requirements and to fulfill the aspirations of the people of Pakistan. The Education Policy 1972-80 suggested that “in order to meet the massive requirements of teachers at all stages, facilities for teacher education should be increased by reorganizing teacher education programs and by introducing innovative techniques. The National Education Policy 1979 also remarked, “that teacher was the pivot of the entire educational system and suggested to strengthen the teacher education in the country”. Under the policy all the primary teacher training institutions and normal schools were upgraded to Elementary Colleges of Education for elementary teachers. The National Education Policy 1998-2010 declared some objectives of teacher education. Some of these are:

1. *To create a matching relationship between demand and supply of teachers.*
2. *To upgrade the quality of pre-service teacher-training programs by*

*institutionalizing parallel programs of longer duration at post-secondary and post-degree levels.*

3. *To make teaching profession attractive for the young talented graduates by institutionalizing a package of incentives.*
4. *To develop a viable framework for policy, planning and development of teacher education programs both in service and pre-service.*

Above objectives shows the realization that teacher education is important for educational system and that it needs to be revised and improved. All the policies and plans have contributed towards certain objectives, but even now teacher education in Pakistan is far from perfect.

### **Primary Teachers Training (Pre-Service)**

Teaching is an art and like all other arts it can be learned with varying degrees of proficiency. Some teachers are born teachers and they can be good teachers without learning the art of teaching. Just as some singers have brilliant musical careers without studying voice culture. On the other hand, there are individuals who are naturally so handicapped for a teaching career that instructions in the teaching art could do as little for them. Hence like every artist a teacher requires sufficient amount of practical training in his/her future job. The origin of pre-

service training program goes back to the establishment of the normal school the latter half of the 19<sup>th</sup> century. The inadequacy of one year of training was recognized long ago and the duration of training was extended to two years. Policy changes took place and the duration of the training courses was reduced again to one year throughout the country.

Pre-service teacher education is offered in two different types of institutions. Teachers entering the primary sector are trained in the Government Elementary Colleges. The award granted by the institutions is the Primary Teaching Certificate (PTC). In practice there are variations in this pattern. In the province of Baluchistan for example, there were no pre-service primary courses available. There, training was offered to untrained teachers after some time in their teaching careers. Even then in Punjab and N.W.F.P. examples were there that majority of untrained teachers were trained through refresher/short courses up to 1990. Pre-service training is needed to provide the formal and informal activities and experiences that help to qualify a person to assure the responsibilities of a member of the

educational profession or to carry out his responsibilities more effectively. The major purpose of initial or pre-service training is to familiarize teachers with the general school atmosphere and to develop in them some basic professional skills. In this way the teacher education is a continues process.

### **In-Service Teachers Training**

The inadequacies of pre-service teacher training programs and the presence of a substandard weak force with no training makes in-service training even more important. It is self evident that changes in the content and even more so in the methods of teaching learning can be affected only if a large number of existing teachers especially in the primary school are adequately prepared through a systemic process of retraining. In-service training aims at promoting the continuous professional growth of the teachers after they have joined the profession. The need for further study is directly related to the ability of teachers to perform teaching tasks in a variety of educational settings. The more the nature of their role changes the more frequently the teacher must receive in service training. Experienced teachers may need such training to improve their

professional knowledge, skills and attitudes in order that they can educate children more effectively.

The initial preparation of teacher is critically important task in teacher development. The role of the teacher should be reflection of the community's expectations as well as the skills and abilities of individuals needed for the profession. Induction was identified as the weakest link in the system of teacher training all over the world, even the most advanced countries. It can be observed from the press release of the Department of Education and Science of Oxford University, D.S. (1992) which said, "Induction should be a planned extension of initial teacher training. It should help newly qualified teachers to become confident and competent as rapidly as possible, with guidance from more experienced colleagues". The in-service training of all working teachers was duly emphasized in all the national education policies of Pakistan. The government efforts for the improvement of the teacher's input at different level of education are also seen in the latest education policy, 1998-2010. Similarly the Education Sector Reforms (ESR) also speaks about the teachers' quality

through different in service teachers training program. Different studies revealed that the performance of the primary school teachers through micro teaching skills was better.

### **Micro Teaching Skills**

A teaching skill is a set of teaching behaviors of the teacher which is especially effective in bringing about desired changes in pupils' behavior. The name of micro-teaching was coined for this method of developing teaching skills in 1963. The idea of micro-teaching originated for the first time at Stanford University in USA, when an Experimental Project on the identification of teaching skills was in progress under the guidance and supervision of the faculty members (Bush, Allen, McDonald Acheson and many others). This project was aided by Ford Foundation and Kettering Foundation. The team of experts was assigned the development of testing and evaluation tools to measure the attainment of teaching skills. At this juncture Keith Acheson, a research worker was investigating the utility of video tape recorder in the development of technical teaching skills. This instrument could be used for recording the class



interaction and the behavior of the trainee vividly and accurately. This lead to the development of a systematic and accurate method of giving feedback to the teacher trainee. All the steps of micro-teaching technique:

Teach → Feedback → Re plan → Re teach → Re feedback.

Allen and Ryan in 1966 identified 20 teaching skills at Stanford University. This list has now increased to 37 teaching skills. These skills can be assessed by means of an observation scales. Since then this technique of teacher training has been widely used in almost all Colleges and Universities of Europe and Asia. In Pakistan, it has been used in teacher training programmes at elementary level. The purpose was to develop teaching skills and competencies among primary school teacher. The teacher uses these skills in pre-instructional, instructional and post-instructional stages as well as in their daily teaching in order to achieve pre-determined and specified objectives in a well manner. Basically this training technique helps the teachers is to master the teaching skills which he/she is required to apply in his daily teaching. To reduce the complexity of teaching it is analyzed into simple teaching activities

performed by the teacher during the teaching-learning process. The main objective of all these activities is to promote learning among pupils. In Pakistan micro eight selected microteaching skills were used in the many in service training programmes. The purpose was to train the teachers for their effective teaching. The present study was designed to see the impact of selected micro teaching skills on the performance of the trained in service primary school teachers.

#### **Research Methodology and Procedure**

The study was descriptive in nature and the performance of the primary school was observed through observation sheet. The sample of the study comprised 200 primary school teachers (105 who got in service training and 105 without in service training). Male and female primary school teachers were equally ensured in the sample with their equal distribution in urban and rural areas. The sample was drawn from four districts of NWFP i.e. from two literacy wise top districts and two literacy wise lowest districts. 105 schools from all districts were included in the sample. For the purpose of observing teacher's performance, an observation schedule

was prepared. The observation schedule consisted three to eight statements in the area of each skill and each statement has a 5 point scale i.e. Strongly agree, Agree, Uncertain, Disagree and Strongly disagree and having 5,4,3,2,1 as the score on these each point respectively for the purpose of recording the observation. The observation schedule was pilot tested on the teachers not included in the sample. The observation schedule was revised in the light of the feedback received as a result of pilot testing. In its final form the observation schedule had eight items as mentioned below:

1. Set Induction
2. Presentation
3. Effective Questioning
4. Listening
5. Pupil reinforcement
6. Teachers' liveliness
7. Closing of lesson
8. Planning

For the purpose of collection of required data nine research assistants in four districts were identified. The observation schedule was discussed with them in detail in joint meeting and afterwards these tools were tried out through their effective involvement. They were formally briefed about the administration of the research tools. The performance of both the group of teachers was

observed by the researchers on the developed instrument i.e. observation sheet. Before proceeding on for observation of classroom performance, the purpose was explained to the concerned teacher. Whatever, a subject/class the primary teacher was to teach, the class room performance during that period was observed. The researcher was seated at the back of the classroom and tick marked the activity / performance of the teacher on the structured observation sheet.

### **Analysis and Interpretation of Data**

The performance of the teachers was observed according to the developed observation schedule. The data obtained was tabulated, interpreted and analyzed according to the standard design of research i.e. mean score. The data analysis is shown in the following tables:

**Table 1 Set Inductions**

S. No	Item	PIT	NIT
1	The method of introduction of lesson was interesting	4.1	3.1
2	The keen interest of the students in the lesson was due to the method of introduction	4.2	3.3
3	The introduction of the lesson and the relation of actual lesson was clear to the students	4.3	3.3

Mean score of the PIT teachers with reference to set induction and its different three aspects ranged from 4.1 to 4.3 whereas of NIT teachers ranged from 3.1 to 3.3. This indicates better performance of the PIT teachers in the teaching skill, "Set Induction"

**Table 2 Presentations**

S. No	Item	PIT	NIT
1	Explanation was fully comprehensive to the students	4.1	4.1
2	The students were impressed by the explanation	4.2	4.1
3	Explanation covered the important points	4.2	4.2
4	Demonstrated models, pictures and examples were source of interest to the students	4.1	3.2
5	Demonstrated models, pictures and examples were upto the mental level of the students	4.2	4.1

Mean score of the PIT teachers with reference to teaching skill, “presentation” and its different five aspects ranged from 4.1 to 4.2 whereas of pre service trained teachers ranged from 3.2 to 4.2. This indicates equal performance of both the group of teachers in the teaching skill, “Presentation”.

**Table 3 Questioning**

S. No	Item	PIT	NIT
1	Questions were asked clearly	4.2	3.2
2	Questions were generally comprehended by the students	4.2	3.2
3	After questioning the students were given time for thinking answer	4.1	3.2
4	Both easy and difficult questions were asked	4.1	3.4
5	The questions provided the students to think deep over for Response	4.1	3.2
6	Maximum students were asked questions in the given time	4.1	3.4
7	Questions were relevant to the under study lesson	4.1	3.7

Mean score of the in service male trained teachers with reference to teaching skill, “Questioning” and its different eight aspects ranged from 4.1 to 4.2 whereas of pre service trained teachers ranged from 3.2 to 3.7. This indicates better performance of the PIT

teachers in the teaching skill, “Questioning”.

**Table 4 Listening**

S. No	Item	PIT	NIT
1	Realized the problems of the students on time	3.6	3.0
2	The students were guided with respect to their problems	3.8	3.2
3	Steps were taken to maintain the interest of students during teaching	3.9	3.3

Mean score of the PIT teachers with reference to teaching skill, “Listening” and its different three aspects ranged from 3.6 to 3.9 whereas of NIT teachers ranged from 3.0 to 3.3. This indicates better performance of PIT teachers in the teaching skill, “Listening”.

**5 Pupil Reinforcement**

S. No	Item	PIT	NIT
1	Words, phrases like "correct", "good", "very good", "fine" and "excellent" were used during question/ answer session.	3.9	3.2
2	Responses like "yes", "right" and "good" were used on the correct response of the students for their encouragement	4.0	3.3
3	For the encouragement of the students multiple gestures like, "given smile" "yes yes" "now say" and "this is good idea" were used	4.2	3.5
4	The students were provided help for suitable answer	4.0	3.1
5	With the help of simple instructions the students were encouraged for correct response, e.g. "think over again"	3.9	3.4
6	Students were encouraged for correct part of answer	4.0	3.3

Mean score of the PIT teachers with reference to teaching skill, “Pupil Reinforcement” and its different six aspects ranged from 3.9 to 4.2 whereas of NIT teachers ranged from 3.1 to 3.5. This indicates better performance of PIT teachers in the teaching skill, “Pupil Reinforcement”.

**Table 6 Teachers Liveliness**

S. No	Item	PIT	NIT
1	The teacher moved on proper time on teaching place	4.2	3.2
2	The teacher has made the teaching method more effective with the posture and gesture i.e. "hands", "body", "head", "face",	4.3	3.3
3	There was rise and fall in the teacher's tone	3.4	3.4
4	The teacher adopted different teaching methods for attention and motivation purposes e.g. teachers students and students' teachers group were made	4.2	3.1
5	Provision of short interval. The students were provided time to give attention and think over the important points	4.2	3.1

Mean score of the PIT teachers with reference to teaching skill, “Teacher’s Liveliness” and its different six aspects ranged from 3.4 to 4.3 whereas NIT teachers ranged from 3.1 to 3.4. This indicates better performance of PIT teachers in the teaching skill, “Teachers’ Liveliness”.

**Table 7 Closing of the Lesson**

		PIT	NIT
1	The way in which the teacher wind up the lesson was interesting one	4.1	3.0
2	The method in which the lesson ended has aroused the interest of the students	4.1	3.2
3	The end of the lesson and the real lesson has connectivity with each other	4.1	3.1
4	The conclusion of the lesson was the sum up of actual lesson and was also clear to the students	4.1	3.3
5	Revision of lesson was done	4.2	3.6
6	Home work was given to the students	4.1	3.3
7	Understanding of the lesson was realized by the students	4.2	3.6

Mean score of the PIT teachers with reference to teaching skill, “ Closing of Lesson” and its different seven aspects ranged from 4.1 to 4.2 whereas of NIT teachers ranged from 3.0 to 3.6. This indicates better performance of PIT teachers in the teaching skill, “Closing of the Lesson”.

**Table 8 Re Planning**

		PIT	NIT
1	The teaching was planned and integrated	3.9	2.9
2	The teaching was effective	3.9	3.3
3	The Teaching was according to the objectives	4.0	3.3
4	All the student's needs were properly managed during the teaching process	4.0	3.2

Mean score of the PIT teachers with reference to teaching skill, “ Re Planning” and its different four aspects ranged from 3.9 to 4.0 whereas of NIT teachers ranged from 2.9 to 3.3. This indicates better performance of PIT teachers in the teaching skill, “Re Planning”.

## DISCUSSION

The observational results indicated that the performance of in service trained primary teachers (PIT) was better in the teaching skills, “Set Induction”, “Questioning”, “Listening”, “Reinforcement”, “Teacher’s Liveliness”, “Closing lesson” and “Re Planning”. However the performance of in service trained teachers (PIT) and only pre service trained teachers (NIT) with reference to “Presentation” was similar. Though microteaching and its different techniques are included in the pre service courses but these are just theoretical and teachers are not provided an atmosphere to practice them with their peer groups. Whereas in the majority of the in service training programs in Pakistan being run through different international agencies like NORAD, the main focus has remained on the methodology and particularly on these teaching skills by one or other way. The results of the study are supported with the earlier conducted studies in Pakistan. The results of the study are supported with the earlier conducted studies in Pakistan. Satti, (1998) in his study titled, “Effectiveness of N-PTOC Programme in Haripur” has

concluded that the performance of the in service trained primary teachers was better than pre service trained teachers. Mehmood, (1999) in his study titled, “Effectiveness of In-service Imparted through Teacher Training Project” has concluded that the performance of the in service trained teachers was better than pre-service trained teachers. Khurshid, (1998) conducted a study on “Effectiveness of PTOC Training on the Classroom Performance of Female School Teachers in Rawalpindi District”. His study’s results indicated that in-service training programs were effective with respect to different teaching skills. Bukhari, (2000) conducted a study, “Development a model for In-service Training of Teachers in Pakistan. The main recommendation of this study was to develop the future in-service teachers training orientation program me on INSTOP Model with respect to objectives, content process and evaluation. Hashmi, (1998) conducted a research on the “Effectiveness of N-PTOC Programme of AIOU”. She concluded that the in-service training programs were effective in achieving the teaching skills. The research showed that there was a positive change towards

improvement of the performance of the trained teachers. Different ongoing projects were recommended to be re-organize and redefine by the organizations working for in-service teachers. Khan, (2003) conducted a study on "Effectiveness of PEP-ILE Programme in Tehsil Swabi. The findings of the study showed some improvement in the performance of the trained teachers. Similarly there was significance difference between qualified and low qualified teachers. The researcher recommended extension in training programme also at middle and secondary level. Project, N-PTOC (2001) conducted a study on the "Effectiveness of New Primary Teachers Orientation Programme of Allama Iqbal Open University". The findings of the study showed that there was a significant difference between the performance of N-PTOC Teachers and Non PTOC Teachers with respect to application of different teaching skills. The study also recommended the extension of the project to train the remaining teachers throughout the country. The findings of the study revealed that the efficiency of the programmes was not up to the mark. The researcher recommended that the in-

service teachers training programmes should be continued in future by overcoming the deficiencies in the relevant areas.

### **CONCLUSIONS**

The results of the study indicated that the performance of the in service trained primary school teachers (PIT) was comparatively better than pre service trained male teachers (NIT) in all the seven teaching skills, " Set Induction, "Questioning", "Listening", "Reinforcement", "Teacher's Liveliness", "Closing lesson" and "Re Planning". The reason is that these micro teaching skills were properly practiced by them during their different in service teachers training programmes. By applying these skills in their daily teaching and by observing the students involvement and well comprehension of the lesson taught, the teachers continued to apply them in their teaching irrespective to science or arts subject at primary level. As a whole findings of the study indicate positive result of in-service teacher training programs especially in teaching methodology. It is, therefore, recommended that in future, in-service teacher training programs may be based on selected teaching skills/

methodologies as mentioned above. However, these in service training programs may be need- based and only NIT teachers may be involved in these training programmes. These in service training programmes are likely to emphasize all the seven teaching skills, i.e. “set induction”, “:Questioning”, “Listening”, “Motivation”, “Teachers Liveliness”, “Closing of Lesson “and “Re planning”. There is also a need to identify and launch some other skills like Skill of Illustrating with Examples and Skill of Stimulus Variation in the future in service teachers training programmes in Pakistan.

#### **BIBLIOGRAPHY**

- Aggarwal, ”Development and Planning of Model Education,” Vikas Publishing Delhi, 1990  
 AIOU, Islamabad, P-CI of the N-PTOC Project December, 1996, Islamabad.
- Alam, Muhammad Tayyab Dr., “Development of a Model for in-service training of teachers in Pakistan” University Institute of Education Research, Rawalpindi 2002.
- Government of Pakistan, Ministry of Education”Education Policy, 1972-80” Islamabad, 1972.
- Government of Pakistan, Ministry of Education ”National Education Policy & Implementation Programme” Islamabad, 1979.
- Government of Pakistan, Ministry of Education, ”Education Policy, 1998-2010, Islamabad 1998”.

Iqbal M. Zafar, “Teacher Training The Islamic Perspective,” \_\_ Institute of Policy Studies Islamabad and International Institute of Islamic Thought, 1996.

Jaffer, Naseem, “Problems of Education in Pakistan,” Royal Book Company, Karachi, 1990.

Khurshid, Misbah “Effectiveness of New PTOC Training on the class room performance of female school teachers in Rawalpindi Division, AIOU 1998.

Mehmood, Khalid, “Effectiveness of in-service training imparted through Teachers Training Project.” AIOU Islamabad, 1999.

Ministry of Education Govt. of N.W.F.P. PC-I of PEP-ILE Project, N.W.F.P. Oxford University, DES Oxford U.K. 1992.

Primary Education programme Govt. of N.W.F.P. “Achievement and teacher behavior“Improvement of the Learning Environment. May, 2000.

Ryan, Yoni, “Quality in Postgraduate education,” Kogan Page, London, 1994.

Satti, Zameerul Haq, “A study of the effectiveness of N-PTOC in District Haripur, N.W.F.P.“ \_ University of ARID, Rawalpindi 1998.

Semiotics Consultants (Pvt.) Limited Islamabad, “Study of the effectiveness of in-service training

programs offered to primary school teachers in N.W.F.P.” Islamabad 1998.

Siddiqui M. A. “In-Service of Proximal Development for Learning and Teaching“ \_ New Delhi, Ashish Publication House 1991.

Training & Supervision Cell, NWFP, “Primary Education Development Programme“, report 1995.