IDENTIFICATION OF THE FACTORS OF QUALITY TEACHER TRAINING AND DEVELOPMENT OF A MODEL PROGRAM IN PAKISTAN

ALTAF AZAD MALIK¹, MALIK BEHLOL²

ABSTRACT: The tendency to emulate developed countries in applying their “state-of-the-art” programs without creating the requisite infrastructural base, conceptual and technical expertise, socio-cultural milieu, and financial strength is always problematic. Pakistan’s teacher training program is a typical example. The problem is confounded by the academically poor, relatively less-privileged and baffled students which these programs are constrained to admit. The notoriety of abysmally poor quality of teachers training programs warranted this study “an identification of factors of quality of teacher training and development of a model program for Pakistan”. An instrument developed by Yackulic and Noonan for their study on quality indicators of teacher training in Canada (2001) was adapted as questionnaire. Program admission requirements; knowledge of basic skills (language art and math); knowledge of human growth and development; received the highest ranking, in seriatim, as factors of quality of teacher training.

Keywords: Teacher Education, Quality, Model

Introduction: In order to meet the growing demands of teachers at various levels, the teacher education system in Pakistan has gone through significant quantitative expansion, yet the quality of teachers’ preparation has been overlooked and compromised. The preparation of teachers is critically important because a country’s modernization and development depend on the quality of its education system that is indebted to the quality of teacher education. There is a direct link between education and national development. For this, educational programs have to be reorganized and teachers are the main actors in this reorganization and transformation. It is, therefore, essential that teacher education programs be designed in such a way that the prospective teachers acquire all the relevant skills (Yackulic & Noonan, 2003). In Pakistan, it suffers from three major shortcomings. Firstly, it tends to imitate American teacher education, which, according to their own standards is under criticism for being deficient in developing teacher abilities for effective practice. Secondly, fragments of periodic experiments of American teacher have seeped into Pakistan’s teacher preparation programs. It has resultanty become an amalgam of incompatible ingredients which forces it to become too theoretical. Thirdly, Pakistan teacher education is woefully oblivious to the ground realities of schools and offers no answers to the problems posed by inhospitable conditions in which the teacher is required to work. It is grossly wasteful to seek to apply fancy concepts and approaches evolved in advanced countries in a developing country like Pakistan, which neither has the matching structures, nor the experiences and nor financial capability to sustain them. The ability of education and training systems to fulfill their roles effectively depends on whether educational institutions synchronize with the socio-cultural contexts and on whether teachers develop and deliver educational content in ways that meet the needs of today’s and tomorrow’s citizens. Policy-makers and society at large have high expectations of teachers as professionals, nation builders, role models and community leaders.

National Education Policy (1998-2010) observes: “The qualitative dimension of teacher education program has received marginal attention resulting in the mass production of teachers with a shallow understanding of both the content and methodology of education. The existing teacher training system in Pakistan is not adequately responsive to the demands for quality education.” (Govt. of Pakistan, 1998, p. 47-48). Commenting on the current state of teacher education in Pakistan, a report published by UNESCO concerning teacher education in Pakistan...
points out that “absence of quality has to be tackled urgently in a context where teacher, learner interactions are mediated by a supportive management, as well as by an enabling policy environment” (UNESCO, 2006, p.12). In Pakistan, the teacher education programs do not significantly raise the level of knowledge and skills of teachers so that there is any measurable impact on the students’ learning (Situation Analysis of Teacher Education in Pakistan, 2006). Researches reveal that the quality of teacher education has seriously been neglected both in content and methodology in Pakistan (Sheikh, 2000). Likewise the research reveals that the standard of education can be improved by preparing competent and effective teachers (Bhat and Ganihar, 2006).

Throughout the world, various training programs make choices, as to which indicators they should use as their preferred means of measuring their efforts to achieve quality and what relative priority should be placed on the chosen indicators. These indicators can be used to gauge the quality of teachers training with special references to national needs, aspirations, as well as global trends. These indicators, factors, or elements may be drawn from the commonly accepted knowledge base of teacher training programs. However; caution needs to be exercised in making comparisons between the various teacher training systems owing to the structural as well as socio-cultural differences in various countries. It is, therefore, essential and indispensable that teacher-training programs be organized in such a way that the prospective teachers acquire all the relevant skills.

The circumstances demanded that a thorough investigation be made to explore the factors that ensured the quality of teacher education and to identify the indicators of a successful teacher training program. On the basis of the findings of such a study, a model was intended to be developed for teacher training in Pakistan. Training programs in some professional fields are known for their high quality training. Medical education, training of civil servants, military training, and business administration education are generally regarded as good quality training programs in Pakistan. It might be instructive to look into these training programs closely to identify the elements, emphases and practices, which contribute to their quality and to determine if some lessons could be learned from them to improve the quality of teacher training and teaching profession. Since independence, studies have been conducted on different aspects of teacher education in Pakistan. But no study has so far been conducted on the indicators of quality of these programs despite the fact that this aspect deserves deep consideration. The researcher, realizing the importance of quality of the factors of teacher education and the dearth of studies on this vital aspect, felt motivated to undertake this research study entitled teacher training and development of a model program in Pakistan “.

The objectives of this study were:
1. to identify the factors constituting quality in various components of a teacher education program and determine their relative importance
2. to find out main features contributing to the quality of selected professional education and training programs in Pakistan.
3. to synthesize the identified factors of quality of teacher education and main features contributing to quality of selected professional education programs in Pakistan.
4. based upon the above synthesis, develop a model teacher education program for Pakistan.

**Review of Literature**

The quality of education is directly related to the quality of instruction in the classrooms. The teacher is considered as the most crucial determinant of the quality of classroom instruction. The academic qualifications, knowledge of the subject matter, skills of teaching and the commitment of the teacher have a strong impact on the teaching learning process (Govt. of Pakistan, 1998). Teachers cannot be replaced with any type of instructional materials, and are far more important than grand buildings, rich curricula and expensive equipment. Big libraries and well-equipped laboratories are of no use until and unless there are good teachers to make an appropriate use of them. The academic and professional training of teachers has a direct and positive bearing on the quality of their performance and consequently, on the achievement of the learners (Avalos & Hadded, 1999).

Quality teachers are described as having some combination of the attributes of mastery of pedagogical knowledge and subject area content knowledge, skills and attitudes necessary for effective teaching, strong understanding of human growth and child development, effective communication skills, strong sense of ethics, and capacity for renewal and ongoing learning (Cobb, Darling Hammond and Murangi, 1999). The education system and programs of teacher education in advanced countries have evolved through long years of deliberations and hard work. Those countries have gradually established the structures, processes and financial capabilities for different levels and types of education. In spite of their long experience and investment, there is widespread dissatisfaction with the current
state of teacher training. In the Newsweek magazine’s special education edition (October, 1990) editor Richard Smith noted cases “indicative of a chronic shortcoming in teacher preparation; the failure to train teachers, to empower them with abilities and disposition necessary for conducting affective practice”.

In 1947, there were normal schools for the training of primary teachers in Pakistan. The teacher training schools were later upgraded to colleges for elementary teachers.

Following were the teacher training programs in Pakistan.

<table>
<thead>
<tr>
<th>Names of the program</th>
<th>Duration</th>
<th>Qualification for admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. J.V (junior vernacular)</td>
<td>One year</td>
<td>Middle (8 year schooling)</td>
</tr>
<tr>
<td>2. S.V (senior vernacular)</td>
<td>One year</td>
<td>Matric (10 year schooling)</td>
</tr>
<tr>
<td>3. C.T (certificate in teaching)</td>
<td>One year</td>
<td>F.A/Fsc (12 year schooling)</td>
</tr>
<tr>
<td>4. O.T (oriental teaching).</td>
<td>One year</td>
<td>F.A (12 year schooling)</td>
</tr>
<tr>
<td>5. B.T (bachelor in teaching)</td>
<td>One year</td>
<td>B.A (14 year schooling)</td>
</tr>
<tr>
<td>6. B.Ed (bachelor in education)</td>
<td>One year</td>
<td>B.A (14 year schooling)</td>
</tr>
<tr>
<td>7. M.Ed (master in education)</td>
<td>Two year</td>
<td>B.Ed (14 year schooling)</td>
</tr>
<tr>
<td>8. M.A (master of arts in education)</td>
<td>Two year</td>
<td>B.A (14 year schooling)</td>
</tr>
<tr>
<td>9. B.S/(B.Ed.Hons)</td>
<td>Four year</td>
<td>F.A/FSc (12 year schooling)</td>
</tr>
<tr>
<td>10. MS (M.Phil, education)</td>
<td>Two year</td>
<td>M.Ed/M.A (16 year schooling)</td>
</tr>
<tr>
<td>11. Ph.D (education)</td>
<td>Four year</td>
<td>B.S/(B.Ed.Hons/ MS/M.Phil,</td>
</tr>
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</table>

In 1956, the name of J.V. was changed to PTC (primary teaching certificate) and the qualification increased from Middle to Matric. (Govt. of Pakistan, 1956.) At secondary level, 14+1 model was applied for the teacher training. The name of B.T was changed to B.Ed (Bachelor of education). Teacher education programs are offered in Government Colleges of Elementary Teachers, Government Colleges of Education, Institutes of Education and Research, and Departments of Education in universities. The Institutes of Education and Research and most Departments of Education in universities also offer M.S/M.Phil and Ph.D program to produce teacher educators, education leaders and scientists.

There are a number of qualities listed in review, some of them are: (1). Demonstrates an empathy with pupil thinking, anticipate misconceptions and allow pupils to develop understanding in a variety of ways. (2). Observe pupils in class for signs that they are failing to keep up, are bored, or are not understanding. (3). Shows flexibility in responding to pupil needs. (4). Genuinely wants pupils to learn, understand and develop critical thinking abilities, as well as master content or learn skills. (5). Encourages pupils to take an active role in working through difficulties and takes time to work through concepts in detail with those who have difficulties. (6). Shows enthusiasm for subject, professional area and teaching role, motivates pupils as they look forward to come to that class. (7). Easy going, relaxed with an open manner, brings a relaxed atmosphere to the classroom. (8). Communicates effectively. (9). Resourceful and positive and adopts a problem-solving approach. (10). Creative and imaginative and has an open attitude to change. (11). Systematic and well organized, focused, determined and hard working. (12). Demonstrates empathy and fairness caring and approachable (Highland Council of Education, Culture and Sport Service, 2007).

with reference to the Pakistani situation in particular and some developing countries in general. It elaborates the concept of quality, which is a complicated term to exactly define. Quality refers to efficiency, efficacy and excellence of a program, activity or process. It is a relative term and is associated with its goals. The extent of the achievement of goals and objectives determines the level of quality in a certain educational activity. In the national perspective, it includes how the aspect of quality was emphasized in the different national education policies and in the international perspective; it asserts some examples from international countries, especially from South Asia, Africa, and Latin America. It discusses the quality teachers, learners, content, environment, processes and outcomes.

Table 1: Qualities of professional teaching and training programs in Pakistan
(Derived From the Literature)

The nine program standards included criteria for program development, staff, facilities, candidates, curricula, duration, structures and procedures, teaching and learning approaches, and assessment. Canada seems to have followed U.S example where each state has established its own teacher education performance standards. National Professional standards for teachers in Pakistan were also announced in 2009 by the Ministry of Education. The list of professional standards for initial preparation of teachers in Pakistan includes subject matter knowledge; human growth and development; knowledge of Islamic ethical values/social life skills; instructional planning and strategies; assessment; learning environment; effective communication and proficient use of information communication technologies; collaboration and partnership; continuous professional development and code of conduct; teaching of English as second/foreign language (ESL/EFL) (Govt. of Pakistan, 2009).

Methodology of the Study

This descriptive study is aiming at the identification of factors of quality teacher training and development model in Pakistan. This descriptive research was designed to describe numerically the current views of working teacher educators about the quality indicators of teacher training and development model in Pakistan. In order to answer the questions concerning the status of the subject of the study, data were collected through questionnaire survey. This is in accordance with the broad definitions of descriptive research and quantitative research given by Gay (2005).

In the first instance, international experiences in teacher education were closely examined through a review of literature and the factors commonly mentioned as contributing to its quality were delineated. An instrument of a previous research on quality indicators for teacher training in Canada was adapted to survey the views of the teacher educators in Pakistan on factors of quality of teacher training program. This was the major part of the study.

Population of the study was the faculty of all the public sector universities having education department in Pakistan, and the faculty of Government Elementary Colleges for Teacher Training in Punjab Province. For this survey of the views of teacher educators, all the public sector institutions engaged in the preparation of school teachers and the teacher educators working therein constituted the population of the study.

Multistage random sampling technique was applied to select the institutions and the respondents of the study. At first stage, 16 universities were selected out of 57, 10 education universities campuses and 33 Government Colleges for Elementary Teachers situated in Punjab. At second stage of sample selection, the researcher selected the respondents of the study from the selected institution. All the faculty members working in the education department of the 16 universities were taken as a sample. This was done because the researcher wanted detailed information about the quality factors for Teacher Training Programme. The researcher randomly selected six faculty members from each Government elementary teacher training college and Education University campuses. This was done to give equal weightage to all the teacher training institutions and Education University Campuses. Multi-stage random sampling technique was applied to ensure the generalization of the results of the study. The detail about the respondents of the study is as under:

Table 2: Sample Detail

RESEARCH INSTRUMENT
During the review of the literature the researcher came across a research paper “Quality Indicators for Teacher Training in Canada” written by Yackulic & Noonan, University of Saskatchewan (2001). One part of the instrument used therein neatly matched the requirements of the researcher for the present study. It was adapted as a questionnaire to elicit the views of the sampled teacher educators.

The main questionnaire, however, attempted to ask questions about 29 factors of quality, presumed to be vital in the teacher education programs. The questionnaire was designed on the five point rating scale: Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree, with numerical values of 5, 4, 3, 2, 1, respectively. For pilot testing of the questionnaires, four institutions consisting two universities, one campus of University of Education and one Government College for Elementary Teacher were personally visited, where the questionnaires were administered to 40 teacher educators, 10 teacher educators in each institution.

The teacher educators at pilot testing phase were requested to give their suggestions freely for the improvement of the questionnaires regarding the content, format and language so as to make the questions simple and understandable. The questionnaires were revised to incorporate their suggestions. Through pilot study it was observed that the questionnaires were appropriate. The reliability of the questionnaires in pilot testing on Cronbach's Alpha which gave reliability values of 0.75 and 0.77. The content validity of the questionnaires was examined and approved by a team of senior teacher educators of the Department of Education, International Islamic University Islamabad. The final versions of the questionnaires are at Annexure (a).

Data Collection and Analyses

The researcher found data collection rather difficult. Most of the institutions had to be visited again and again. The researcher distributed 480 questionnaires among teacher educators constituting the sample to get the 100% response. It was possible to collect 400 filled questionnaires from the respective respondents. The measures of relative position are meant to give meaning to a raw score by comparison with some reference groups. The relative position of each factor of the quality of teacher education programs was compared with the help of following measures: Weighted scores, Mean value, Standard Score, Percentiles, Percentile Ranks, Document analyses.

The data of the study were organized, analyzed and the findings were drawn. The responses of the teacher educators regarding the value they attached to the different factors of quality of teacher education programs were organized. It includes distribution of frequencies of responses on a five-point scale in which teacher educators rated each factor of quality as Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree with numerical point value of 5, 4, 3, 2, and 1, respectively.

Table 3: Analyses of the suggested factors of quality of teacher education Program

Table 4: Weighted score, Mean value, and Standard /T score, Ranking and Percentile Responses of Teacher Educators on the Factors of Quality of Teacher Education Programs

Code: 11. Program admission requirements

Program admission requirements received the highest rating as a factor of the quality of teacher education programs. An overwhelming majority of teacher educators, i.e. (85.50) percent expressed their strong agreement/agreement with this factor of quality. There were 46 (14%) respondents who did not agree or strongly disagreed with program admission requirements as a factor of quality. Program admission requirements ranked first as a factor of the quality of teacher education programs with a total weighted score of 1630 and mean value of 4.075 and standard/T score of 70. The percentile rank of program admission requirements was 98.34.

Code: 23. Student teacher knowledge of basic skills (language arts and math)

The second highest rating was given to student teacher knowledge of basic skills (language arts and math) by respondents as 257 out of 400 (64.25%) of them indicated their strong agreement/agreement with this factor of quality. But 124 (24.31%) respondents disagreed/strongly disagreed that student teacher knowledge of basic skills (language arts and math) was a factor of the quality of teacher education programs. This factor obtained a weighted score of 1490 mean value of 3.72, and standard/T score of 64. On the basis of which it was ranked second. The percentile rank of this factor was 94.9.

Code 21: Student teacher knowledge of human growth and development
The number of respondents who strongly agreed / agreed that student teacher knowledge of human growth and development was a factor of quality of teacher education program was 285 (71%) and those who strongly disagreed / disagreed were 104 (26.00%). The total weighted score of this factor was 1490 and its mean value was 3.72. Its standard/T score was 64. This factor was also ranked second among 29 factors of quality teacher education program with a percentile rank of 94.9 and was tied with the factor student teacher knowledge of basic skills (language arts and math).

**Code: 26. Student teacher knowledge of student variability and exceptionality**

On student teacher knowledge of student variability and exceptionality, strong agreement / agreement was given by 276 (69%) respondents as a factor of the quality of teacher education programs. However, 107 (26.75%) respondents strongly disagreed / disagreed that this was a factor of the quality of teacher education programs. The total weighted score of this factor was 1461 with a mean value of 3.65. And standard/T score of 63. It was placed at rank 03. The percentile rank of this factor was 91.4.

**Code: 22. Student teacher knowledge of the principles of learning**

The respondents who strongly agreed / agreed that student teacher knowledge of the principle of learning was a factor of quality of teacher education program numbered 276 (69%) while those who strongly disagreed / disagreed that this was a factor of quality of teacher education programs were 115 (28.75%). The total weighted score of this factor was 1456 with a mean value of 3.64, and standard/T score of 63. It was placed at rank 04. The percentile rank of the factor was 88.0.

**Code: 25. Student teacher skills in basic teaching approaches**

Student teacher skills in basic teaching approaches as a factor of quality of teacher education programs was strongly agreed / agreed by 260 (65.00%) respondents. But 124 (31.00%) respondents disagreed / strongly disagreed that student teacher skills in basic teaching approaches were a factor of the quality of teacher education programs. The total weighted score and mean value obtained by this factor were 1444 and 3.61 respectively. Its standard/T score was 62. It was ranked 05. The percentile rank of this factor was 84.5.

**Code: 27. Student teacher knowledge of teaching technology**

At rank 06 was student teacher knowledge of teaching technology, which was strongly agreed/ agreed by 250 (62.50%) respondents as a factor of the quality of teacher education programs. Those who disagreed/strongly disagreed with this factor of the quality of teacher education numbered 133 (33.25%). This factor received a weighted score of 1416 and mean value of 3.54, and standard/T score of 61. The rank assigned was 08 and its percentile rank was 81.0.

**Code: 15. Use of technology enhanced learning program components**

To the question whether the use of technology enhanced learning was a factor of quality of teacher education programs, 264 (66.00%) respondents strongly agreed/ agreed whereas 120 (30.00%) respondents disagreed/strongly disagreed. The weighted score of this factor was 1412 and its mean value was 3.53. Its standard/T score was 61. It was ranked 07. The percentile rank of this factor was 77.5.

**Code: 28. Student teacher knowledge of classroom management skills**

Out of 400 respondents, 254 (63.5%) strongly agreed/agreed that student teacher classroom management skills were a factor of the quality of teacher education programs. Whereas 137 (34.25) respondents disagreed /strongly disagreed with student teacher classroom management skills as a factor of quality. The weighted score for the factor was 1388. It means value was 3.47, and the standard / T score was 60. The rank assigned was 08 and its percentile rank was 71.5.

**Code: 29. Student teacher classroom assessment skills**

The number of respondents who strongly agreed / agreed that student teacher classroom assessment skills were a factor of quality of teacher education programs was 262 (65.50%). As against 136 (34.00%) respondents disagreed /strongly disagreed with it as a factor of quality. The weighted score and mean value obtained by this factor were 1382 and 3.45 respectively, and standard/T score of 60, thereby ranking 9th the percentile rank was 70.7.

**Code: 17. Access to suitable field experiences placements**

Access to suitable field experience placements was strongly agreed/agreed by 251 (62.75%) respondents. However, 138 (34.50%) disagreed /strongly disagreed implying that this was not a factor of quality of teacher
education programs. With a weighted score of 1369 and a mean value of 3.42, and standard/T score of 59, this factor was placed at rank 10 and percentile rank was 67.3.

Code: 19. Length of field experience

Regarding length of field experience as a factor of quality of teacher education programs, 244 (61.00%) respondents strongly agreed/agreed. On the other hand, 130 (32.25%) respondents disagreed/strongly disagreed that length of field experience was a factor of quality. This factor received a weighted score of 1362, mean value of 3.40 and standard/T score of 59. On the basis of which it was ranked 11th and percentile rank was 63.8.

Code: 18. Extent of involvement of practicing teachers during field experience

In respect of extent of involvement of practicing teachers during field experience, 240 (65.50%) respondents strongly agreed/agreed, that it was a factor of quality of teacher education programs against which 145 (36.25%) respondents disagreed/strongly disagreed meaning thereby that to them, it was not a factor of quality. This factor received a weighted score of 1348 and mean value of 3.37 and standard/T score of 58. It came at rank 12 and its percentile rank was 60.4.

Code: 24. Student teacher knowledge of independent learning

Student teacher knowledge of independent learning as a factor of quality of teacher education programs was supported with strong agreement/agreement by 205 (51.25%) respondents. However, it was opposed as a factor of quality with disagreement/strong disagreement by 180 (45%) respondents. This factor attained a weighted score of 1293, mean value of 3.23 and standard/T score of 57. It ranked 13 and its percentile rank was 56.9.

Code: 14. Quality of curricula used in the program

Quality of curricula used in the program was strongly agreed/agreed by 159 (39.00%) respondents, but rejected by 228 (57.00%) respondents with disagreement/strong disagreement as a factor of quality in teacher education programs, with a weighted score of 1096 and mean value of 2.74. And standard/T score of 48 this factor ranked 14th. Its percentile rank was 53.3.

Code: 13. Quality of instruction in the program

Quality of instruction in the program as a factor of quality of teacher education program was supported with strong agreement/agreed by 150 (37.50%) respondents. However, it was opposed as a factor of quality with disagreement/strong disagreement by 60.00% respondents. This factor attained a weighted score of 1082, mean value of 2.70 and standard/T score of 47, and was ranked at number 15. It obtained a percentile rank of 50.0.

Code: 10. Quality of facilities

Quality of facilities was endorsed with strongly agreed/agreed by 147 (36.75%) respondents, but rejected by 232 (58%) respondents with disagreement/strong disagreement as a factor of quality in teacher education programs, with a weighted score of 1079 and mean value of 2.69 and standard/T score of 47. This factor ranked 16 and percentile rank was 46.3.

Code: 12. Length of program

At rank 17 was length of program, strongly agreed/agreed by 143 (31%) respondents as a factor of the quality of teacher education programs. Those who disagreed/strongly disagreed that this was a factor of quality numbered 248 (62.00%). This factor received a weighted score of 1057 and mean value of 2.64 and standard/T score of 46. The percentile rank was 43.0.

Code: 08. Extent of library holdings

Out of 400 respondents, 126 (31.50%) strongly agreed/agreed that extent of library holdings was a factor of the quality of teacher education programs. On the other hand, 248 (62%) respondents disagreed/strongly disagreed that extent of library holdings was a factor of quality. This factor received a weighted score of 1027 and mean value of 2.56 and standard/T score of 45. The rank assigned to this factor was 18.

Code: 16. Extent of technical support for technology enhanced learning

Only 114 (28.50%) respondents strongly agreed/agreed that extent of technical support for technology enhanced learning was a factor of the quality of teacher education programs. Comparatively as many as
272 (68.00%) respondents disagreed/strongly disagreed with it as a factor of quality. This factor received a weighted score of 1004. Its mean value was 2.51. Its standard/T score was 44 and it was ranked 19th, and its percentile rank was 36.3.

**Code: 07. Availability of specialized programs**

At rank 20 was availability of specialized programs, strongly agreed/agreed by 125 (31.25%) respondents as a factor of the quality of teacher education programs. Those who disagreed /strongly disagreed that this was a factor of quality numbered 264 (66%). Its standard/T score was 43. This factor received a weighted score of 986 and mean value of 2.46. Its percentile rank was 32.8.

**Code: 09. Availability of scholarships**

The number of respondents was 108 (27%), who indicated their strong agreement /agreement with availability of scholarships as a factor of the quality of teacher education Program. On the other hand, a great majority, i.e. 288 (72%) of respondents expressed disagreement /strong disagreement against the availability of scholarships as a factor of the quality of teacher education programs. The weighted score for this factor was 932. Its mean value was 2.33 and standard/T score of 41. Its rank was 21. The percentile rank was 29.3.

**Code: 01 per student funding allocated to the program**

At rank 22, per student funding allocated to the program, was strongly agreed/agreed by 104 (26%) respondents as a factor of the quality of teacher education programs. Those who disagreed /strongly disagreed that this was a factor of quality numbered 283 (70.75%). This factor received a weighted score of 914 and mean value of 2.28 and standard/T score of 40. The percentile rank was 25.9.

**Code: 02. Faculty- student ratio**

The number of respondents who strongly agreed /agreed that faculty- student ratio was a factor of the quality of teacher education programs was 108 (27.00%) whereas those who disagreed /strongly disagreed were 281 (71.25%). The weighted score of this factor was 886 and its mean value was 2.21. It received standard/T score of 39. It ranked 23rd. The percentile rank was 22.4

**Code: 20. Employment success of graduates**

Very small number of respondents .82 (20.50%) strongly agreed/agreed that the Employment success of graduates was a factor of the quality of teacher education programs as opposed to as large a number of respondents as 306 (76.50%) who disagreed/strongly disagreed with it. The weighted score for this factor was 886. Its mean value was 2.21 and the standard / T score was 39. It ranked 23rd. The percentile rank was 22.4.

**Code: 03. Proportion of faculty with completed doctorates**

There were 82(20.50%) respondents who strongly agreed/agreed that the proportion of faculty with completed doctorates was a factor of the quality of teacher education programs. On the contrary, 305(76.25.00%) respondents disagreed/strongly disagreed, which meant that the proportion of faculty with completed doctorates could not be regarded as a factor of the quality of teacher education programs. This factor obtained a weighted score of 872 and a mean value of 2.18. Its standard/T score was 39 and it ranked 24. The percentile rank was 19.0.

**Code: 04. Research productivity of faculty**

A total of 88 (22.00%) respondents strongly agreed/agreed that research productivity was a factor of the quality of teacher education programs. Against them, an overwhelming majority of respondents, 304 (76.00%) disagreed/strongly disagreed implying that this was not a factor of quality of teacher education programs.

With a weighted score of 760 and mean value of 1.90 and standard/T score of 33. This factor was placed at rank 25. Its percentile rank was 15.5.

**Code: 05. Institutional commitment to equity**

This factor was strongly agreed /agreed by 64(16.00) respondents that institutional commitment to equity was a factor of the quality of teacher education program, but was disagreed /strongly disagreed by 327 (81.75%)
respondents. The weighted score for this factor was 742 and its mean value was 1.85 and the standard / T score was 32. Its rank was 26. The percentile rank was 27.00.

**Code: 06, Extent of involvement of stakeholders in program design**

The respondents who strongly agreed/agreed that extent of involvement of stakeholders in program design was a factor of the quality of teacher education programs numbered 40 (10.00%). However, a large majority of respondents, 351 (87.75%), disagreed/strongly disagreed and rejected it as a factor of the quality of teacher education programs. This factor received a weighted score of 734, mean value of 1.83 and standard/T score of 32 and rank of 27. The percentile rank was 8.3.

On the basis of the strength of the above ratings, the factors of quality of teacher education programs can be divided into the following five groups:

**Discussion:** This study has revealed that most teacher educators regard admission requirements as the most important factor of quality of teacher education programs in Pakistan. This is in line with the generally held belief that quality of education and training program, to a great measure, depends upon the quality of intake of its students. Since the generally perceived high quality programs are heavily prized socially and economically, they attract the top achievers as their candidates. Teacher education programs on the other hand, cannot expect to attain such status and recognition in the prevailing circumstances and in the foreseeable future. The prevailing salary and service condition for school teachers do not attract academically talented candidates to those programs. Low social and self-esteem are further hurdles to quality pre-service preparation or continuous professional development of teachers (Govt. of Pakistan, 2009). In their study, Cobb, Darling-Hammond and Murangi (1985) concluded that teaching often does not enjoy the privilege of being able to select the best qualified candidates. Factors influencing recruitment include the status of the teaching profession and economic resources of the system. Casey (2005), reviewing the researches on teacher education admission criteria, observed that relationship of admission criteria to the knowledge, skills and attitudes, the beginning teacher need in their preparation provided by the programs are rarely made explicit.

Basic skills in language art and math were rated as the next most important factor of quality of teacher training programs. Realizing that a teacher’s success in the classroom is primarily determined by his ability to communicate effectively with his students, a strong teacher training program would place high premium on this factor. In Pakistan, this problem is further complicated due to a rather confused policy about medium of instruction. In most teacher training institutions, the medium of instruction is English but when the prospective teachers start teaching in schools, they tend to resort to Urdu or the regional language. During their preparation, they struggle to learn to communicate in a language with which they have basic difficulties.

In their views on ten performance standards as factors of quality of teacher training programs, communication and technology in which teachers use knowledge of effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration and supportive interaction in the classroom, was given sixth place by teacher educators.

Knowledge of human growth and development and of student variability and exceptionality figured as the third and fourth top factors of quality of teacher education programs in this study. How children learn and develop and how teachers can provide learning opportunities that support their intellectual, social and personal development; and diverse learners, teacher’s understanding how students differ in their approaches to learning and creating instructional opportunities that are adapted to diverse learners, came at third and fifth position respectively in the ten performance standards studied as factors of quality of teacher training programs. Most teacher education programs in Pakistan offer courses in human growth and development and educational psychology. However, how much effort is made to provide the student teacher, actual practice in preparing profile of individual pupil’s physical, intellectual, social and emotional development status and needs and in creating learning opportunities that meet individual needs is a big question. Even if their practical skills are developed during their preparation as teachers, how much of these can be applied when they begin teaching in school in the existing circumstances which by no means are friendly.

The next four top factors of quality of teacher training rated on the basis of views of teacher educators were knowledge of principles of learning (rank 4). basic teaching approaches (rank 5). Teaching technology (rank 6) and use of technology enhanced training (rank 7). On ten performance standards also, content technology, multi instructional strategies and communication technology were rated second, fourth and sixth respectively, as factors of quality of teacher training programs. Indeed it is the knowledge of these factors which differentiates trained from
untrained teachers. Zehn and Kohler (1993) asserted that teacher training is focused on methods courses and content specialty. In Pakistan such courses form the core of teacher training programs but the quality and emphasis of these courses vary greatly. The irony is that even these courses which by their very nature and demand should be essentially practical are generally delivered theoretically. Practice provided in the use of numerous teaching methods and techniques is usually meager and insignificant. It is rare that the student teacher is provided with practical exercise in content pedagogy i.e. the ability to understand the central concepts, tools of inquiry, and structures of the discipline(s) that he or she would teach and to create meaningful experiences using a variety of instructional strategies to encourage pupils development of reading, writing, critical thinking and problem solving skills.

The second group of factors of quality receiving next highest favorable responses (ranging between 65% and 51.2%) of teacher educators included classroom management (rank 8), and assessment skills, (rank 9); access to suitable field experiences placement (rank 10), length of field experience (rank 11), and extent of involvement of practicing teacher during field experience (rank 13). Out of ten performance standards, planning (i.e. teacher plans instruction based upon knowledge of subject matter, students, the community and curriculum goals), was placed at the first place, motivation and management (i.e. teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self motivation) came at the eight place, and assessment (i.e teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the student) was given the ninth place. Regina M.Oliver and Danciel R.Reschly (2007) in their paper on “Effective classroom Management: Teacher preparation and professional development reviewed researchers on classroom management and reported that effective teachers have higher rates of positive student responses to their instruction. Effective classroom management requires a comprehensive approach that includes structuring the school and classroom environment actively seeking students engagement, implementing classroom rules and routines enacting procedures that encourage appropriate behavior, using behavior reduction strategies, and collecting and using data to monitor student behavior, and modifying classroom management procedures.

All teacher training programs in Pakistan include courses in classroom management and assessment. These courses seldom receive the keen attention and hard practical work that they demand. Generally, these courses are covered in routine manner, dealing mostly with theoretical aspects. Very little, if any, practice is not given to the student teacher in identifying and tackling different management problems in real classroom situation of a school nor is adequate practice made available in constructing and administering assessment instruments, and interpreting, reporting and using results of evaluation for promoting pupil learning.

Access to suitable field experience placement, length of field experience and extent of involvement of practicing teachers during field experience are the factors which are regarded or expected to function as the kingpin of a teacher training program. Student teaching practice, as field experience is commonly known, is seen as an essential element to teacher preparation. Its duration varies widely which is determined by nature of the teacher training program and the teaching level. Student teaching practice is usually arranged at the completion of the course work and toward the end of the teacher training program. Teachers preparing in Germany, undergo two full year of internship that include seminars and classroom experience. College and school based faculties observe and evaluate at least 25 lessons. At the end, candidates go through a variety of portfolio and paper assignments prior to teaching (Waldrop, 1991). In the New Zealand and Australia, the cooperating teacher, associate teacher, or tutoring teacher is responsible for mentoring and evaluating student teacher during several four-week sessions. In Germany, the US, Canada and Singapore both school and college/university-based faculty assesses students. The component which often is identified as characteristic of a good teacher education program is the need for early and numerous opportunities to practice teaching in field based experiences. A notable complaint from teacher education graduates is the existence of a large gap between theory taught and actual classroom practice and utility of coursework. Furthermore, the lack of connection between theory and practice seems to increase after teacher candidates have spent some time in the classroom (Armstrong, 2009).

Even worse rating was obtained by factors like availability of specialized programs, availability of scholarships, per-student funding allocated to program, faculty-student ratio, and employment success of graduates, proportion of faculty with completed doctorates. These were rejected as factors of quality of teacher education programs by 66.4% to 76.2% respondents and were accepted by only 20.7% to 31.2% respondents. Among 29 proposed factors of quality of teacher education programs, these factors ranked 19th to 24th. Goldhaber and Brener (1997) found that a teacher’s advanced degree was not generally associated with increased student learning from eighth to tenth grade.

The group that received the lowest number of favorable responses included research productivity of faculty, institutional commitment to equity and extent of involvement of stakeholders in program design as factors of
quality. As high as 68.0% to 87.7%, respondents were negatively disposed towards these factors. Support facilities did not find favor with respondents. How learning environment and teaching conditions affect student achievement and teacher’s morale is explained by Hanushek and Lugue (2000) study that teachers might be willing to take lower salaries in exchange for better working conditions. There is no serious effort in the 60 year history to address the critical question of reluctance of teacher education to the improvement of quality of education. The necessary link between teacher education and school education is incising. The teaching and learning practice prevalent in the public school classroom in Pakistan clearly shows the huge gap between teacher education and school education system. Policy and five year plan has made lofty claim and false provisions for developing teacher education without region to ground realities (Ali, 2011).

The curriculum of Education: AED (Associate Degree in Education) and B.Ed(Hons)Elementary and Secondary: Revised 2010 approaches by Higher Education Commission Islamabad ,Pakistan and National Professional Standards for Teacher in Pakistan (2009), announced by Policy and Planning Wing, Ministry of Education Government of Pakistan, Islamabad are clear manifestations of adopting American exemplars in Pakistan. Whereas the four-year undergraduate program of Teacher Education and Teacher Education Performance standards of various states in USA can be safely assumed to synchronize with, their public school system there seems to be little appreciation of huge disparity between the recent interventions in teacher education and ground realities of public school, most of which do not even meet the basic minimum requirements of physical infrastructure. It may be argued that teacher education in Pakistan cannot remain oblivious of the advancements taking place in this field at international scene. The counter argument is that Pakistan should bring its public school system up to the international standards to take advantage of the international developments in teacher education. Now that the curriculum of teacher in Pakistan is given by the Higher Education Commission and professional standards for teacher have been prescribed under the Ministry of Education, the room for maneuverability is extremely limited under the prevailing conditions of public schools.

Proposed Practical Teacher Training Model:A model is a plan or a pattern or a framework which can be used to design a program, a procedure, or a product. This teacher training model attempts to present a framework for designing a program for preparing prospective teachers in Pakistan. Presentation of this model is necessitated by certain realities. The present state of the field of teacher education is a reflection of numerous initiatives and interventions made internationally, particularly in the US, where scholars, researchers and the practitioners of the teaching profession can take pride in the extensive work and developments that have taken place in this field. The fact remain that there runs an undercurrent of dissatisfaction generally with the teacher training programs as offered presently and other alternatives such as adding a fifth year to existing four -year undergraduate teacher education program, reducing the number of courses in education, and on-the-job training are being seriously considered . The usual criticism is that too many and too frequent conceptual and structural interventions have made the programs diffused and dispersed which have denied the profession to evolve into a solid tradition of practice. On the contrary, the virtues of practical pedagogy of the earliest programs of the normal school have been lost. The devastating conclusion of the report of the Able Foundation (2001) that teacher certification was neither an efficient nor an effective means to ensure a competent teaching force and that the attributes of effective teacher were more likely to be found outside the domain of the school of education has raised many questions.

Teacher education in Pakistan is believed to be of abysmally low quality, although efforts have continued to be made to reform and modernize it by copying the international initiatives. The most recent examples are the introduction of four -year undergraduate teacher education program, despite the fact that its efficacy is being questioned internationally. The introduction of national professional standards for teachers in Pakistan to initiate American or Australian examples, without taking into account poor school conditions is another such decision. The more such international experiences are copied, the void between the public school and teacher training widens. In the past few years, many new universities and institutions have come into being. Many of such institutions have departments of education which offer teacher education programs. With little experience in establishing and running such programs and with inadequate and suspect quality of teaching faculty, this proliferation has aggravated the situation further. Ground realities of the public school system recede more and more into the dark.

The candidates who opt to become teachers do so because they fail to find a place elsewhere. They come to teacher education program with intellectual, socio-cultural, economic and academic deficiencies and low self-esteem. Loading them with the courses and activities designed for the Western youth who have grown in intellect, culture, social relation, and academics with the growth of their public schools and teacher education programs, only adds to their misery. Disconnect between their studies, their academic and intellectual possession, the environment,
and the conditions of the public schools where they would be required to teach haunt them throughout. It is imperative to shape their preparation as teacher in a manner which their academic, intellectual and cultural background can sustain, and builds their self image, and becomes relevant to their surroundings and their job in schools.

There is the disquieting state of the public schools, particularly in rural areas. There are glaring disparities in the number of available teachers, provision of facilities such as number of classrooms, drinking water, furniture, electricity, toilets. Shortage of English, Mathematics and Science teachers and absence of science laboratories in secondary schools is a nagging problem. The teacher education programs in Pakistan seldom prepare the teacher to cope with such conditions. Training of the beginning teachers should enable them to be functional in difficult circumstances.

A Revised (2010) 4-year B. Ed (Hones) Elementary and Secondary curriculum have been given out by the Higher Education Commission. All teacher education programs are required to follow this curriculum. The constraints imposed by the revised curriculum need to be respected and the proposal for a teacher training model has to be carried out within these constraints. However the curriculum document allows flexibility to reorganize course, according to the local needs and available resources and facilities.

The basic contention of the proposed practical teacher training model is to teach school subjects effectively. The focus should remain on developing specific skills in teaching the subject matter. Any course or material that interferes with this prime objective is superfluous and should be discarded. The first consideration of the proposed model is to simplify the content of training by reducing the theoretical and conceptual load that is not directly related to the development of teaching skills.

The second contention is that training should emphasize development of doing skills instead of knowledge skills. A person who can do his job well is more confident, knowledgeable, and positively disposed than the one who merely knows about the job but cannot perform it successfully. The majority of the teachers is exposed to many concepts during training but not given adequate practice in performance. Resultantly, they remain handicapped throughout their careers.

The third contention is that teacher training cannot become relevant if it is far removed from teaching in public schools. The present gap between teacher training and school teaching should be closed by taking training to the site. If teachers are prepared in schools not only will the prospective teachers benefit, but also the practicing teachers, the entire training program could thus assume the form of field experience.

Proposed Practical Teacher Training Model
(See Figure 1)

Conclusions
1. Admission requirements received the highest percentile rank and topped the list of factors of quality of teacher education program. The generally perceived high quality program of civil services training, military training, medical education and business education placed great emphasis on admission requirements and used stringent criterion for selection of their candidates. Unfortunately, the situation of admission of academically poor students is likely to change in teacher training programs in the foreseeable future. Selecting the best from the available lot is the only feasible option.

2. Factors involving development of skills and practical competencies were given preferential rating such as basic skills in language arts and mathematics, skills in basic teaching approaches, use of technology enhanced learning component, classroom management skills, classroom assessment skills and suitable field experience, length of field experience, were more precisely the requisite skills for successful practice of the teaching profession. Quality programs of civil services training, military training, medical education and business education also placed great emphasis on training and were aimed to develop skills to deal effectively with practical problems of the field. Development of specific practical skills presently insignificant seems to be the necessary desired focus of the teacher training programs to improve their quality.

3. Factors requiring direct practical application were also rated high. The knowledge of human growth and development, knowledge of student variability and exceptionality, knowledge of principles of learning, knowledge of teaching technology and Involvement of practicing teachers during field experience not as theoretical concepts but as practical skills also appear as important predictors of quality of teacher education programs.
Based upon the above consideration, a practical teacher training model for Pakistan is proposed with the objectives of reducing academic and intellectual, theoretical and conceptual demands on the students, equipping them with specific essential skills identified through a survey of teacher educators and building their confidence to successfully practice the profession of teaching even in the existing difficult conditions of public school system in Pakistan. The model assumes that the mastery of the selected school subjects and basic skills of language art, such as communication and presentation skills and basic mathematics, will be provided and developed in the relevant departments and outside the department of education.

The actual model envisages close collaboration, consultation, planning and organization, and logistics management between the departments of education /teacher training institution and the cooperating /participating /practicing schools.

All training will be provided through field experience. Access to suitable field experience placement, length of actual field experience, and involvement of practicing teachers in the field experience of the prospective teachers is the central component and is to be established first of all, Skills for studying and determining human (child) growth and development differentiating students’ variability and exceptionality and application of principles of learning will be developed, through field experience in the first round.

In the second round, skills of the prospective teachers teaching approaches, teaching technology and technology enhanced learning will be developed through field experience. The prospective teachers will learn and practice through third round of field experience in the actual classrooms of the cooperating school specific and specialized methods of teaching elective school subject 1. Similarly, the fourth round of field experience of the prospective teacher will be devoted to developing and practicing specialized methods of teaching selected school subject 2. Classroom management skills, organization and procedures, and behavior management skills will be developed in the fifth round of field experience.

In the sixth and the last round, classroom assessment skill, including construction and administration of tests, grading and reporting will be developed in the prospective teachers through field experience in actual classrooms of the cooperating schools.

5.4 RECOMMENDATIONS
1. The proposed practical teacher training model may be presented in a seminar of teacher educators, school administrators and practicing teachers. The model may be refined on the basis of the feedback of the seminar.
2. The refined model may be pilot-tested in a limited scale. The result of pilot-testing may be carefully recorded. The model may be further improved if necessary.
3. The results of the pilot-testing and improved version of the proposed practical teacher training model may be presented to Higher Education Commission for consideration.

Further Research

Research studies on the following themes may be undertaken to provide greater insight into the issues related to teacher training.
1. A co-relational study of trained and untrained teachers and students achievement
2. Relationship of teachers training and teachers’ classroom behavior.
3. A comparative study of teacher training methods in advanced and developing countries.

REFERENCES