

ASSESSING THE EFFECTIVENESS OF TEACHER EDUCATION PROGRAMS: PROSPECTIVE TEACHERS' PERSPECTIVE

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Abstract

Quality enhancement of teacher education programs has been a debatable issue all over the world. The present study was aimed to assess the quality of teacher education programs being offered in a public sector university in Pakistan. Three programs were randomly selected and prospective teachers studying in the final semester were selected as sample of the study. Prospective teachers studying in last semester of teacher training programs were the respondents. Questionnaire, containing 55 statements divided into six factors, was used as data collection tool. Data were analyzed by SPSS version 20. Descriptive statistics showed that the respondents were more satisfied about the selection criteria, effectiveness of teaching strategies used by teachers, behavior modification practices, appropriateness of courses, timely feedback, and teachers' content knowledge but they were less satisfied with the statements related to availability of multimedia in the classes, sharing of faculty offices, no distortion of external factors, space to conduct activities, cleanliness and neatness of classrooms, and environment helpful for learning. The results of inferential statistics revealed significant difference in mean score of respondents from different programs on the factors of admission criteria, use of technology, assessment procedure, and quality of paper development and marking. It is recommended in the light of results that the university should allocate special budget to improve the quality of infrastructure. Furthermore, availability of technology and its proper use should be ensured by the university administration.

Keywords: *Effectiveness, teacher education program, prospective teachers.*

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Introduction

Teachers play a pivotal role in developing and reforming the education system of any country. The role of teachers in the overall education system is very important. It has been rightly said by the Commission on National Education (1959) that ‘no system is better than its teachers’. Teachers have the responsibility to inculcate enriched knowledge, accepted values, desirable attitudes and appreciated behavior in the students to make them good citizens who will work for the best interest of the society.

In both academic and policy-making contexts, pre-service teacher education program has always been under a substantial debate due to its undoubted importance. Major dimensions of teacher education program which have been discussed in literature are excellence, pertinence, the knowledge that a student teacher should be equipped with, and the roles that a student teacher has to play in the professional life.

Teacher education program not only focuses on the learning of educational theories and on transforming ‘serial learning of concepts on a scale of growing complexity’ (Korthagen, 2010, p. 99), but it also aims on providing information by collecting useful data in order to explore the above mentioned issues, consequently, making the training program more effective and improved (Metzler & Blakenship, 2008).

Quality enhancement of teacher education program has always been a worldwide debatable issue. Recuperating teachers, making teacher education program more meticulous and upgrading the quality of teachers which will ultimately improve the educational institutions and students’ performance are the important points of emphasis of the documents such as National Commission on Teaching and America's Future (1996).

In his doctoral study, Mehdinezhad (2008), reported that over the last many years, teacher education program is being evaluated throughout the world. These efforts have made their major contributions towards the improvement of the programs; however, some of the dimensions still need more extensive evaluation studies.

In order to ensure the quality of the process, taking feedback from the graduates has always been appreciated. It is useful way to measure the satisfaction of the prospective teachers towards the program they are enrolled in (Mehdinezhad, 2008). Quality Assurance Process (QAP) smoothens the way of dialogue between the program holders and students .Ayres (2006) stated that for the purpose of getting suggestions about the

students' contentment, to assess the quality of teacher education program, and students' perception of their mastery of content and skills learned as of result of that program, 75% of teacher education programs collect data from the students in the form of follow up surveys. According to Ingersoll and Kinman (2002), students' survey is the best way to ascertain the elements that become the reason to continue teaching.

Evaluation of teacher education program serves two basic purposes; one of them is to improve teaching learning process and the other purpose is to provide the opportunity to assess the program in comparison to other teaching programs implemented in the world, with the view of the usage of available recourses and the standard of teaching activities (Hulpiau, 2010).

In Pakistan, it has constantly been testified that teacher education programs are suffering from many problems. Lack of resources, less opportunities for professional growth, low quality and irrelevance of courses offered inappropriate ways of assessment are not all but few of them (Dilshad & Iqbal, 2010: Dilshad, 2010).

To advance the excellence of teacher education programs, Government of Pakistan has taken effective steps. Establishment of Quality Enhancement Cell (QEC) in all the universities, including universities offering teacher education programs, is a continuity of this journey towards quality improvement. The present study aimed to identify the different dimensions of teacher education programs from prospective teachers' perspective.

Evaluation Criteria

In the light of literature review of teacher education program evaluation, teacher education programs were analyzed in the following aspects: content command, teaching methods adopted by instructors, classroom environment, availability and use of technology, assessment procedure, and paper making and marking. The prominence of these aspects, contributing towards the overall effectiveness of the program, as reported in literature, is discussed below.

The process of evaluating arguments or intensions and judgments leading to maturity of beliefs is known as critical thinking. Talking about the development of critical thinking, Kraak (2000) asserts that it is "an important, perhaps the most important of all present time educational tasks" (p. 51). It is one of the most considerable tasks of teacher training program to provide an opportunity to students to develop their critical thinking .As prospective teachers are supposed to develop these skills in

their own students while practicing in the classrooms, educational institutions must develop the program in such a way that can enhance students' ability to think critically. Training programs should pay significant consideration to refine the intellectual skills of students and teachers before they enter their professional life (Ashton, 1988). As the teachers are going to participate in the major decisions of education, training programs should integrate the development of critical thinking as an important aspect (Resnick, 2007).

Classrooms' environment conducive to learning is also one of the components which affect the overall effectiveness of the program. Relationship between classroom environment and students' learning has been explored in the previous studies (Fraser, 1998). Learning takes place more smoothly when classroom environment goes with the required environment of the students (Aldridge, Fraser, Fisher, Trinidad & Wood, 2003).

Pervasiveness of the use of technology, both at national and international level, is hard to overlook in any educational setup. Effective integration of technology in curriculum has become a serious issue (Aldridge et al., 2003). Technology provides the teacher to adopt multiple ways of teaching and to ensure the greater involvement of students in teaching learning process.

Gathering information about students' progress through different techniques is termed as 'assessment'. The results of assessment are used to know the present progress, diagnose students' errors and needs, and take future decisions. The overall instruction plan is improved in the light of assessment results. Not only the progress of students is assessed, but the overall quality of program, training institute and school is judged by using assessment's result. Keeping in view this importance of assessment, it is right to say that improvement of students, teachers' instructional strategies, and training program depend on the quality of assessment procedures adopted. The more the valid assessment procedures will be adopted, the more the quality of the program can be guaranteed (Mehdinezhad, 2008).

Other than assessment, the selection of curriculum and instruction strategies is other important aspect of the quality of any program. Curriculum is 'what' to teach whereas; instruction is 'how' to teach. Teaching of same content requires different teaching strategies in different contexts according to needs of students and resources provided. Teachers are to provide the content in a way that is more professionally meaningful for students, dealing with students real life problems, striving to improve students' learning (Kaufman, 2003). According to the

educational experts, renewal of curriculum and instruction is the inevitability of any educational program. Teachers need to equip themselves with the modern and appropriate pedagogical knowledge to meet the needs of the era.

Success of any educational program is also linked with the pedagogical as well as content knowledge of teachers. Byrnes (2003, p. 164) claims that “Effective classroom teaching is associated with a number of skills or qualities possessed by successful teachers”.

At present, teacher education programs in Pakistan are confronted by severe problems that destructively upset the overall effectiveness of education system (Aly, 2006). There is an intense need to evaluate teacher education program to identify its weak areas to improve this sector. The present study was aimed to evaluate different teacher education programs of a public university located in the province of Punjab. Prospective teachers’ opinions were surveyed through questionnaires and the data were analyzed by comparing the multiple aspects of teacher education program with respect to different programs. The present study seeks to answer the following questions:

1. What are the perceptions of prospective teachers regarding the effectiveness of their teacher education program about the following sub-factors?
 - (1) Admission Criteria
 - (2) Courses offered,
 - (3) content command and teaching methods adopted by instructors,
 - (4) classroom environment,
 - (5) use of technology,
 - (6) assessment procedure,
 - (7) paper making and marking.
2. Are there any differences in the ratings of prospective teachers enrolled in different teacher training programs?

Methodology

The data were collected through exploratory survey.

Participants

All the prospective teachers enrolled in the different teacher education programs i.e. M.A education, B. Ed (Hons.) and B. Ed (elementary) of a public sector university comprised the population of the study. For this study, only students of final semester of above mentioned programs were selected as sample. The sampling technique selected for this study is purposive sampling as senior students are better able to rate the different facets of their teacher education program. Sample description is given below:

Table 1
Description of sample

Programs	N	Percentage
M. A (Education)	70	43
B. Ed (hons.)	47	29
B. Ed (one year)	46	28
Total	163	100

Instrument

Six point Likert type scale was used as data collection instrument extending from 'strongly agree' to 'strongly disagree'. After extensive literature review, a questionnaire having seven dimensions including admission criteria, courses offered, teaching and learning, classroom environment, assessment procedure, and paper making/marking was developed.

Validity and Reliability

The questionnaire was validated by the experts of the field. Three statements were excluded from the questionnaire being overlapped and another dimension of program evaluation's availability and use of technology was included. After the changes recommended by the experts, the questionnaire was again given to the experts to ensure the validity.

Initially, sixty two items were included in questionnaire. After pilot study, the items having low reliability were excluded and questionnaire having fifty five items was finalized for the survey. Five items were included in the subscale of admission criteria (1 to 5), six items of courses offered (6 to 11), teaching and learning included twelve items (12 to 23), items related to classroom environment were ten (24 to 33), eight questions (34 to 41) were about the availability and use of technology, nine items (42 to 50) were related to assessment procedure, and paper making and marking included six items (51 to 55). Internal consistency reliability was estimated by Cronbach's alpha. The overall reliability of the scale was recorded .91, whereas it was observed .71 for admission criteria, .73 for courses offered, .83 for teaching and learning, .82 for classroom environment, .75 for availability and use of technology, .81 for assessment procedure, and .60 for paper making/marking.

Data Analysis

Data collected from prospective teachers were analyzed using Statistical Package of Social Sciences (SPSS) version 20. Descriptive as well as inferential statistics were applied to answer the research questions. Mean and standard deviation were applied to examine the satisfaction level of prospective teachers against each dimension, whereas ANOVA was run for program wise comparison of mean score of sub factors.

Results

The results of descriptive and inferential statistics are given below.

Table 2
Mean scores of statements on which students of all three programs were highly satisfied

Dimensions of Program	M. A Education M(SD)	B. Ed (Hons.) M(SD)	B. Ed (one year) M(SD)
selection on merit	5.26 (.84)	4.84 (.51)	5.28 (1.05)
discussion skills	5.23 (.81)	4.86 (.99)	4.87 (.91)
behaviour modification	5.23 (.59)	5.03 (.53)	4.93 (.90)
appropriateness of courses	5.15 (.58)	4.87 (.93)	5.24 (.76)
timely feedback by teachers	5.15 (.72)	4.6 (.92)	4.89 (.90)
teachers' content command	5.11 (.93)	5.09 (.75)	4.93 (.83)
appropriateness of teacher	5.00 (.80)	4.77 (.42)	4.98 (.72)
provision of technology	5.00 (.95)	4.6 (.72)	4.72 (1.15)
teachers' commitment	4.87 (.87)	4.86 (.99)	5.00 (.76)

Above table indicates the mean scores of the statements on which the students of all three programs, i.e. M. A. Education, B.Ed (hons.) and B. Ed one year program are highly satisfied. Students of all above mentioned programs were highly satisfied with the admission criteria of the program they were enrolled in, effectiveness of teaching strategies regarding developing questioning and discussion skills among students and behavior modification, appropriateness of courses for preparing prospective teachers for teaching profession, timely feedback from teachers on assignments and other assessment procedures, teachers' content knowledge, suitability of teachers for assigned courses, provision of technology in classrooms and teacher educators' commitment towards teaching.

The dimensions, on which students of different programs were highly satisfied, other than the dimensions given in the table, are reported further. The students of M. A Education were also highly satisfied with teachers' commitment towards making the content understandable for students (4.96), appropriateness of courses for preparation of teachers (4.94), productive feedback on assignments from teachers (4.94), and provision of opportunities to learn collaboratively (4.91).

Students of B. Ed Hons program were also highly satisfied that the teachers cover courses on time(4.94), paper pattern doesn't compel students to cram (4.84), teaching methods (4.8), teachers' focus on achieving higher level objectives (4.77), collaborative learning (4.77), making contents understandable for students (4.76), teachers strive for quality teaching (4.76) and teachers provoke critical thinking(4.69).

Whereas, students of B. Ed one year program scored high on the statement that this course increased their interest for teaching profession (5.22), they were glad to get admission in this course (5.2), appropriateness of courses for preparation of teachers (5.17), improvement in critical thinking ability (5.00), papers don't compel students to cram (4.93), their satisfaction (4.85), and that they will suggest their friends to get admission in their course (4.76).

Table 3
Mean scores of statements for which students of all three programs were less satisfied

Dimensions of Program	M. A Education M(SD)	B. Ed (Hons.) M(SD)	B. Ed (one year) M(SD)
availability of multimedia	3.94 (1.52)	3.13 (1.60)	3.41(1.48)
sharing of offices	3.91(1.34)	3.79 (1.47)	3.96 (1.38)
No distortion of external factors	3.85 (1.50)	3.83 (1.49)	4.02 (1.20)
internet facility	3.81(1.38)	4 (1.33)	3.98 (1.26)
seating arrangement	3.79 (1.64)	4 (1.42)	4.09 (1.35)
space to conduct activities	3.72 (1.48)	3.74 (1.50)	3.8 (1.38)
offices for faculty members	3.62 (1.38)	3.74 (1.33)	3.98 (1.13)
neat & clean classrooms	3.13 (1.19)	3.61 (1.53)	3.5 (1.41)
environment helpful for learning	2.34 (1.61)	2.96 (1.52)	3.04 (1.55)

From the results displayed above, it is clear that all of the dimensions, on which students were less satisfied, were related to infrastructure of the university and nearly all programs were facing same problems. Students of all three programs slightly agreed with the availability of multimedia in the classes, faculty offices sharing, no

distortion of external factors, appropriate seating arrangements, space to conduct activities, separate offices for faculty members, cleanliness and neatness of classrooms, and environment helpful for learning.

Other than the dimensions given in the above table, the students of B. Ed (Hors.) program were less satisfied with the statements “assignments requiring use of technology” (3.84), and “faculty sharing of offices” (3.79). whereas, students of B. Ed one year program scored low for the statements “sharing of offices by faculty” (3.96) and “consideration of students’ concern while marking” (3.83).

Table 4
Program wise Comparison of mean score of sub factors

Sub Factors	M. A	B. Ed	B. Ed	F. value	Sig.
	Education	(one year)	(Hons.)		
	M(SD)	M(SD)	M(SD)		
Admission criteria	4.838 (.97)	5.061(1.11)	4.497(1.28)	7.292	.001*
Courses offered	4.755 (.99)	4.967(1.04)	4.564(1.41)	4.557	.012*
Content command	4.904(.93)	4.665(.98)	4.840(.93)	2.253	.108
Classroom environment	3.694(1.45)	3.911(1.32)	3.783(1.45)	.734	.481
Availability/use of tech.	4.447(1.25)	4.168(1.28)	3.905(1.47)	6.477	.002*
Assessment procedure	4.794(.90)	4.502(1.11)	4.429(1.20)	4.171	.017*
Paper making/marking	4.579(.99)	4.226(1.12)	4.406(1.22)	3.119	.047*

* Difference is significant at .05 level.

In the above table, Sub-factor wise analysis of mean difference of different programs has been showed. ANOVA results revealed a significant difference in the sub factor ‘Admission Criteria (F= 7.29, p= .001). The difference was also statistically significant in the sub factors including courses offered (p= .012), availability and use of technology (p= .002), assessment procedure (p= .017) and quality of paper marking and making (p= .047). Whereas, mean difference was not significant for the sub-factors ‘content command and teaching methodologies’ (p= .108) and ‘classroom environment’ (p= .481).

Post-Hoc test further revealed that against the sub-factor ‘admission criteria’, the difference was found among all three groups; M.A Education and B. Ed (one year), (p= .00), B. Ed (one year) and B. Ed (hons.), (p=.00) and B. Ed (hons.) and M.A Education (p= .03). The difference for the sub-factor ‘courses offered’ was significant among all three groups; M.A Education and B. Ed (one year), (p= .01), B. Ed (one year) and B. Ed (hons.), (p=.02) and B. Ed (hons.) and M.A Education (p= .00). Whereas, for the sub-factors’ availability and use of technology, the difference was found statistically significant between two groups; M.A Education and B. Ed (one year), (p= .01), B. Ed (one

year) and B. Ed (hons.) and M.A Education ($p = .00$). For the sub-factor 'assessment procedure, the difference was found between M. A. Education and B.Ed (hons.), ($p = .001$).

Discussion

Present study was aimed to identify the quality of teacher education program from prospective teachers' perspective. Three randomly selected teacher education programs were evaluated by getting the opinions of students enrolled in these programs about admission criteria, courses offered, content command and teaching methods adopted by instructors, classroom environment, use of technology, assessment procedure, and paper making and marking.

Students of all three teacher education programs responded positively and reported their agreement for selection criteria, development of discussion skills, program effectiveness for behavior modification, appropriateness of courses for the preparation for teaching, timely feedback by teachers and teachers' content command. Whereas the common statements on which students of all three programs ranked low were availability of multimedia, sharing of offices by the faculty members, no distortion of external factors, internet facility, neat and clean classrooms, and classroom environment conducive for learning.

Almost all the statements on which students slightly agreed were related to the availability of infrastructure. Students of all programs were suffering from poor internet facility to work on their assignments and projects, distortion outside the classes which students thought to be a factor prohibiting smooth teaching learning process, size of classrooms and over all classroom environment was also reported not to be helpful for conducive learning as the classrooms were not airy, and neat and clean. Previous researches found a link between students' achievement and classroom environment (Fraser, 1994 & 1998; Fraser & Fisher, 1982; Goh, Young & Fraser, 1995). Equipping oneself with the friendly use of technology is the need of the present era. Use of technology makes the teaching learning process meaningful, efficient and interesting. The findings are alarming towards teachers' use of technology which leads towards serious considerations on improving technological resources of the university.

Learning process becomes more active and easy in case of internet availability (Aldridge, Fraser, Fisher, Trinidad & Wood, 2003; Trinidad, Macnish, Aldridge, Fraser & Wood, 2001). But, as mentioned above, teacher education programs offered in this university are not facilitating towards the provision of internet. One lacking aspect of any program may negatively influence the quality of other aspects, so it is needed to

pay equal attention to all the aspects of teacher education program to get maximum results.

Recommendations

In the light of findings, some of the recommendations are given:

1. The university may allocate special budget to improve the quality of infrastructure. The results indicated that distortion free, airy and conducive for learning classrooms are the dire need of students.
2. Availability of technology and its proper use should be ensured by the university administration. So that both, teachers and students, may get benefit of these resources.
3. Frequent organization of professional development courses/ trainings including diverse and effective pedagogical skills is needed to enhance quality teaching.
4. More qualitative measures might be taken to collect intensive data on program evaluation.

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