A Comparative Study of Subject Knowledge of B.Ed Graduates of Formal and Non-Formal Teacher Education Systems

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Abstract

This study was designed to compare the subject knowledge of B.Ed graduates of formal and non-formal teacher education systems. The population of the study included all teachers from Girls High and Higher Secondary Schools both from private and public sectors from the district of Peshawar. Out of the total population, twenty schools were randomly selected from which 60 teachers from formal and 60 from non-formal system (6 teachers from each school) were randomly selected. A test was prepared and personally distributed among 120 teachers. The data were organized and analyzed through descriptive analysis. It was found that B.Ed. graduates from formal system had more subject knowledge as compared to B.Ed. graduates
from non-formal teacher education system. It is recommended that the graduates as well as the teacher educators need to update their knowledge and work for continuous professional development.

**Keywords:** distance learning, formal and non-formal teacher education system

**Introduction**

Education is a progressive and developmental process of all human faculties as it plays an important role in enhancing human capabilities to lead a successful life. As all human beings are naturally opting for a satisfied and successful life, they are required to have sufficient amount of knowledge, skills and attributes to lead a purposeful life by overcoming the problems. Thus, an education system must equip students to become aware of adulthood responsibilities and problems and learn to deal with them. The recent trends in education consider life itself as a process of education, that is, from womb to tomb one goes through the process of education (Pathak, 2012). Among the many forms of education, the first is formal education where face to face interaction of teachers and students takes place within the framework of a fixed time table and in a proper institute. The second is informal education which denotes a lifelong process of education in which an individual learns attitudes, values, skills and knowledge from his surroundings (Panday, 2003). In the third form of education, the instructor and the learner are not in direct contact with each other. The learning material is provided to students by post and is written in a very simple language so that students can easily understand and perceive the material. Diagrams
and exercises are included in these courses to support and guide the students accordingly. Some materials are communicated through TV channel programs and internet. Such type of education is called non-formal or distance education (Munshi & Jumani, 2008). This is the indirect form of education in which students are provided with necessary material and tasks either alone or in groups. The learners interact with instructors through correspondence and telephone. Sometimes guidance is provided through meetings in study centers offered by part time tutors (Rao, 2004).

Teaching the teachers is in itself a professional procedure, because these teachers serve the society as administrators, trainers and supervisors; thus educating teachers’ requires a set of practical activities. It is the teachers who fulfill different roles such as researchers, innovators, or planners (Verma, 2006). B.Ed is a one year course done after the completion of 14 years of education. There are many subjects included in this program, such as functional English, curriculum and instruction, leadership and management, philosophy of education, teaching of English, educational psychology, teaching of science, computer education and guidance and counseling. Curriculum is a set of experiences and activities designed for the overall development of learners (Rehman, 2011); therefore, the teachers should be taught to enhance the learning opportunities for the learners in the classrooms. They should be able to select and relate different instructional methods to accommodate the learning styles of learners. There are many teaching methods such as direct method, indirect method, drills, inquiry approach, project method, team teaching, micro teaching and questioning, which the teachers
should be well equipped with. Questioning is a crucial part of the teaching learning process; therefore, teachers should skillfully use questions because questioning stimulates learners and directs their learning. Thus a teacher’s efficiency can be judged by the type of questions and the way they are put forward to the students (Qureshi and Shamim, 2009). Lecture method does not stimulate learning hence, for better teaching learning outcomes, the teaching should be goal oriented and new ideas should be connected to their previous knowledge and experiences. The learners should be encouraged to test and apply their knowledge for the solution of real world problems. As learners have different backgrounds and different learning styles, therefore, the teachers should systematically organize the teaching learning process and must use different teaching methods (Siddiqui, 2004).

Teacher training programs have gained popularity in every country of the world. In Pakistan, training programs are offered by both formal and non-formal systems. Formal education is provided by universities and colleges, whereas non-formal education is provided by Virtual University and Allama Iqbal Open University but the latter is very popular because of its system, structure and approach. It provides education from basic to doctoral level, but its highest enrollment is in the area of teacher training programs. Textbooks and reading materials are prepared on self-learning basis in easy and simple language. Part time teachers (tutors) are appointed nearest to the students’ areas to help and assess them (Jumani, Hussain & Khan, 2009). In both systems subject knowledge is very appropriate for producing quality teachers.
There are ten National Professional Standards for teachers in Pakistan, among which the very first standard is the knowledge of the subject matter. The teachers must understand basic concepts, theories, history and structure of the subject they are going to teach. They must keep themselves abreast of new ideas and be aware of the evolving nature of the subject and should be cognizant of the vertical and horizontal relationship of one subject to another as well as its significance and utility in real life. Moreover, they must keep themselves informed of the upcoming concepts, theories, researches and trends at national and international level (Govt of Pakistan, 2009). Therefore, this study tries to compare and analyze the subject knowledge of teachers who received B.Ed degree from formal and non-formal teacher education system. Both the systems have same syllabus and vary slightly in their methodology, procedure and teaching practice.

Objective of the study

To compare subject knowledge of teachers who graduated from formal and non-formal teacher education systems.

Methods and Procedure

Research design

This study used the survey research design. According to Koul (1988), survey study is conducted to collect detailed description of an existing phenomenon and employs data to justify current conditions and practices or to make more intelligent plans.
for improving them. Surveys help to gather information regarding existing status, comparison of existing status with the established status and standards and means of improving the existing status.

Sample

The sample of the study included only those schools where B.Ed. graduates of formal and non-formal sectors were available. Therefore, 10 schools from government and 10 from private sector were randomly selected. The number of B.Ed. graduates of formal system was greater than those of non-formal system. However, 60 teachers from formal and 60 from non-formal system (6 teachers from each school) were randomly selected.

Data collection tool

Data for the study were collected through a multiple choice test comprising 25 questions. These questions were taken from B.Ed. subjects namely teaching methodology, curriculum and instruction, philosophy of education, educational psychology and English grammar (five questions from each). The researcher personally met with the teachers and requested them to attempt the test in her presence.

Data analysis

The collected data were organized and tabulated to test the subject knowledge of the teachers and percentages were calculated.
Results

Table 1

Distribution of Respondent Teachers Related to Curriculum

<table>
<thead>
<tr>
<th>Items</th>
<th>% of correct responses by formal graduates</th>
<th>% of correct responses by non-formal graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does curriculum mean?</td>
<td>(70.00)</td>
<td>(35.00)</td>
</tr>
<tr>
<td>Which language does the word curriculum come from?</td>
<td>(81.67)</td>
<td>(43.33)</td>
</tr>
<tr>
<td>When was the old viewpoint about curriculum replaced?</td>
<td>(80.00)</td>
<td>(30.00)</td>
</tr>
<tr>
<td>How many elements does a curriculum have?</td>
<td>(70.00)</td>
<td>(20.00)</td>
</tr>
<tr>
<td>What problem does the present curriculum have in its objectives?</td>
<td>(70.00)</td>
<td>(20.00)</td>
</tr>
</tbody>
</table>

Source: Field survey  
N= 120

The above table shows that the majority of the teachers of formal system answered the questions correctly. Therefore, it is concluded that B.Ed graduates of formal system have more subject knowledge in the area of curriculum as compared to B.Ed graduates of non-formal teacher education system.

Table 2

Distribution of Respondent Teachers Related to Teaching Methodology

<table>
<thead>
<tr>
<th>Items</th>
<th>% of correct responses by formal graduates</th>
<th>% of correct responses by non-formal graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does Pedagogy mean?</td>
<td>(70.00)</td>
<td>(50.00)</td>
</tr>
<tr>
<td>What is the other name of Instructional material?</td>
<td>(90.00)</td>
<td>(60.00)</td>
</tr>
<tr>
<td>Which method has the same steps like Inquiry method?</td>
<td>(76.67)</td>
<td>(50.00)</td>
</tr>
<tr>
<td>How many steps are there in a lesson plan?</td>
<td>(85.00)</td>
<td>(45.00)</td>
</tr>
<tr>
<td>What is the basic purpose of team teaching?</td>
<td>(60.00)</td>
<td>(40.00)</td>
</tr>
</tbody>
</table>

Source: Field survey  
N= 120
The above table shows that the majority of the teachers of formal system answered the questions correctly; therefore, it is concluded that B.Ed graduates of formal system have more subject knowledge in the area of teaching methodology as compared to B.Ed graduates of non-formal system. This result is in line with the results of a previous study conducted by Anees (2005) which concluded that in non-formal B.Ed program tutors casually attend their tutorial sessions and do not use various teaching methods.

Table 3
_Distribution of Respondent Teachers Related to Philosophy of Education_

<table>
<thead>
<tr>
<th>Items</th>
<th>% of correct responses by formal graduates</th>
<th>% of correct responses by non-formal graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>From which language the term philosophy has been derived?</td>
<td>(96.67)</td>
<td>(60.00)</td>
</tr>
<tr>
<td>What is the aim of education according to idealism?</td>
<td>(60.00)</td>
<td>(60.00)</td>
</tr>
<tr>
<td>What is Epistemology?</td>
<td>(65.00)</td>
<td>(43.33)</td>
</tr>
<tr>
<td>What is ontology?</td>
<td>(70.00)</td>
<td>(50.00)</td>
</tr>
<tr>
<td>What is the emphasis of logic?</td>
<td>(70.00)</td>
<td>(70.00)</td>
</tr>
</tbody>
</table>

Source: Field survey  
N= 120

The above table shows that both the groups have same level of knowledge about aims of education according to idealism and emphasis of logic; however, majority of the teachers of formal system answered the questions correctly. Therefore, it is concluded that B.Ed graduates of formal system have more subject knowledge in the area of philosophy of education as compared to B.Ed graduates of non-formal teacher education system.
Table 4

_Distribution of Respondent Teachers Related to Educational Psychology_

<table>
<thead>
<tr>
<th>Items</th>
<th>% of correct responses by formal graduates</th>
<th>% of correct responses by non-formal graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational psychology is the ........ branch of psychology?</td>
<td>(80.00)</td>
<td>(40.00)</td>
</tr>
<tr>
<td>What does the term personality mean?</td>
<td>(60.00)</td>
<td>(30.00)</td>
</tr>
<tr>
<td>What did Ivan Pavlov present?</td>
<td>(70.00)</td>
<td>(46.67)</td>
</tr>
<tr>
<td>Who was Piaget?</td>
<td>(80.00)</td>
<td>(40.00)</td>
</tr>
<tr>
<td>Intelligent Quotient (I.Q) =?</td>
<td>(75.00)</td>
<td>(50.00)</td>
</tr>
</tbody>
</table>

Source: Field survey  
N= 120

The above table shows that majority of the teachers of formal system answered the questions correctly. Therefore, it is concluded that B.Ed graduates of formal system have more subject knowledge in the area of Educational Psychology as compared to B.Ed graduates of non-formal teacher education system. It reveals that effect of the formal system is more positive than non-formal system.

Table 5

_Distribution of Respondent Teachers Related to English Grammar_

<table>
<thead>
<tr>
<th>Items</th>
<th>% of correct responses by formal graduates</th>
<th>% of correct responses by non-formal graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is Occasionally?</td>
<td>(73.33)</td>
<td>(56.67)</td>
</tr>
<tr>
<td>What is the superlative degree of bad?</td>
<td>(80.00)</td>
<td>(80.00)</td>
</tr>
<tr>
<td>Change the following into passive voice. I am eating an apple.</td>
<td>(78.33)</td>
<td>(08.33)</td>
</tr>
<tr>
<td>Change the following into interrogative. (He went.)</td>
<td>(90.00)</td>
<td>(90.00)</td>
</tr>
<tr>
<td>Change the following to indirect narration. He said, “I will work hard”.</td>
<td>(70.00)</td>
<td>(40.00)</td>
</tr>
</tbody>
</table>

Source: Field survey  
N= 120
The above table shows that both formal and non-formal graduates have equal responses about degrees of adjective and sentences; however, majority of the teachers of formal system answered the questions correctly. Therefore, it is concluded that B.Ed graduates of formal system have more subject knowledge in the area of English Grammar as compared to B.Ed graduates of non-formal teacher education system.

**Discussion**

Teacher education is the knowledge, skill and ability that is relevant and crucial for teachers. Teacher education seeks to reshape the attitudes, remodels the habits and constitutes the personality of teachers as they occupy an important position in the education system of any society. All the educational conferences and policies lay emphasis on quality education and teacher training. The Commission on National Education (1959) stressed throughout the report that success of the education system depends on competencies of its teachers. However, the Commission predicted that generating efficient and competent teachers will be one of the major problems of Pakistani school systems unless an effective and purposeful teacher training program is developed. The same topic was discussed during the first conference in 1947 in which the committee agreed that teachers should be properly trained and well paid for the development of a great state. The committee suggested that provinces should take necessary steps to ensure the proper training of teachers and add research departments in the training institutions for diagnosing and solving teaching problems (Government of Pakistan, 1947). Education policy 1972 stressed that all teachers would have to undergo at least one in-service training course during every 5 years.
for their continuous professional growth.

The Allama Iqbal Open University has started a comprehensive non-formal program for teacher education. This program will help to train a large number of teachers at all levels. Emphasis will be given to the qualitative improvement rather than quantitative expansion of teacher training institutions (Government of Pakistan, 1973). This study tried to compare subject knowledge of B.Ed graduates of formal and non-formal system of teacher education. Various researches have been conducted to explain the effectiveness and deficiencies of formal and non-formal teacher education as well as the performance and knowledge of their graduates. A brief summary of these researches is as follows.

Jumani (2007) in his study concluded that the teachers did not apply diverse teaching methods in their classroom. In support, Murtaza (2005) found that least importance was given to teaching practice in both systems. Therefore, for producing quality teachers there is need to give emphasis to teaching practice. Khan (2008) in his PhD thesis concluded that teachers trained through both formal and non-formal systems indicated that tutors and supervisors did not use various instructional aids during training. As a result, the graduates do not have sufficient knowledge of teaching supports. Anees (2005) in his PhD thesis found that in non-formal teacher education, modern instructional strategies are not introduced. Moreover, tutors conducted their tutorials casually because student activities during teaching practice are rarely monitored and student assignments after evaluation are not returned in time. Additionally, the duration for teaching practice period is not sufficient and the examination system of non-formal B.Ed program does not measure
student teacher competencies and thus lacks in producing quality teachers. Consequently, the graduates produced by the non-formal system have little subject knowledge.

Aziz, Hassan, Atta and Sahi (2013) in their study highlighted that students of the formal system were more satisfied about the course content, teaching methodologies and assessment techniques as compared to students of non-formal teacher education system. Munshi and Jumani (2008) conducted a study on “Effectiveness of Distance Teacher Education in Pakistan” and found that it was not compulsory for students to attend tutorial sessions; as a result, the graduates had little knowledge of their professional subjects.

Teachers form the foundation of an education system and should be effective and competent, to lay a strong base. As teachers are kingpin in this system, therefore, it is highly essential to improve their quality and standards through pre-service and in-service teacher education programs. Pupils suffer immensely if the teacher is untrained and has inadequate knowledge. According to National Professional Standards for teachers in Pakistan (2009), the teachers must have a deep knowledge of subject matter, pedagogy, child and adult psychology, individual differences and assessment techniques. The responsibility lies upon teacher education institutions that prepare individuals for teaching profession as these individuals may become supervisors, administrators and trainers after some time.

Conclusions and Recommendations

Teacher education programs must be practical and activity based because a teacher has to perform different roles such as a
curriculum developer, planner, designer, manager, guide, counselor, innovator, researcher, organizer of co-curricular activities, and a service provider for the community and parents. Moreover, the student teacher should increase their knowledge and they should work hard for their professional development. To increase the effectiveness of teacher education programs, following recommendations are made:

1. Effective teaching requires teachers to have command over their subject as well as adequate knowledge of other subjects. For this purpose teachers as well as graduates need to update their knowledge continuously.
2. Department should provide computers and internet facility in the institutes / study centers for both formal and non-formal student teachers.
3. The graduates should consult website of digital library of Higher Education Commission of Pakistan in order to get membership.

References


Subject Knowledge of BEd Graduates


