Pakistan Journal of Distance & Online Learning
Volume: V, Issue I, 2019, 221-232

Theory and Practices Gap of Teacher Education Programs in Formal and Distance Education System

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Abstract

In Pakistan, a large number of prospective teachers are being trained frequently from formal and distance mode of education. The recent focus of the research was on pedagogical knowledge and practices of prospective teachers in distance and formal learning system of education. The purposed study was aimed to find out the comparison of pedagogical knowledge and practices of the prospective teachers in distance and formal education programs. The main objectives of the study were to explore the theoretical knowledge and to examine the pedagogical practices of prospective teachers in both mode of education. The study was quantitative and descriptive in nature. A survey was conducted through knowledge based test which was drawn from Higher Education Commission courses outline of B.Ed (Hons) and ADE programs on (408) prospective teachers. Check list and self-developed observation sheet was used to measure the pedagogical practices of top ten percent (10%) and bottom ten percent (10%) of prospective teachers in the actual classrooms. The collected data integrated to give a comprehensive view of the level of difference in knowledge and practices of prospective teachers in both systems. Moreover, it was concluded that distance learners have lower scores in knowledge and practices than formal learners.

Keywords: prospective teachers, distance and formal education, pedagogical knowledge and practice

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Introduction

Education deals with two modes of education. Formal and Distance mode of education are offering different programs in all the disciplines. Teaching programs are one of the widest and appreciated programs in distance and formal education programs.

In all sort of teacher training programs, different skills and competencies are considered to be focused across the world. Pedagogical competencies are defined as an unified set of individual characteristics, knowledge, dispositions and skills which are mandatory for efficient performance in several teaching perspectives (Smith & Simpson, 1995). In Pakistan, like other countries of the world; knowledge, skills and attitudes are focus of attention from which other standards and competencies emerge. The pedagogical competence and practices of the programs of distance education are designed to produce the stuff best suited for society as change agents.

Strategically objectives within origination are likely to be met when practicing the acquired knowledge, individual attributes, and abilities. The similar components comprise the concept of competency among teachers. (Lucia & Lepsinger, 1999).

Although researches have added valuable contribution in the field of formal learning and distance education programs of prospective teachers, evaluation but particularly with reference to competencies and teaching practices, still there is need to explore the causes of differences and the present study aims to fill that gap in existing literature.

Teaching has been called the noblest profession and it is profession of Prophets. A teacher is a milestone in the process of teaching learning process. Teaching is transformation of knowledge in the learner. Teaching is a skill which is endorsed in an individual.

The teachers' competencies are defined in various perspectives. It is defined to measure the degree of knowledge and performance skills exhibited by a teacher. The teachers are prepared to teach focus these competencies. (Australian Teaching Council 1996). The attitude of a teacher matters to assess his compatibility. Knowledge of the teacher and his performance in teaching are two vast aspects measured in competency of a teacher. According to Houston, (1987), a competency is the need of a teacher which involves the succession of teacher education program.

Classroom teaching, in the domain of teaching, is a special case in point. In the classroom, what challenges teacher the most at managerial level, is the strength of group being large and its being diverse in nature.

Secondly, the unnatural and crafted environments of classrooms may also cause difficulties to the students relating to motivation and in other cases, relating to attention. As described by USAID (2012), for the ones who have never come across a chance to perform as a teacher in the classroom environments, it is generally hard to grasp and understand the intricacies tied with the work.

According to cognitive theories, learning occurs as a result of information formation developing with major primacies. This view states that learning takes places when the learner perceives and process information in his own unique way and this learning process gives birth to new learning. The developments in this course are related more to the quality and manner of learning as to what they learn and how they learn, rather than focusing the amount of learning defining how much they learn. However, the issue carrying more importance, as argued also by Mayer (2004) remains that rather than being passive receivers, students are more of active learners.

In the recent methodological literature found locally as well as internationally, teaching methods and teaching practices have received special attention, however, upon their defining, naming and understanding, an absolute agreement is still missing. Firstly, there is a lack of consensus among the researchers upon the most suitable term which most effectively conveys the sense. Different researchers use different terminologies in their literature. Few instances of terms used under the main subject of teaching method are methods of teaching and learning, methods in the class, organizational types of learning and teaching processes (Braičić, Đuranović, & Klasnić, : 2015). As Maňák and Švec (2003) put it, a teaching method characterizes "a dynamic element" in teaching style, which when compared with the objectives, content and organizational forms, tends to transform comparatively quick and is flexible enough to adapt to new situations and circumstances. However, at the same time, teaching methods are not the pivotal determining factor in teaching, rather they are one of the basic elements of an educational system, and therefore cannot play as a substitute to the missing content nor can they compensate what is vague.

Within the educational contexts, teachers tend to make use of the professional knowledge they have of the field coupled with the researches to address the needs of the students. Teachers carry better knowledge of their students which includes their varied cultural, linguistic and religious backgrounds. They are aware how each individual experience of each student may affect their learning process. Keeping in view the above stated, they are also cognizant of how to

structure their lessons to meet the variety of physical, social and intellectual development, needs and characteristics of the students. Teachers are a master of the content of their subjects and of curriculum as well. Blömeke & Delaney (2012) support by stating that while teacher knowledge certainly remains a basic component, professional competence involves more is more than just knowledge. Contribution of professionalism, attitudes, skills and motivational variables also play their part to achieve mastery in this field.

Teachers are blessed with a variety of appropriate and effective teaching strategies suiting the requirements and they use them to applyaptly-designed lesson plans and teaching programs. Their own regular evaluation to ensure whether they are meeting the learning and intellectual needs of their students is a common practice. Another trait of good teachers is that they continue mapping on the performance of students using the assessment data to diagnose what kind of challenges students are faced with.Teachers actively and effectively perform according to every teaching and learning stage (Ministerial Council for Education, 2011)

The present study investigated the professional competencies of prospective teachers of B.Ed. (Hons) in Non- formal and Formal Education Programmes in Pakistan.

Research Questions

In the above explained context, our research aimed to make a comparison on competencies of prospective teachers in distance and formal education program.

Following were the research questions:

1. What differences exist in the pedagogical knowledge of prospective teachers in formal and distance education program?
2. What differences exist in dispositions of prospective teachers in formal and distance education program?
3. What are the differences in practices of prospective teachers in formal and formal education program?

Methodology

The design was selected, because according to Gay (2000) and Fraenkel, Wallen, & Hyun (2011), the most common descriptive methodology is the survey, as when researchers summarize the characteristics (abilities, preferences, behaviors, and so on) of individuals

or groups. The purpose of this research was to compare the competencies of prospective teachers. The study was quantitative in nature. Causal-comparative research was employed. The study involved two variables; modes of education were the independent variable and pedagogical knowledge and practices were used as dependent variable.

The research was based on the two perspectives; knowledge and skills. For this purpose, two different instruments were made to achieve the objectives of the study. A knowledge test was comprised to assess the level of knowledge of formal and distance prospective teachers. A checklist and observation sheet was made to check the practices of these prospective teachers.

There were two hundred and twelve (212) prospective teachers from formal universities and one hundred and ninety-six (196) prospective teachers from distance education university. The researcher conducted census survey from all the prospective teachers from formal and distance education universities. Census survey was used to get the data from prospective teachers about one sub-constructs (knowledge) of three national professional standards for teachers (Instructional planning and strategies (IPS), Assessment and Effective communication and proficient use of information communication Technologies (ICT)) of the study.

Through census survey, students with high mean score from various universities were drawn through proportionate sampling technique to assess them on sub-constructs "pedagogical skills". Ten percent (10%) of top and ten percent (10%) bottom of the prospective teachers on the basis of mean score from census survey were selected for observation through stratified sampling. In order to give fair chance to prospective teachers, consecutive three observations were taken for each prospective teacher

Instruments

The instruments used in the study were self-developed. According to National Professional Standards (Ministry, 2009), the research was based on the two perspectives; knowledge and skills. For this purpose, three different instruments were made to achieve the objectives of the study. A knowledge test was comprised to assess the level of knowledge of formal and distance prospective teachers. An observation sheet was comprised to analyze the practices of pros*pective teachers. The knowledge test and observation sheet were consisted on three main factors: 1) IPS. 2) Assessment 3) Effective Communication and proficient Use of ICT.*

The items of the knowledge test were developed on the indicators drawn from three core factors of National Professional Standards stated

as earlier to quantify by the competency of prospective teachers. The first part of knowledge test, checklist and observation sheet consisted of demographic variables. Knowledge test contained on forty (40) items, checklist had seven (7) statements and observation sheet had ten (10) items. These items and statements were directly related to competency measures of prospective teachers.

Reliability and Validity of the Tool

To check the reliability of the revised instruments, questionnaires were administered prospective teachers for pilot testing. For estimating internal consistency based on potential of how all articles on a test linked to all other items and to the total test (Gay, 2009) Cranach's alpha(α) coefficient test were measured using SPSS to ensure reliability and not below at 0.60 accepted as credible for use in nomothetic research (Abell, Springer & kamata,2009). Value of Cronbach Alpha was calculated as 0.78 for the knowledge test-A and value of Cronbach Alpha 0.73 was calculated as for the Rating Scale –B.

The low inter-item correlations were deleted in the final data tool. Three statements were deleted from the final knowledge test. More than 196 prospective teachers studying in the M.A Education and M. Ed program in the third semester were contacted to collect data. 200 prospective teachers were agreed to fill the questionnaire.

Ethical Considerations

After the pilot testing, data collection was completed. Above 200prospective teachers studying in the ADE program in the last semester were contacted to collect data. 196 prospective teachers from distance education system and 212 from formal education system answered the knowledge test. The respondents were free to fill the questionnaire and knowledge test and they were not bound. It was made sure that to answer of knowledge test would have not been any concern with their academic qualification.

Analysis of the Data

The competency linked to two variables was selected to make a comparison between formal and distance education prospective teachers. The prospective teachers were asked for their (i) knowledge about

instructional planning and strategies, assessment and communication (ii) practices while delivering lessons in the actual classrooms. Inferential statistics were used to examine the difference in competencies of these prospective teachers in distance and formal education mode.

Differences in the pedagogical knowledge of prospective teachers in formal and distance education program

Table 1

Difference in Pedagogical Knowledge - Instructional Planning & Strategies

Constructs	Education Program	N	M	SD	*t*	*df*	*P*
Instructional Planning & Strategies	Formal	212	6.65	2.048	.138	406	.890
	Distance	196	6.68	1.986			

In table 1 independent sample t-test was applied on knowledge construct Instructional Planning & Strategies in terms of program of respondents. Insignificant mean difference was reported at t=.134, p >.05. Hence it showed that program has no significant mean difference on the Instructional Planning & Strategies of respondents

Table 2

Difference in Pedagogical Knowledge – Assessment

Constructs	Education Program	N	M	SD	*t*	*df*	*p.*
Assessment	Formal	212	4.34	1.816	.236	406	.813
	Distance	196	4.39	1.778			

In table 2, Independent sample t-test was applied on knowledge construct Assessment in terms of program of respondents. Insignificant mean difference was reported at t=.236, p >.05. Hence it showed that program has no significant mean difference on the assessment of respondents.

Table 3

Difference in Pedagogical Knowledge - Use of Communication technologies

Constructs	Education Program	N	M	SD	*t*	*df*	*p.*
Use of Communication Technologies	Formal	212	5.48	2.174	1.734	406	.084
	Distance	196	5.09	1.988			

In table 3, Independent sample t-test was applied on knowledge construct Use of Communication Technologies in terms of program of respondents. Insignificant mean difference was reported at t=.236, p >.05. Hence it showed that program has no significant mean difference on the Use of
Communication Technologies of respondents.

Differences in Pedagogical practices of prospective teachers in formal and formal education program?

Table 4

Differences in Pedagogical practices - Instructional Planning & Strategies

Constructs	Education Program	N	M	SD	*t*	*df*	*p.*
Instructional Planning & Strategies	Formal	212	2.15	1.352	.532	406	.595
	Distance	196	2.07	1.279			

In table 4, independent sample t-test was applied on Pedagogical practices construct Instructional Planning & Strategies in terms of program of respondents. Insignificant mean difference was reported at t=.352, p >.05. Hence it showed that program has no significant mean difference on the Instructional Planning & Strategies of respondents.

Table 5

Differences in Pedagogical practices – Assessment

Constructs	Education Program	N	M	SD	*T*	*df*	*p.*
Assessment	Formal	212	3.85	1.110	.547	406	.584
	Distance	196	3.79	1.038			

Independent sample t-test was applied on Pedagogical practices construct Assessment in terms of program of respondents. Insignificant mean difference was reported at t=.547, p >.05. Hence it showed that program has no significant mean difference on the assessment of respondents.

Table 6

Differences in Pedagogical practices – Use of Communication technologies

Constructs	Education Program	N	M	SD	*t*	*df*	*p.*
Use of Communication Technologies	Formal	212	9.18	3.806	.549	406	.583
	Distance	196	8.96	3.579			

Independent sample t-test was applied on disposition construct Use of Communication Technologies in terms of program of respondents. Insignificant mean difference was reported at t=.549, p >.05. Hence it showed that program has no significant mean difference on the Use of Communication Technologies of respondents.

Discussion

This research was done to see the effect of research variables on competencies of prospective teachers in distance and formal mode of education. To keep the prospective teachers updated with technological gadgets, all programs of it should be planned in such a way that teachers produced through this system is educated, scientific minded, courageous but concerned towards students (Bennet, 2000).

The scenario of current competitive world is changed into modern world and the profession of teaching has replaced into modern technologies. In the developed countries, many changes are taking place in teacher education. Universities and colleges in the developed world are incorporating the latest innovations and methods of teaching. There is immense need to update the teaching a.v.aids to replace with modern ethological equipment's. As technology is becoming an integral source of education in this competitive world (Alqiawi & Ezzeldin, 2015). The findings of the study can indicate effective efforts to improve quality of

prospective teachers based on the comprehensive course outline course of all aspects.

Conclusion and Recommendations

These findings of the current study suggest various practices further. It is clear that IPS is being practiced almost equally (with negligible difference in mean values) in distance and formal education programs. While Assessment is being practiced more in formal education programs while distance education programs lack the assessment practices. It is evident that with minor difference, communication technologies are more utilized in the formal education programs than the distance education programs. Data of this research study drawn from the findings and conclusions, some suggestions can be recommended that teacher educators should be updated exactly the role models as prescribed by the National Professional Standards. Course outline should be merged with practical aspects of application of Assessment for the modes of education. There should be one platforoooooooooooooooooooo.2n m/ forum for the prospective teachers where they would communicate and make exchange of ideas with each other.

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Citation of this Article:
Anjum, S., & Mahmood, N. (2019). Theory and practices gap of teacher education programs in formal and distance education system. *Pakistan Journal of Distance and Online Learning, 5*(1), 221-232.