



Transforming Distance Education for Teachers' Continuous Professional Development

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ABSTRACT

This study proposes a framework for transforming online education for professional development based on prospective teachers' opinions of distance education. One hundred fifty students from Allama Iqbal Open University (Distance Education), from rural and urban areas, were randomly chosen to collect data on several aspects of teachers' professional development, including workshop efficacy, curriculum, evaluation methods, and information and communication technology (ICTs). The data were acquired using a self-developed instrument that was pilot tested. After collection, data were analyzed using means and t-tests. The study found that while AIU's teacher education programs fulfill the demands of distant students, they do not support prospective teachers' ongoing professional growth. The curriculum of teacher education courses does not completely develop students' creative and professional qualities. There is a lack of balance between theory and practice. The use of ICT in teacher education is not up to standard. The AIU's teacher education programs also require additional attention to prepare future teachers in remote areas. Distance Education Programs for teachers' CPD requires a lot of focus and excellent tactics. The researchers presented a mechanism to alter distance education for instructors' CPD.

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1. Introduction

Teaching necessitates on-going education to supplement the knowledge gained through experience. There must be incentives and infrastructure for [teacher] learning; time and opportunity for collaboration; curriculum development and lesson study; teacher research; evaluation, and feedback. In order to provide a high-quality service to customers, clients, and the general public, employees must engage in ongoing professional development (CPD) (Saipro, 2020). Continuous professional development of faculty is considered essential in both traditional educational institutions as well as open and distance learning ones, because teaching and education are seen as commendable social and nation-building services. Continuing professional development (CPD) is critical to the advancement of faculty careers. Teachers' professional expertise, pedagogic skills, and mastery of their subject of specialization are critical to the quality of educational transactions, whether in the classroom, via media and technology, or in printed self-learning materials. Systematic professional development empowers faculty to perform the defined tasks at a level of mastery and in accordance with the educational institution's needs (Asgar & Ratra, 2020).

When it comes to professional development for educators, it is an ongoing process that requires a major shift. As "school standards and professional standards are inextricably linked, and the need for a teaching force that is flexible and adaptable to the impact of rapidly changing structures of work and leisure," ODL systems are increasingly contributing to the

professional development of teachers. Teachers' professional development could benefit from open and distance learning, which can take advantage of new technology (Maymina, Divina, & Liulia, 2018).

Distance education can be tailored to meet the needs of the student. People who are more traditionally educated can also benefit from this method of instruction because it places the teacher and student at a remove from one another. They communicate with each other via email, face-to-face interaction, or other instructional methods. As a result, it necessitates the use of innovative technologies such as electronic and other forms of contact, as well as a distinct hierarchical structure and authoritative procedures that aren't often found in traditional classroom settings (Burke, 2009). Teachers' training is a crucial issue in many developing countries. Teacher training is a multifaceted activity that encompasses several aspects of an educator's personal and professional life (Lozano, Boni, Peris, & Hueso, 2012). It's not merely to teach the teacher how to instruct, but also to try to build up their desire, restructure their expert demeanors, and generate aptitudes to boost their polished skill, which is the goal of the course. "To keep pace with mechanical changes in the public eye, teacher training projects at all levels in a nation must be organized so that the educators created by these projects are comprehensively taught, logically minded, uncompromising in terms of quality, inventive, bold yet thoughtful towards understudies," argues Burke (2009). In many countries, it was not possible to teach only by selectively relying on the formal or customary vis-a-vis framework because of the enormous challenges and limited resources. Conventional or formal training was not an option for many people because of the high dropout rate in this system and the increasing number of students in the classrooms. Then again, formal education has been replaced by a sort of training called "removal" training. Separate training has also made it easier for people to join the teaching profession by removing the constraints of distance and time (Maiyo & Ashioya, 2009).

The worldwide benchmark for quality and equity in education cannot be met by Pakistan's educational system in general or teacher education in particular. Teachers, according to research, need extensive preparation both before entering the profession and while in it if they are to keep up with the rapidly shifting nature of curricula and learning requirements. In order to reach global standards, both pre-service and in-service teacher training programs must be reworked (M. Iqbal & Arif, 2011). Teachers are urged to recognize that their methods are being influenced, generally via technological communication, on a global scale. Communication media can be used both directly and indirectly by educators to reach students all over the globe with their instruction or to make use of global resources in this way in order to improve their own teaching (Roberts-Holmes, 2015). Education plays a significant role in the economy of the United States. A strong educational system is essential for a nation, and a strong educational system requires successful educator preparation for its teachers (Conklin, 2015).

The Allama Iqbal Open University (AIOU) plays a significant role in the training of future educators in Pakistan via remote education. Educator preparation at a distance and orders are both available at Pakistan's largest institution, Allama Iqbal Open University. It was established in 1974 and is a unique institution of higher learning in Pakistan, as previously mentioned. The primary responsibility of this institution was to provide grade teachers in Pakistan with an in-administration teacher preparing office to help them improve their proficiency level. The Faculty of Education was founded on this foundation later on. For the time being, this workforce is providing pre-administration and in-administration educator training, ranging from PTC to higher levels. It has given our country's educators, many of whom work alone or in small groups and are a considerable way from professional development centers, the opportunity to collaborate. As a result, the Allama Iqbal Open University (AIOU) is taking a benign and effective role in the training of competent instructors. The educators working on AIOU projects are nationally and internationally recognized for their expertise (Jumani, Rahman, Chishti, & Malik, 2011).

The Allama Iqbal Open University (AIOU) educator preparation initiatives rely on hands-on learning that grants pedagogical aptitudes to build up instructors' expert capacities, which has improved the chart of national proficiency level. Its initiatives aim to modify educators' outlooks, reestablish their habits, and restructure their sense of self. According to Iqbal and Khan (2011), distant teacher education includes the following components:

Distance training is crucial in delivering teachers because of its exceptional nature of keeping a nearby invigilation on the investigation of the learners, regardless of time or area.

- Pakistan's female population, particularly those in tribal areas and areas far from Pakistan's real urban areas, benefit greatly from distance educator training.
- In terms of time or age, this framework can be adjusted. When it comes to preparing to be a teacher in Pakistan, the Allama Iqbal Open University (AIOU) is preferred among aspiring educators since it is more cost-effective than the formal training offered by the Pakistani government.
- AIOU's teacher training system is financially autonomous and contributes 43% of its savings to other projects of the university that are in short supply from a pay consumption standpoint.

In addition, it allows them the opportunity to acquire job-related knowledge, skills, and procedures through in-house teacher preparation programs, enhancing their job readiness and productivity. Allama Iqbal Open University is the global leader in online teacher preparation. It has been a decade since the Allama Iqbal Open University's Department of Teacher Education was established, but its students have been thriving in mountains, deserts, towns, cabins, royal residences, and everywhere throughout Pakistan. The department's goodwill has spread throughout the country and the Middle East.

Distance education adheres to learning approaches that are structured, allowing its students and instructors to engage in education from a distance in terms of both time and place. This form of teaching has gained international acclaim and is on the rise (McIsaac & Gunawardena, 1996). In Pakistan, AIOU offers B.Ed. and M.Ed. programs in teacher education, as described above. To what extent AIOU's teacher education programs meet the professional development needs of pre-service teachers is a question that can be studied. This piqued the researchers' interest in analyzing AIOU's existing methods for the professional development of future instructors.

The Study aimed at analyzing the practices of distance education for the continuous professional development of prospective teachers, further the Study aimed at providing a mechanism to transform the distance education for the continuous professional development of prospective teachers of distance education program at Pakistan. The objectives of the Study are as follows;

- To analyze the current practices of teacher education program at distance education (AIOU) for the continuous professional development of prospective teachers.
- To compare the current practices of teacher education program at distance education (AIOU) at rural and urban areas.
- To provide a mechanism to transform teacher education at distance education for the successful continuous professional development of prospective teachers.

The Research Questions of the Study are as follows;

- What are the current practices of teacher education program at distance education (AIOU) for the continuous professional development of prospective teachers?
- What is the difference between the current practices of teacher education program at distance education (AIOU) at rural and urban areas?
- What should be a mechanism to transform teacher education at distance education for the successful continuous professional development of prospective teachers?

The hypothesis of the Study are as follows;

- H0:1** There is no significant difference between the current practices of teacher education program at distance education (AIOU) for the continuous professional development of prospective teachers at rural and urban areas.

2. Methodology and Procedure

The purpose of this research is to discover how prospective teachers at distance education institutions view the function of distance education in their professional development as teachers. A representative sample of 150 B.Ed. level students from rural and urban areas was selected to collect data on various indicators of teachers' professional development, such as the effectiveness of workshops, curriculum, assessment procedures, balance between theory and practice, use of ICTs and teaching practices. Self-created instruments were used to gather the information. It was then put through its paces in a test run. A total of 15 statements were included in the survey, all of which related to AIOU's efforts to help future instructors advance their careers. A five-point Likert scale, ranging from "strongly disagree" to "strongly agree," was used to gauge how much agreement the respondents had with the assertions. A variety of statistical methods were used to examine the acquired data, including means and t-tests.

3. Data Analysis

Table 1 shows that there were total 150 B.Ed. graduates who responded, there were three statements regarding curriculum of AIOU for B.Ed. course. The range of score on each statement was 1 to 5. Therefore, each responded was able to get a score of 1 to a maximum of 5 score on each statement. Table shows that the mean score of 150 B.Ed. graduates regarding curriculum of AIOU was 3.89 which lies above average on the continuum of 5-point Likert scale. It means that the B.Ed. graduates agreed with the statements regarding curriculum of their B.Ed. course.

Table 1: Mean score of B.Ed. Graduates on statements regarding Curriculum of AIOU for B.Ed. Course

Practice	No of B.Ed. Graduates	No of Statements	Range of Score	Mean Score	Level of Agreement
Curriculum	150	3	1-5	3.89	Above Average/ Towards Agreement

Table 2: Mean score of B.Ed. Graduates on statements regarding Teaching Practices offered by AIOU in B.Ed. Course

Practice	No of B.Ed. Graduates	No of Statements	Range of Score	Mean Score	Level of Agreement
Teaching Practice	150	3	1-5	2.86	Below Average/ Towards Disagreement

Table 2 shows that there were total 150 B.Ed. graduates who responded, there were three statements regarding Teaching Practice of AIOU for B.Ed. course. The range of score on each statement was 1 to 5. Therefore, each responded was able to get a score of 1 to a maximum of 5 score on each statement. Table shows that the mean score of 150 B.Ed. graduates regarding Teaching Practice of AIOU was 2.86 which lies below average on the continuum of 5-point Likert scale. It means that the B.Ed. graduates disagreed with the statements regarding Teaching Practices in their B.Ed. course.

Table 3: Mean score of B.Ed. Graduates on statements regarding workshops offered by AIOU in B.Ed. Course

Practice	No of B.Ed. Graduates	No of Statements	Range of Score	Mean Score	Level of Agreement
Workshops	150	3	1-5	2.89	Below Average/ Towards Disagreement

Table 3 shows that there were total 150 B.Ed. graduates who responded, there were three statements regarding workshops of AIOU for B.Ed. course. The range of score on each statement was 1 to 5. Therefore, each responded was able to get a score of 1 to a maximum of 5 score on each statement. Table shows that the mean score of 150 B.Ed. graduates regarding workshops of AIOU was 2.89 which lie below average on the continuum of 5-point Likert scale. It means that the B.Ed. graduates disagreed with the statements regarding workshops in their B.Ed. course.

Table 4: Mean score of B.Ed. Graduates on statements regarding ICT integration by AIOU for B.Ed. Course

Practice	No of B.Ed. Graduates	No of Statements	Range of Score	Mean Score	Level of Agreement
ICT	150	3	1-5	4.05	Above Average/ Towards Agreement

Table 4 shows that there were total 150 B.Ed. graduates who responded, there were three statements regarding ICT of AIOU for B.Ed. course. The range of score on each statement was 1 to 5. Therefore, each responded was able to get a score of 1 to a maximum of 5 score on each statement. Table shows that the mean score of 150 B.Ed. graduates regarding ICT integration by AIOU was 4.05 which lie above average on the continuum of 5-point Likert scale. It means that the B.Ed. graduates agreed with the statements regarding ICT for their B.Ed. course.

Table 5: Mean score of B.Ed. Graduates on statements regarding Assessment & Evaluation procedures of AIOU for B.Ed. Course

Practice	No of B.Ed. Graduates	No of Statements	Range of Score	Mean Score	Level of Agreement
Assessment & Evaluation	150	3	1-5	2.95	Below Average/ Towards Disagreement

Table 5 shows that there were total 150 B.Ed. graduates who responded, there were three statements regarding Assessment & Evaluation procedures of AIOU for B.Ed. course. The range of score on each statement was 1 to 5. Therefore, each responded was able to get a score of 1 to a maximum of 5 score on each statement. Table shows that the mean score of 150 B.Ed. graduates regarding Assessment & Evaluation procedures of AIOU was 2.95 which lies below average on the continuum of 5-point Likert scale. It means that the B.Ed. graduates disagreed with the statements regarding Assessment & Evaluation procedures of AIOU for their B.Ed. course.

3.1. Hypothesis Testing

H0:1 there is no significant difference between the current practices of teacher education program at distance education (AIOU) for the continuous professional development of prospective teachers at rural and urban areas.

Table 6

Area	No of B.Ed. Graduates	Overall Mean Score	Std. Dev	Degree of Freedom (df) Df= (n1+n2)-2	t-value
Urban	85	2.96	12.48	148	0.038
Rural	65	2.88	13.56		

Table 6 shows that there were total 85 B.Ed. graduates from urban area and there were total 65 B.Ed. Graduates of AIOU from rural area. The mean score of urban B.Ed. graduates' perceptions regarding the practices of AIOU for their professional development was 2.96 and whereas the mean score of rural B.Ed. graduates' perceptions regarding the practices of AIOU for their professional development was 2.88. The computed t-value on t-test was 0.038 which is less than the critical t-value (1.987) on 5% level of significance. Therefore the null hypothesis "there is no significant difference between the current practices of teacher education program at distance education (AIOU) for the continuous professional development of prospective teachers at rural and urban areas" accepted. The B.Ed. graduates of both areas (urban & rural) was dissatisfied with the current practices of AIOU for their professional development through B.Ed. course of teacher education program.

4. Findings of the Study

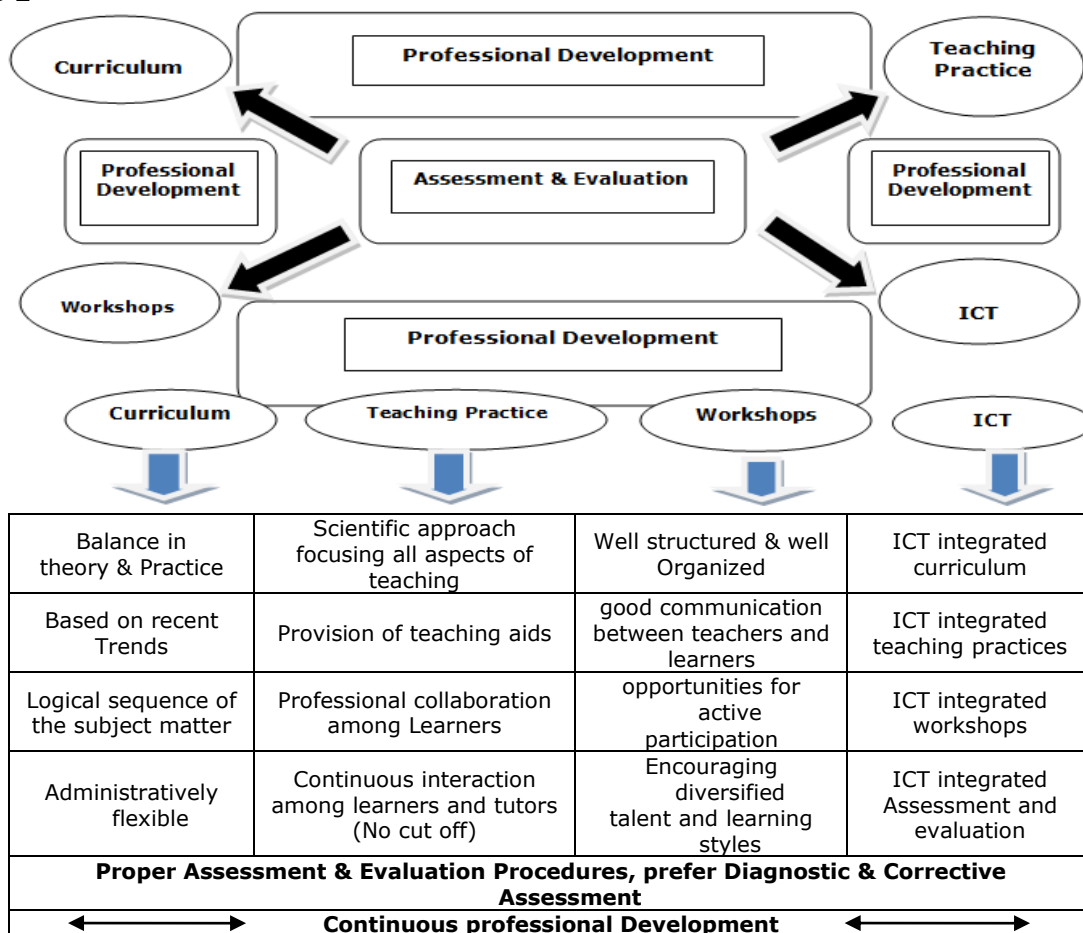
- The mean score of 150 B.Ed. graduates regarding curriculum of AIOU was 3.89 which lies above average on the continuum of 5 point likert scale.

- The mean score of 150 B.Ed. graduates regarding Teaching Practice of AIOU was 2.86 which lies below average on the continuum of 5 point likert scale.
- the mean score of 150 B.Ed. graduates regarding workshops of AIOU was 2.89 which lie below average on the continuum of 5 point likert scale
- mean score of 150 B.Ed. graduates regarding ICT integration by AIOU was 4.05 which lie above average on the continuum of 5 point likert scale
- The mean score of 150 B.Ed. graduates regarding Assessment & Evaluation procedures of AIOU was 2.95 which lies below average on the continuum of 5 point likert scale.
- The mean score of urban B.Ed. graduates' perceptions regarding the practices of AIOU for their professional development was 2.96 and whereas the mean score of rural B.Ed. graduates' perceptions regarding the practices of AIOU for their professional development was 2.88.
- The computed t-value on t-test was 0.038 which is less than the critical t-value (1.987) on 5% level of significance. Therefore the null hypothesis "there is no significant difference between the current practices of teacher education program at distance education (AIOU) for the continuous professional development of prospective teachers at rural and urban areas" accepted.
- The B.Ed. graduates of both areas (urban & rural) was dissatisfied with the current practices of AIOU for their professional development through B.Ed. course of teacher education program.

4.1. Mechanism to transform teacher education at distance education for the successful continuous professional development of prospective teachers

Figure 1 elaborates the new mechanism to transform teacher education at distance education for the successful continuous professional development of prospective teachers:

Figure 1



5. Conclusion

Due to its practicality and accessibility, online programs for teacher preparation are becoming increasingly popular in Pakistan. Time and quality are necessary to make this type of teacher education program more successful and valuable. Lozano et al. (2012) reported that

teachers' training is a crucial issue in many developing countries. They indicated that teacher training is a multifaceted activity that encompasses several aspects of an educator's personal and professional life.

The Study found that Pakistan's online education programs need to be restructured in order to better prepare teachers for the job market. There are a few, but critically significant, areas for development in Pakistan's remote education teacher preparation programs, according to the Study's findings and conclusions. The researcher's method for transforming these areas could be used to transform teacher education programs in Pakistan's distance education programs. Teacher education should emphasize ongoing professional development in all aspects, according to the experts. As a result, assessments and evaluations are critical in all facets of teacher preparation, but only if they are accurate, diagnostic, and corrective. We should not overlook another important feature of information and communication technology (ICT). The use of ICT should be woven into all aspects of teacher training.

Research found that Pakistan's online education programs must be restructured to better prepare teachers for employment. According to the Study's findings, there are a few, but critically important, areas for improvement in Pakistan's teacher preparation programs such as placing a strong emphasis on preparing teachers for corrective evaluations and assessments. Likewise, the integration of ICT into teacher preparation should permeate every facet of the process.

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Appendix: Survey Instrument

Practices of AIOU for the Continuous Professional Development of Prospective Teachers	SD	D	N	A	SA
	1	2	3	4	5
A. CURRICULUM					
1. The Curriculum of B.Ed. Programme offered by AIOU meets the global challenges.					
2. The Curriculum of B.Ed. Programme offered by AIOU shows balance between theory & practice.					
3. The Curriculum of B.Ed. Programme offered by AIOU is sufficient for the continuous professional development of prospective teachers.					
B. WORKSHOPS					
1. The workshops in B.Ed. Programme offered by AIOU are well structured & well organized					
2. Equal opportunities of learning are provided to all participants during the workshops of B.Ed. Programme offered by AIOU					
3. The workshops in B.Ed. Programme offered by AIOU are the gateway to the professional development of prospective teachers.					
C. TEACHING PRACTICES					
1. Sufficient opportunities of teaching practices are provided in B.Ed. Programme offered by AIOU					
2. The teaching practices in B.Ed. Programme offered by AIOU are well planned & well organized					
3. The teaching practices in B.Ed. Programme offered by AIOU are the gateway to the professional development of prospective teachers.					
D. ICT INTEGRATION					
1. Information communication technology (ICT) is well integrated in the B.Ed. programme offered by AIOU.					
2. Sufficient use of ICT is made during the entire course of B.Ed. programme offered by AIOU.					
3. ICT integration in B.Ed. programme offered by AIOU is helpful for the continuous professional development of prospective teachers.					
E. ASSESSMENT & EVALUATION					
1. Assessment & evaluation procedures in B.Ed. programme offered by AIOU are appropriate enough.					
2. Multiple procedures and techniques are implemented for the better assessment and evaluation of the prospective teachers during B.Ed. program					
3. Assessment & evaluation procedures implemented by AIOU play a vital role for the continuous professional development of prospective teachers					