

Teachers Preparation and Professional Development for Addressing Twenty-First Century Distance Learners: Are BOU Teachers Ready?

Romana Kader^{*}

Abstract

Teaching in the twenty-first century is a different perspective; learning could never happen the way it is now. Learning takes place everywhere, all the time, on any given topic, and in any learning style. The question now is, what does "Teacher of the Twenty-First Century" mean? Great pupils are the outcome of great teachers. Many factors influence student accomplishment. The most powerful influencer is an inspiring and knowledgeable teacher, thus it is critical to pay special attention to how we train and assist new and seasoned instructors. The skills and knowledge students need to be successful in the future are continuously changing, while others are quickly being digitized, automated, or outsourced. This puts teachers in a complex spot. Not only they are expected to have a profound and extensive perceptive of the subjects they teach, but also to effectively arrange their students for 21st-century challenges; teachers are expected to be fervent, compassionate, and thoughtful, and to ensure that students feel cherished and included in a mutual learning environment. Duties & learning for teachers are soaring and rising, but still, education systems are not keeping speed. Most schools seem much similar today as they did a generation ago, and teachers themselves are frequently not developing the practices and skills required to meet the diverse needs of today's learners. So the next big question comes, what can be done to support teachers to meet the formidable challenges of 21st-century education? And how can they take advantage of new opportunities? This paper attempts to find out the actual status of the teacher's professional development activities at Bangladesh Open University. This research also tried to identify the current practices versus best practices of 21st Century Skills. Both primary and secondary data have been used in this study. Survey questionnaire and focus group discussions (FGD) were conducted to achieve the objectives of this research. Some descriptive statistics have been used for data analysis. It is revealed from the perceived opinions of teachers that the teachers of BOU are quite competent to meet the need of twenty-first-century learners but they have to concentrate more on relevant skills for meeting the need of twenty-first-century learners. Researchers think BOU should create more opportunities to develop professionally in terms of so many aspects through research training, workshops, technology orientation etc. it has been recommended that teachers should be more empowered to show creativity in their works and the Use of learner-friendly modern technology should increases.

³ **Keywords:** Teacher Preparation, Professional Development, Conventional Practices, Innovativeness, 21st-century learner.

^{*} Assistant Professor (Management), School of Business, Bangladesh Open University.

Introduction

Higher education around the world is dealing with unprecedented problems in the twenty-first century. One of the most urgent issues in current education reform is how to develop talent in teachers and school leaders in order to increase their effectiveness (Sanders & Rivers, 1996; Turnbull, Riley, & MacFarlane, 2013). In our rapidly changing world, education plays a critical role in preparing students to face difficulties. Every aspect of human life in the twenty-first century is fast changing (economically, socially and technologically). Educationists, policymakers, managers, and instructors all face difficult problems as a result of fast change. Teachers in the twenty-first century must instill soft skills in their students (Jan, 2017). Although the forces driving these changes have been in place for a while and universities have long been a target of outside criticism, the pace of change keeps speeding up. Many publications, many of which have chronicled the difficulties emerging from the clash between traditional academic labor and modern expectations, have tested the nature of these forces and their impact on universities. Some have analyzed the changing idea of instructive work to search for standards by which colleges could offset administration goals with scholarly qualities (see for instance Ramsden 1998a and Martin 1999), moving past cleaned polarities of managerialism and collegiality.

Ochoa (2010) suggests that at this point, “One of the most important jobs that teacher education programs must complete is educating instructors for the twenty-first century. Teachers in the twenty-first century must master teaching skills as well as integrate technology into their classrooms. Teacher development programmes are quite important. Good instruction is increasingly being considered as a crucial factor of a society's economic well-being (Jan, 2017). As the global economy gets more competitive, political upheaval taunts people, and scientific advancements call for specialized abilities, teacher training programs are being called into question. Specifically, how do we train teachers to distinguish between groups in school settings with a wide range of cultural and linguistic diversity? How can we simplify a curriculum that encourages children to address critical social, political, and economic concerns that directly affect their lives, communities, countries, and the entire world? How do we prepare teachers who can assist critical thinking that implements the code of “thinking globally and acting locally”? How can we integrate multicultural and multilingual pedagogies into our curriculum as the number of immigrant children in urban schools rises? How can we prepare educators for a bilingual society? How do we offer expertise for dual language programs that put together children from dissimilar social classes into teaching communities that asserts their language and culture, and supplies them with skills for the global economy? What does it imply to be a proficient global

educator? How can we train teachers to confront issues like racial tension, language rights, social discrimination, linguistic and cultural diversity, illiteracy, health, scarcity, bigotry, peace, power, and justice differently?

Goodwin (2010) raises important queries to include: “What might quality instruction entail and resemble in a global setting? What does excellent global education look like, and how is it accomplished?” Due to the lack of agreement on what teachers in a global context should be able to do, what should be the socio-political consideration of global education, and what challenges, dilemmas, and structures stand in the way of internationalizing teacher preparation, these questions are crucial to the field of international teacher training (Knight, 2007). For Goodwin, the focal point is the preparation of teachers who can respond to the needs of changing communities and culturally and linguistically varied classrooms. In response to the question of “what should capable teachers know and be able to do”? Goodwin offers five important theoretical domains that a globally minded teacher educator is supposed to exhibit, namely:

- Personal knowledge– assisting a mindful connection of the potential teachers' autobiographies and the formal syllabus, to bridge one's accumulated experiences with continuing personal development
- Knowledge of the political, historical, cultural, and structural factors that affect local and global problem-solving and problem-posing
- Pedagogical knowledge– a manner of thinking about how to use subject-specific theories and information, as well as how to construct the curriculum to satisfy students' needs, welfare, and worldviews
- Sociological knowledge– To safeguard the rights of children, it's about allaying instructors' worries, prejudices, and misconceptions, as well as having the skills to disrupt schooling practices that are unfair and damaging
- Social knowledge– the capability to contribute efficiently in self-governing cooperative groups and create classrooms that promote fairness, addition, diversity, cooperation, personal security, and momentous decision-making.

The five intangible areas of Knowledge for globally minded teachers are present for the insightful development of teacher candidates, and international experiences and exchanges are incorporated those show participants to think outside of their local/national context while attempting to connect theory and practice through practical experiences.

This paper measures the readiness and assesses the present condition of the teachers of Bangladesh Open University (BOU) regarding preparation and professional development for addressing twenty-first-century distance learning.

Literature Review

Today's technological and social media developments offer the best means of preserving the teaching and learning process. Understanding technological, financial, institutional, educator and student barriers is crucial for successfully implementing distance learning in the age of digitalization (Al-Balas, 2020). Geverola et.al (2020) found that 21st century distance education presents difficulties and challenges for teachers. Many universities and colleges are reshaping their schools of education to place an emphasis on subject-matter knowledge, use ever-increasing educational technologies, innovative training programmes and create schools of professional development (Jan, 2017).

Beck (1990) advocates a developmental way to deal with grown-up training by focusing on the consolidated valuable encounters that grown-ups bring to their schooling surroundings, and maintains that coordinated informative exchanges ought to help objective coordinated peer interface. Grown-ups tending to an academic question on the whole and according to fluctuated points of view require conditions that convince oneself administering utilization of mature abilities and consider aggregate and individual reflection, as well concerning wide cooperation. As Slavin (1983) brings up, nonetheless, the powerful utilization of agreeable learning techniques requires the cautious advancement of relational abilities in the educator, yet in the understudies, also. The scope of procedures created conceivable by the innovative combination of distance schooling advancements can hold a variety of learning and instructing styles. Be that as it may, different advances, albeit regularly utilized to help post-auxiliary instructive practice, are not incorporated into the general arrangement and arrival of guidance.

PC intervened correspondence, for instance, is consistently utilized for understudy/peer collaboration between class meetings, however, is less generally incorporated into direct class contact among the teacher and far-off endless cohorts, themselves. Expanding on standards of grown-up learning, distance schooling models for proficient instructors can increase live, video-conveyed educating by coordinating PC interceded correspondence, PC document trades, and electronic mail,—all of which require changeable levels of communication among students and instructors—directly into the instructional frame.

Teachers in training will be able to create models of digitally enhanced practice that they can later adapt to their educational environments by using appropriate and original technology used by teacher educators. However, as more layers of technology are placed between teachers and students, their physical distance grows, posing problems that instructional designers and

classroom teachers must work to solve. Moore (1991) asserts that "distance" refers to much more than just the physical distance separating instructors and students in his exploration of the idea of "transactional distance" in remote learning. Telephonic tutoring generally has fewer "transactions" available between student and teacher than face-to-face instruction (as well as among learners themselves). By providing electronic chances for student interaction, educators must broaden their use of tactics for bridging "distances." Students should be required to use electronic communication and resources for both "in-class" and "homework" involvement. Examples include electronic mail, conferencing, resource distribution lists, electronic bibliographies, and remotely located files. The following learner-centered processes can use electronic message activities in combination with appropriate site-based activities (like structured peer coaching):

- Case studies
- Simulations
- Cooperative learning
- Guest "lectures" online
- Electronic field exchanges
- Online student services
- Role plays
- On-line library access
- Peer conferencing
- On-line database searches

In computer networking, synchronous and asynchronous communication should be set up. It should have a practical simplicity that aids in goal achievement and equips students to share the knowledge of peers and teachers. The technologies must be as clear as feasible for this process to take place; they must also be powerful enough to enhance accomplishment without burying material behind features that don't support educational objectives (Schrum 1992) (Watts and Castle 1992). By incorporating networked computer interactions into the curriculum, instructors and groups of students can have direct online contact to facilitate problem-solving. Remote groups can be connected in problem-centered electronic exchanges intended to foster mindful participatory conversation through computer-mediated class segments. Such sessions would require peer participation in role plays or other small-group exercises modified especially for internet discussion to produce written individual and collective knowledge. The next section is a sample of such an activity.

Inoue, Lattimer, Alexandrowicz, & Buczynski (2010) offer a reflective investigation of a procedure that ran into misunderstandings and differing presumptions regarding the goals of international experiences. The authors highlight a policy that lacked a hypothetical framework due to a definitional and practical contradiction. The authors advise that a theoretical framework be adopted, such as the six suggested frames of Dolby & Rahman (2008), in light

of the authors' expansion of demand for the worldwide experience. Comparative education, international education, internationalization of higher education, internationalisation of K–12 education, research on international teaching and teacher education, and globalisation education are their six frames of reference. The authors suggest that the discussion centre on these six frames as a policy requiring internalisation experiences as a requirement for a graduate degree is taken into consideration.

Utilizing them would allow for a thorough analysis of many viewpoints and beliefs regarding international experiences, particularly international teacher education. The difficulty lies in developing a policy that is theoretically meaningful, succinct, and focused to minimise misunderstandings and uncertainties given the variety of opinions on foreign education and experiences.

Objectives of the study

The main objective of this study is to assess BOU teachers' readiness for addressing twenty-first-century distance learners. The specific objectives are:

- To explore the current competencies of the teachers of BOU in light of twenty-first-century skills.
- To identify the areas that needs to be addressed and improved to enhance the skills of teachers.
- To find out the strategies to improve the skills of the teachers of BOU to meet the demand for twenty-first-century learners.

Methodology of the Study

Both quantitative and qualitative method was used to achieved the objectives of this research. The study was based on both primary and secondary data. The primary data collected directly from the teachers in four dimensions by questionnaire. Focus group discussion with academics of BOU also held to take feedback about the professional development of in 21st century. The questionnaires were adopted from Institutional Quality Assurance Cell (IQAC) questionnaire. The secondary data were collected from published documents of BOU. For data analysis, statistical software called Stata has been used in the paper. Five-point Likert scale (strongly agree=5, agree=4, strongly disagree=1) was used to get the reflection of learners on current status of existing professional development activities at BOU. Focus group discussions were conducted to know the perceptions of academics on ongoing professional development activities at BOU.

In this study, purposive sampling has been used to select sample sizes from different Schools. For data analysis, descriptive statistics have been used. There are six schools in BOU. The total number of teachers at this university

is 140 when conducting the survey representing the population of this study. Samples of 52 faculties have been taken in the study. All the faculties working on the BOU campus have been included in the study. And the sample was chosen using guidelines of purposeful sampling (Saunders, Lewis & Thornhill, 2009). Several related published reports; information from authentic internet sources, newspapers as well as related case studies in this field was accessed for this study. Statistical analysis was done to analyze the data.

The study has some limitations. It was based on only the faculty members at Bangladesh Open University. Also due to time and budget constraints, this study didn't use multiple data collection techniques.

Existing Scenario of Professional Development of Teachers in BOU

Academic personnel of the School acts as a team to promote its academic programs. Though the teachers particularly the young ones have got training on different issues of Open and Distance Learning and research methods, no training or orientation program is arranged for student counselling and guidance in the School. Most of the teachers of this School have already got their Ph.D./M.Phil. and the remaining teachers are sincerely working to get themselves admitted into Ph.D. Program. No peer observation is in practice in the School. There are well-spelled-out policies regarding the training and development of both academic and non-academic staff of the university. There are financial allocations in the budget of the School for holding seminars or workshops to share new knowledge or innovations in the school. There are also opportunities for both academic and non-academic to attend seminars and workshops abroad.

Bangladesh Open University has got its policies for conducting research. It allocates separate funds in its budgets for carrying out research. Each School has its journal where the teachers of the school publish their research articles. It also allows both academic and non-academic staff to go for higher studies at home and abroad with necessary leave with pay as per the university policy. It also allows both academic and non-academic staff to participate in national and international seminars with some subsidies. University operates through some statutory bodies that are recognized under the Act of BOU. In the process of operation, a slim opportunity is there for internal quality assurance, but it is not well-structured at all. Further, it is not holistic and comprehensive. For example, the programs are in operation for the last twenty years and twelve years respectively, and yet the School did not take any mentionable initiative to examine the quality, particularly employability and learning outcomes of the program. Radio and TV programs play effective roles to meet twenty-first-century learners. There are enough opportunities through developing e-books, BouTube, Web TV, Audio-Video conferencing, etc. for developing learners' skills. Course materials/modules developed by teachers are well-written and learner support.

Findings and Discussion

Skills for professional development of the BOU Teachers

Table-1: Percentage Distribution of Academics According to their Views on the professional development of teachers (Figures in the parenthesis indicate percentages)					
Aspects of Evaluation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Teachers can think critically when problems arise.	2 (3.8)	2 (3.8)	6 (11.5)	35 (67.3)	7 (13.5)
2. Most teachers apply creativity in their work.		13 (25.0)	11 (21.2)	28 (53.8)	
3. Teachers are collaborative with their colleagues and their students.		2 (3.8)	11 (21.2)	39 (75.0)	
4. Teachers have good communication skills.	1 (1.9)	2 (3.8)	8 (15.4)	34 (65.4)	7 (13.5)
5. Teachers have adequate knowledge about information literacy and media literacy.		6 (11.5)	7 (13.5)	32 (61.5)	7 (13.5)
6. Teachers can modify any plans when needed.		6 (11.5)	32 (61.5)	7 (13.5)	7 (13.5)
7. BOU Teachers can motivate a team to accomplish a goal.	1 (1.9)	3 (5.8)	13 (25.0)	28 (53.8)	7 (13.5)
8. Meeting and networking with others for mutual benefits.	1 (1.9)	3 (5.8)	10 (19.2)	24 (46.2)	14 (26.9)

Source: Researcher's Survey

The result of the study shows that the majority of the teachers think critically when problems arise (67.3%); Most of the teachers apply creativity in their works (53.8%) whereas 21.2% of the teachers were neutral about this; However, 75.0% of the teachers are collaborative with their colleagues and their students but 21.2% teachers were neutral whereas 3.8% teachers disagreed; Most of the teachers have good communication skill (78.9%). The majority of the Teachers have adequate knowledge about information literacy and media literacy(61.5%) and strongly agree(13.5%), But 61.5% of teachers were neutral about they can modify any plans when needed whereas 13.55% agree; It takes approval from top authority for any required change in the academic process. Usually, this process takes time and creates extra hazards. The majority of the teachers (53.8%) can motivate a team to accomplish a goal; only 1.9% of teachers disagreed; lastly, 46.2% of teachers can Meet and network with others for mutual benefits.

BOU Teachers' Training for Professional Development

Table-2: Percentage Distribution of Academics According to their Views on training for professional development of teachers (Figures in the parenthesis indicate percentages)

Aspects of Evaluation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
There is a system of orientation training for the newly appointed teacher.	1 (1.9)	34 (65.4)	7 (13.5)	8 (15.4)	2 (3.8)
The entity has the practices of TNA (training need assessment) before providing any type of training.	7 (13.5)	34 (65.4)	8 (15.4)	2 (3.8)	1 (1.9)
Adequate Training funds are available.		3 (5.8)	6 (11.5)	30 (57.7)	13 (25.0)
Funds for training are properly used.	8 (15.4)	36 (69.2)		7 (13.5)	1 (1.9)
Teachers are interested and prepared for accepting the training facilities.		20 (38.5)	2 (3.8)	29 (55.8)	1 (1.9)

Source: Researcher's Survey

As seen in the table-2, the majority of the respondents disagreed (65.5%), that there is a system of orientation training for the newly appointed teacher; only 15.4% of teachers agreed; the respondents are asked about the entity has the practices of TNA (training need assessment) before providing any types of training, 65.4% teachers disagreed whereas only 3.8% agreed; the majority of the teachers agreed and strongly about Adequate Training funds are available 57.7% and 25.0%. However, a greater part of the respondents (69.2%) said that funds budgeted for training is not properly used for the professional development of the teachers. Lastly, 55.8% of Teachers are interested and prepared for accepting the training facilities and side by side 38.5% of teachers disagree about the same matter.

Academics' Views of Research and Extension Services

Table-3: Percentage Distribution of Academics According to their Views on the professional development of teachers (Figures in the parenthesis indicate percentages)

Aspects of Evaluation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Teachers get enough opportunities to pursue a higher degree.		27 (51.9)	2 (3.8)	22 (42.3)	1 (2)
The entity provides the opportunity for the life-long learning of teachers.		2 (3.8)	39 (75.0)	11 (21.2)	
The entity has a well-defined policy for research and development.		22 (42.3)	3 (5.8)	27 (51.9)	

Source: Researcher's Survey

Table-3 presents the percentage distribution of academics' opinions regarding research and extension service opportunities at BOU. Almost 51.9% of teachers are not happy with the existing regulations of BOU for pursuing a higher degree. However, most of the teachers don't believe that they have enough opportunities for life-long learning and professional development at BOU. Teachers expect more fringe benefits from authority to develop lifelong learning. Around 51.9% of respondents are happy with the research policy, also 42.3% of them are not happy with the existing research policy of BOU. Responses are mixed in terms of research facilities because the workloads of teachers are very high so they cannot put more concentration on research.

Table-4: Uses of Modern Technology by BOU teachers' (Figures in the parenthesis indicate percentages)

Uses of Modern Technology	Academics' view (percentage)
a) E-Platform	36.5
b) Mobile Technology	59.6
c) BouTube	25
d) E-books	36
e) Projector	57.7

Source: Researcher's Survey

This table shows that the majority of the stakeholders do not use modern educational technologies like e-platform, mobile technology, BOU Tube, e-books, and projectors. It may happen due to the lack of modern educational technology available in the study center of BOU.

Summary of Focus group Discussion

From the focus group discussions of teachers of BOU, the following points have been summarized for the professional development of 21st-century teachers of higher education.

Regular studies of professional journals and periodicals.
Critical thinking and problem-solving skills.
Communication and collaboration skills.
Information technology literacy and media literacy as well as digital collaboration skills.
Formal professional training
Attending workshops, conferences, lectures, and seminars.
Use of videotape in effective teaching, learning style, and witting.
Regular use of the internet.
Visit other universities and colleges and observe other teachers.
Quarterly self-evaluation of teaching effectiveness.

Conclusion and Recommendations

It is revealed from the perceived opinions of teachers that the teachers of BOU are quite competent to meet the need of twenty-first-century learners but they concentrate more on relevant skills for meeting the need of twenty-first-century learners. Faculty members of BOU are not fully happy with the given facilities for professional development by the authority. They think BOU should create more opportunities to develop professionally in terms of so many aspects through research training, workshops, technology orientation, etc. Teachers expect more flexibility and financial support for pursuing a higher degree abroad. The following specific steps can be taken to promote the professional competency of teachers of BOU–

- Teachers should be more empowered to show creativity in their works
- Still, there is a scope for improving the leadership skills of BOU teachers
- Need orientation training regularly for refreshers.
- A training needs assessment survey should introduce.
- To ensure the proper utilization of the training fund
- The flexibility of Study leaves for pursuing a higher degree
- BOU should create more opportunities for lifelong learning for the teacher
- The use of learner friendly modern technology should increases
- Updated technology orientation training for teachers

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