INSTITUTIONAL AND COMMUNITY PERCEPTIONS OF DISTANCE EDUCATION IN BANGLADESH: PREPARING FOR THE 21ST CENTURY

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ABSTRACT

Bangladesh Open University (BOU), the sole distributor of distance education (DE) in Bangladesh, is regarded as one of the mega universities in the world. Nonetheless, the institution faces numerous issues and challenges that revolve around not only its administrative and academic operations, but also the lack of acknowledgement of its sociological value and concomitant recognition within the local community. This study examines the perceived challenges facing DE provision in Bangladesh from the point of view of the local Bangladeshi community as well as senior academics and administrators within the institution. Qualitative case study formed the methodological basis of the study. Using purposeful non-random sampling supplemented with snowballing technique, five senior academics and directors from BOU were selected for individual semi-structured interviews. Four focus groups were also formed using stratified purposeful sampling to determine the perception of the community towards DE. The paper introduces an innovative theoretical model, 'Adapting Structuration Theory In Distance Education (ASTIDE)', conceptualised as part of a broader study, to address the underlying issues and challenges relating to the future provision of DE in Bangladesh.

Keywords: Distance Education, ASTIDE, Bangladesh.

INTRODUCTION

The study described in this paper focused primarily on distance educational opportunities within Bangladesh, where Bangladesh Open University is the only DE provider. The policies and practices utilized at BOU were thematically analysed from the view point of the Bangladeshi community (BOU students, teacher-tutors and informed public members) and BOU administration/academe. The analysis was also linked with the past and contemporary literature reviewed in this study relating to DE in Bangladesh. As part of the analytic process, the conceptualized ASTIDE model was integrated throughout the paper to help explain each of the themes generated through the juxtaposition of the discussion with the Bangladeshi community and BOU participants.

Bangladesh is located in South Asia and has a population of approximately 160 million with a density of 1033 per sq. km, one of the most densely populated countries of the world (World Factbook of CIA, 2014). According to BuddeComm (2013), the economy of Bangladesh is predominantly agro-based and its main endowments include its vast human resource base, rich agricultural land, relatively abundant water and substantial reserves of natural gas. The people of this country experience poverty (one-third living below the

poverty line), along with political confrontation and instability, poor infrastructure, corruption, insufficient power supplies and slow implementation of economic reforms (BuddeComm, 2013).

The fixed-line teledensity in Bangladesh is the lowest (1.1 milion subscribers, less than 1%) in South Asia (BuddeComm, 2013). However, this situation has considerably improved through the rapid expansion of the mobile market, with a penetration rate of 73% (120 million subscribers, 13th in the world) in 2014 (BTRC, 2014). The recent growth of the Internet has also been significant with subscriptions of more than 40 million, however 96% only subscribe to mobile narrowband Internet (BTRC, 2014). The use of personal computers and Internet has received encouragement via the government's Vision 2020 initiative (Institute of Governance Studies Report, 2010), and waiving of duties and taxes on computer hardware and software imports since 1998 (Rahman, Khatri, Bank, & Brunner, 2012). As a consequence, Internet usage was given a boost and charges began to fall accordingly.

As with many developing countries, while education is considered a priority sector in Bangladesh and a means of assisting socio-economic development, it is also often very difficult to access and complete. The dropout rate for secondary education in Bangladesh is very high, with 60-70% of students leaving school before completing Grade 10 and 37% of the remainder not completing Grade 12 (Ahmed & Rahman, 2010). Poverty related factors are the main reasons for this high dropout rate with female students particularly impacted due to early marriage, household expectations and lack of recognition of the need for education for females (Ahmed & Rahman, 2010). According to a British Council Report (2012) and OECD Report (2012), participation rates for tertiary education in Bangladesh are quite low, with only 13% of Grade 12 students enrolled in higher education in 2012, compared with 25% in India, 27% in China, 43% in the USA, 47% in the UK, and 57% in Canada. Transforming the human resource potential of the large population is key to further development and distance education could provide a viable pathway for Bangladesh to educate its massive population and prepare them to adapt to 21st century issues and challenges.

The only option for accessing distance education in Bangladesh is through the Bangladesh Open University (BOU), which is a publicly funded system offering 21 formal and 19 non-formal programs from secondary to Masters level. More than 486,195 students were enrolled in programs within the six faculties in 2012-2013 (BOU Website, 2014). The university has 12 regional resource centers (RRCs), 80 coordinating offices (CO) and 1381 study centers across the country utilising teachers of high schools or colleges throughout the country at the weekend to provide education to distance learners (Rashid & Rahman, 2010). Three programs contribute approximately 95% of the total enrolments, namely Secondary (Grade 8-10), Higher Secondary (Grade 11-12) and Bachelor of Arts (BA), with female participation rates quite high (41.5%) (BOU Website, 2014). Interestingly universities are not incorporated into BOU program and offerings, unlike high schools and colleges, which according to Islam (2011), is a problem as there are approximately 90 universities in Bangladesh including 34 public, 54 private and 2 international universities (UGC, 2012).

LITERATURE REVIEW

Although contemporary distance education literature frequently signals the problems and prospects of this form of education in developing countries, little research focuses on community perceptions and how they might differ from institutional perceptions (Aktaruzzaman, 2014; Aktaruzzaman & Plunkett, 2016a, 2016b).

Numerous studies have raised issues and challenges in relation to the provision of distance education in Bangladesh. For instance, diminishing enrolement figures, even in programs with initial high demand. Perceptions about DE in developing countries as second rate education and of limited social value have been proposed as possible reasons

(Aktaruzzaman, 2014; Kamal & Sultana, 2002; Rashid, Jahan, Islam, & Ratna, 2015). Even non-formal programs at BOU are not as popular as those offered through NGOs, as they are not considered to be as effectively conducted (Numan, Islam & Sadat, 2007). A recent study by Rashid et al. (2015) into the Diploma in Computer Science and Application (DCSA) attributed decreasing enrolment trends to a number of external and internal issues, which were quite telling. They included personal workload, difficulties in understanding course materials, lack of strategic direction, insufficient human resources, political influence and nepotism, delay in production and delivery of course materials, lack of monitoring and evaluation and absence of an executable policy formulation.

Issues related to lack of integrated curriculum in distance education was also raised by Vaz (2012), particularly in developing countries such as Bangladesh where the formal economy cannot offer large-scale job opportunities as required for its huge population. According to Islam (2011), less than 10% of aspirant students have the opportunity to undertake a Bachelor program in Bangladesh. The school leavers from Grade 10 and Grade 12 level (even at Grade 8 in many cases) make a living either in the informal economy, in foreign countries or in the country's large garments industry sector (Mia & Mian, 2004) and in these fields general education is perceived as providing very little for school leavers. Often, in the absence of opportunities and alternatives, unemployment problems can contribute to problems of terrorism and religious fundamentalism in some parts of the world (Aktaruzzaman, 2014). Vaz (2012) highlights the value of retaining students in education, through the provision of multiple pathways at these terminal stages and through integrating vocational elements within academic education in order to ease the transition from study to work.

Older technologies including radio, CD, audio-visual cassettes, and TV broadcasts are commonplace at BOU, as is reliance on traditional face-to-face teaching and print materials (Rashid & Rahman, 2010). Taylor (2001) and Moore and Kearsley (2005) described these as part of the 2.5th generational DE model, while what is required to improve the delivery of courses is the integration of both synchronous and asynchronous media (Islam & Selim, 2006). However, due to concomitant infrastructural and financial constraints, other possibilities include the use of a cheaper and interactive context of learning through the use of mobile phones, video and SMS based techniques (Shohel & Power, 2010), which have been found to be feasible, despite the lack of adoption of open educational resources at BOU (Anderson & Hatakka, 2010). While ICT limitation have not specifically featured in more recent studies, recommendations for improvements in the area have been suggested including extended duration of BOU programs through TV and radio, development of self-instructional and activity based course materials and improved linking with local institutions and online libraries for key resources (Islam & Ferdowsi, 2014; Sultana, Jahan & Numan, 2011).

A number of theoretical perspectives have been developed in relation to DE provision, which are outside the scope of this paper. However, in order to identify possible means of addressing some of the related issues, an all-inclusive theoretical framework in the form of ASTIDE model was proposed (Aktaruzzaman & Plunkett, 2016a), and is detailed in the following section.

THEORETICAL FRAMEWORK

In 1984, sociologist Giddens developed a theory of structuration, which is a social theory based on the concepts of structure and agents that create and reproduce a social system without offering either primacy. He suggested that within this theory, social life is viewed as "neither the experience of individual actors, nor the existence of any form of social totality but social practices ordered across space and time" (Giddens, 1984, p. 2). As such, Structuration Theory and its existing adaptations towards the information system field (DeSanctis & Poole, 1994; Orlikowski, 2000) provide a structure for determining the suitability of technology in promoting educational change. Within these theories, human action (e.g. learning practices) and its existing relationship with social structures (e.g.

pedagogical cultures) are core components, thereby providing a useful avenue for examining possible resolutions for issues raised in this study.

Despite adaptations to Structuration Theory relating to information systems, such as DeSanctis and Poole's (1994) 'Adaptive Structuration Theory' and Orlikowski's (2000) 'Technology in Practice', none adequately covered the complexity associated with DE provision in developing countries (Aktaruzzaman & Plunkett, 2016a). Similarly, theories relating to distance education (Gorsky, Caspi & Chajut, 2008; Moore, 1993) have not sufficiently reflected the focus of DE provision in developing countries, where sociological rather technological parameters particularly matter (Aktaruzzaman, 2014; Aktaruzzaman & Plunkett, 2016a, 2016b).

In response, a theoretical model was conceptualized, based on Giddens' (1984) Structuration Theory (ST) and its derivatives. The 'Adapting Structuration Theory In Distance Education (ASTIDE)' model (Aktaruzzaman & Plunkett, 2016a) is underpinned by the key constructs and modalities of ST, thereby providing a comprehensive theoretical framework for appropriate DE provision (Aktaruzzaman & Plunkett, 2016b). In the adapaptation process five triads were identified: (i) signification-interpretive scheme-communication (T1), (ii) domination-facility-power (T2), (iii) legitimation-norm-sanction (T3), (iv) structure-modality-interaction (T4), and (v) interpretive scheme-facility-norm (T5). Within this adapatation, the concepts of instruction, development, policies and practices, student success and technology perspectives, are then integrated into these triads respectively, as illustrated in Figure 1. The model was utilized in data analysis to address underlying challenges related to DE provision in Bangladesh.
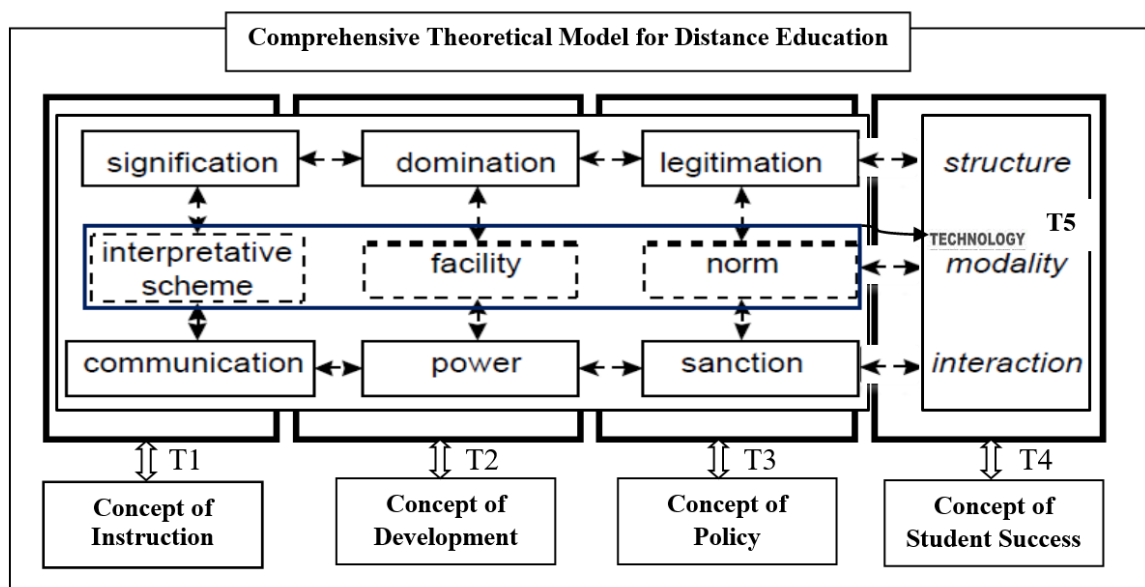

Figure 1. ASTIDE Model (Source: adapted from Giddens, 1984, p. 29)

While Giddens (1984) did not explain how to utilize ST in empirical research, he did highlight key operational constructs – norms, facilities and interpretive schemes in the 'duality of structure' of ST. Adaptations by Orlikowski (2000) and Halperin and Backhouse (2007) provided some methodological guidance, proposing the use of interviews, observations, focus group discussions and document collections as suitable for capturing norms, interpretive schemes and technological characteristics. As these data sources intuitively support Giddens' (1984) structurational process they were utilised in the study described in this paper.

METHODOLOGY

The initial task of developing a framework for Bangladesh inolved analysing the existing conditions of DE in the country and identifying related issues and challenges from different perspectives. It required the perceptions of different groups of people associated with DE including students, teacher-tutors, informed public, managers, senior academics and directors, in close consultation with the researcher. Therefore, a qualitative case study strategy was determined appropriate for gaining detail and rich insights into individual experiences of the world in context (Yin, 2014). In this study, the focus was on a sample of people with experience and understanding of the issue under investigation (Flick, 2007), therefore, purposive sampling, supplemented with snowballing was used (Patton, 2015). Five participants were thus obtained, named Senior Reference Group (SRG) members due to the senior positions they held in either top level administration or academe at BOU. For the Bangladeshi community, stratified purposeful sampling was utilized to select and populate four focus groups – male students, female students, teacher-tutors and informed public, with five members in each group. Semi-structured individual interviews of 30-45 minutes were conducted with each of the SRG members, often supplemented by provision of web or manual documents. FGDs were conducted with each of the Bangladeshi community groups with a duration of 45-60 minutes.

In this study the researcher transcribed all the individual interviews and FGDs, which were further reviewed by two of his senior colleagues. Then the transcripts were cross-checked by the supervisors to examine their accuracy against the voice recordings. Following transcription, interview participants were provided with the opportunity to accept and react to their own words. However, member checking was not conducted with the FGD participants due to the numbers involved and lack of access to email addresses. To ensure confidentiality, identification of participants was omitted and pseudonyms were used in accordance with approved ethics. Data were thematically analyzed using constant comparison and inductive analysis (Denzin & Lincoln, 2011) in NVivo to extract patterns and emergent themes. Representative quotes or commentaries from respondents were used to support the data analysis. To provide a trail of evidence for the study's reliability, a template with code manual was created through close examination of the research questions and interview or FGD questions. Then in consultation with the supervisors, the researcher invited an experienced colleague in qualitative research to do the same and after comparing the two, made minor modifications to the code template. Each of the individual and group interviews data was coded as case nodes in NVivo. Based on the research questions and through connecting the cased nodes, thematic nodes were identified and corroborated. The researcher used colleagues and supervisors for peer debriefing and found this process particularly valuable in the analysis of data. This study employed multiple cases, providing a form of triangulation, to make analytic generalization and to compare and collate evidence of different cases in order to satisfy external validity. An interview or FGD guide and a systematic process for recording, transcribing and interpreting data were also used to make the process transparent to key external informants reviewing draft reports. The ASTIDE theoretical model (Aktaruzzaman & Plunkett, 2016a, 2016b) was considered to address the DE issues and challenges in order to lay the groundwork for development of a framework of policies and practices for distance education in Bangladesh.

FINDINGS AND DISCUSSION

To identify the issues and challenges related to DE in Bangladesh, themes and subthemes emerging from discussions with the Bangladeshi community (BOU students, teacher-tutors and informed public members) were compared and collated with the information provided by SRG members from BOU. The major themes emerging from the juxtaposition of the two types of data collected through focus group discussion (FGD) and individual interviews were: flexibility and support, course materials and delivery, use of ICTs, integration of VET (Vocational Education and Training) into DE programs, and overall quality of DE programs and provisions at BOU.

Issues Emerging from FGDs/interviews with the Bangladeshi Participants

Pseudonyms were provided for the twenty FGD participants of the Bangladeshi community (13 of whom were male and 7 female) and five SRG members (all male), aged between 25 and 50+ years. The FGD participants were directly or indirectly involved with the ongoing distance education system operated by Bangladesh Open University. However, all SRG members held senior positions ranging from director to senior academics in different schools or faculties.

Flexibility and Support

The Bangladeshi community acknowledged the importance of the flexibility attached to DE as a core reason for engaging in DE programs. Apart from the classes attended once a week, learners are able to study while working and performing family duties, thereby enjoying the freedom to develop themselves and survive. One of the informed members of the public, Tuhin echoed this perception in the following way, "*The BOU program is ideally suited to those who have to stop their study due to different socio-economic circumstances. As the classes usually take place on Fridays (weekends in Bangladesh), people can continue education along with their respective work or job*". Similarly, a female student participant, Jayeda commented that, "*there is opportunity to continue education through distance education of BOU along with household works or job*". Sobur, a male student participant was particularly grateful for the opportunities associated with DE, stating, "*Many Bangladeshis cannot continue their education in the traditional system due to family or economic problems. BOU programs give us the opportunity*". Nawab, a tutor at BOU regional center also commented on the flexibility and its impact on the country, claiming, "*Bangladesh is a poor country ... It is often not possible for people to continue education in traditional system but BOU gives the opportunity to them*".

The SRG members similarly perceived the value of flexible options provided via DE and perceived that BOU had positioned itself as a bridge through which poorer citizens, the majority of whom live below the poverty line, are able to make positive contributions to the economy, as well as increasing the potential for productivity of those already employed, and with high educational standards (Aktaruzzaman, 2014). This was reflected in the following comments by senior academics; Mak stated that, "*BOU is the only university which can help this kind of people who are living at the bottom of the society. We are trying to bring them up...*", while Sarker added, "*our target is also to catch the in-service people and lifelong learners, who wish to continue updating their knowledge and skills throughout their life span*".

In terms of support, it was interesting that none of the Bangladeshi community, particularly students and tutors (n=15) raised the need for a support system, which would ultimately benefit them. While BOU has a Student Support Services (SSS) division, its functionalities are limited to registration, examinations and results. This represents a very limited support structure, as illustrated through the ASTIDE model's reflection of Giddens' (1984) concept of knowledgeability of agents. This is initially highlighted in the lack of policy frameworks developed by the institution, which defines what is acceptable and what is not. Additionally, tutors and university staff have inherent beliefs about what ought to be and as such, measure the anomalies through comparison with the assumed norms of a traditional higher education institution. Although the students considered the support issue as normal, this could be the result of a lack of awareness of possibilities within a DE institution. The world pioneer of distance education, the Open University UK (OU UK) promotes student support in its DE programs (Lentell, 2003; Tait, 2003). As such, BOU would benefit from incorporating a rigorous policy framework as outlined in the 3rd triad 'legitimation-norm-sanction' of the ASTIDE model, in order to provide a formal and reliable support structure for students, tutors at the study centers delivering lectures and for academics at the headquarters engaged in curriculum development and research.

Course Materials and Delivery

The male and female student groups (n =10) highlighted issues with the challenging content of texts, limited number of classes to complete a course and late arrival of

materials. The tutor group also questioned the appropriateness of course materials and number of classes for completion of course content. Jahangir, an English course teacher, commented that, "*The subject matter of the English course of Higher Secondary and Bachelor level of BOU is not appropriate for the students of that level and also not commensurate with their previous education. These subject matters should be revised in terms of familiar topics and practical orientation. The number of classes must be increased to cover the course materials*". Another tutor Raju acknowledged the ongoing trends of distance education in Bangladesh, stating that, "*the quantity (number of students) of BOU programs is increasing but not the quality*". The 'open for all' ideology promoted by BOU provides challenges for customising the content to learners given the diversity of abilities, resulting in the perception that the content is difficult and at graduation, learners may not have mastered it.

In contrast, the five SRG members all perceived the quality of what is taught and learned at BOU as generally good. The general perception was that programs and course development were strictly regulated to ensure quality, yet program/course reviews were not mentioned. Director of Training and Research, Alam, remarked that, "*the instructional materials and the courses are developed by expert writers in-house or outside…*". Mak, a senior academic, added that, "*In this team we include the teachers of different universities especially teachers from the Institute of Education and Research (IER), University of Dhaka and the good tutors of different study centers of BOU*". Another senior academic, Anis, explained, "*In developing course materials there are three teams involved – the writer, the editor and the reviewer. When the writing is complete, the editor will check whether it is written based on the curriculum, based on the distance education system and based on modular format. If he says ok, then we send these to the reviewers for their opinions. Finally, it goes to the printing section where graphics sections are developed differently using computers*". On the other hand, the SRG members partially acknowledged delays in the printing of course materials and their distribution. According to senior academic, Manwar, "*In small programs… there is no delay but in cases involving 30,000 students, there may be some delay due to complexities of the government offices in printing the huge number of materials*". Yet Sarker, who was a senior academic also undertaking further study, explained that, "*I am also a student of the BEd program of this university and have not got any materials up to now. The semester is going into the third month*".

However, renowned open universities like the Open University UK update course materials regularly and deliver courses in a range of interactive formats (e.g., mobile, online, print) to students on time (The OU UK Website, 2014). The ASTIDE model integrates Giddens (1984) notion that agents have the capability of repeating an action to the extent that it becomes organizational practice. This is what was reported as occurring at BOU. The Bangladeshi participants indicated 2-3 months as the usual delay in course material delivery and the absence of regular revision and updating of materials. Therefore, in order to emerge from the situation, new behaviour patterns are required such as those existing at the OU UK. Again, in the 1st triad 'signification-interpretive scheme-communication' of the ASTIDE model, Gorsky et al.'s (2008) focus is reflected in the intrapersonal dialogues (interaction between learner and subject matter through texts, TV/radio programs, simulations, tutorials and webinars) which modify and/or reproduce those embedded interpretive schemes in social systems (e.g. transmission structures of learning) as meaningful structures to facilitate learning. It suggests course materials are important and should include self-instructional and interactive components.

Use of ICTs in DE Programs
Community participants indicated a desire for integration of technologies such as smartphones and the Internet for accessing learning content and for computer knowledge being made available through DE. Female student Farzana, stated, "*We do not have computer subjects. If it is incorporated in the BOU program, then we can learn it well as we have to pass the examination. However, if we do the computer courses of 3 to 6 months outside, it is extra expenditure. In terms of jobs, it is always mentioned that applicants having computer knowledge will get preference. So I think computer courses must be*

introduced at different levels of the BOU program". Similarly, male student Asadul pointed out, "*Many students also have jobs. It is hard for them to find time to study printed books but if they have the learning content and modules in web and mobile based platforms, it will be really helpful to them*". It appears that BOU students perceive they have the readiness for integration of ICT into their programs and want it carried out through student support and more importantly through their tutors. Surprisingly, only one of five tutor participants, Jahangir, discussed the potential impact of ICTs in distance education, proposing that, "*ICTs should be added to every course of BOU as most of our students are professionals. So if they know how to operate computers, Internet and mobile phones. We can think of web and mobile based learning systems also*". It is interesting to note that the informed public members appeared to be more aware than tutors of the need for integration of ICT in DE.

Although several ICT initiatives had taken place at BOU in the last 10 years (2005-2015) with the assistance of local/international agencies, the SRG members acknowledged the limitations of ICT infrastructure and its practices at the university and its affiliated study centers across the country. Senior academic Sarker, highlighted how, "*In 2007 Bangladesh Virtual Classroom project (BVC) with mobile SMS technology was conducted by Swedish Agency, SPIDER but could not sustain*". A similar situation occurred with the Virtual Interactive Classroom (VIC) project by Korean agency KOIKA. This resonates with issues raised by Gronlund and Islam (2010) about sustainability and funding issues impacting on ICT development, such as with the BVC project, while the VIC project had stalled due to inadequate manpower and limited infrastructure at BOU. Senior academic Mak optimistically discussed the use of BIMS (BOU Information Management System), stating that, "*we have already developed software called BIMS. In this software we can upload all the things, all the information, all the results from anywhere in Bangladesh...kind of web based system*". However, WI-FI has not yet installed at BOU headquarters, which could be useful in facilitating the wider use of BIMS. Furthermore, the computer labs at the study centers belong to individual institutions, which are often equipped with mobile Internet, but there is no assurance that DE students are able to access the facility. While BOU is generally considered the only feasible option for educating and training the huge population of Bangladesh, the question remains, is BOU ready to accept the challenge?

It was evident from the discussions that some ICT resources are in place but not utilised due to insufficient human resources or inappropriateness in terms of student needs and the context. This suggests the need for examining both short-term and long-term policy development regarding ICT procurement, its integration with delivery methods, e-content repository and training and support systems at different levels for BOU staff. The above scenario primarily links into the ASTIDE model, which incorporates Giddens' (1984) view that in the process of structuration human agents build into technology certain interpretive schemes (how to use the technology in a meaningful way and whether prior knowledge on technology use is required), facilities (resources required for technology use such as physical equipment and support systems) and norms (institutionally sanctioned methods of technology use). More importantly, the ASTIDE model suggests rigorous policies (e.g. ICT policy, HR policy) and their implementation at different levels and with appropriate timeframes. This would need to be established through innovation, modernisation and if required, collation of policies and practices with local and international providers, which emerge from the 3rd triad 'legitimation-norm-sanction' of the ASTIDE model and are inherent in the practices of stable and renowned DE providers such as the OU UK (Aktaruzzaman & Plunkett, 2016a, 2016b).

Integration of VET into DE Programs

Employability was emphasised by Bangladeshi community participants. For instance, female student Jayeda pointed out that, "*...in BOU programs we read only theoretical aspects - if the practical things like computer, mechanical activities, etc. can be incorporated in the BOU program, its acceptability will definitely improve. VET education should be introduced in BOU programs*". Most female participants intended acquiring employment through completing DE programs, as highlighted by Doly's comment, "*if we

get this type of training at the local centers, we can do small and medium type of business sitting at home and at the same time take care of our children". Among the teacher-tutors, Jahangir supported integrating vocational courses in DE programs, stating, "*BOU programs are mainly syllabus based theoretical education. There is no vocational education and training courses available...Therefore VET can be introduced*". Similarly, informed public member Afroza suggested, "*practical oriented courses on home economics, child care or small business can be helpful for housewives".* The above discussion suggests the need of integrating VET into DE programs at BOU.

The SRG members were also positive about the integration of vocational components in DE programs in order to provide more inclusive and time-driven education to the community. Senior academic Anis explained, "*BOU has taken on the project to integrate vocational education with general education in the junior secondary (Grade 6-8) and secondary level (Grade 9-10) as the maximum number of students is dropping out on or before passing SSC (Grade 10). This project may help the early drop outs to be equipped with knowledge and skills including the programs of carpenting, weaving, tailoring, fish processing, etc. so that they can work in the garments and other sectors effectively and also get the opportunity to complete their education at the BOU*". This was supported by another academic, Mak's response, "*We do not have any programs for the people working abroad. But we have a plan to design this type of program. We have undertaken one project to train the garment workers. They are mostly poor females ... A special junior secondary program has been designed to include this kind of people*". However, without carefully formulated policy and its systematic implementation, such expansion may result in poor sustainability as occurred with other projects at BOU.

The emphasis of the participants on incorporating practically oriented courses in the BOU curriculum suggests that long-established structural changes would be required by BOU in its institutional policies and practices (Giddens, 1984). The change process can be explained at the individual and institutional level using the underlying propositions of the ASTIDE model. From the individual perspective, it is completely based on the individual agencies as to how they see the benefits of DE systems. The neo-humanist approach (Sein, 2005) of preparing oneself for the local job market and also Sen's (1999) work on individual freedom to make life choices, were reflected in the views of the participants. From the institutional perspective, political modernisation and policy innovation suggest renewal of policy making with the changing relationships between state, market and civil society, and day-to-day interactions between agents respectively (Arts & Van Tatenhove, 2004). This perspective suggests reform of the existing theory-based curriculum at BOU through incorporation of issues raised by concerned parties including integration of VET into the academic program. This would assist in developing regionally focused curricula, with the aim of engaging more local students and producing more skilled workers locally. From the data and literature, it would appear that this is what is required within Bangladeshi society.

Overall Quality of DE Programs and Provisions
Community perceptions towards DE programs and graduates are important in maintaining quality, yet within BOU even tutors have conflicting attitudes. While willing to teach DE classes, they often perceive the courses to be of lower quality compared to traditional programs. Female student Parvin, maintained, "*To improve distance education of BOU first we have to improve the attitude of the teacher-tutors who are taking our classes. They should respect us and our degrees*". Tutor Raju confirmed the existence of discrimination as, "*a true factor we have to admit*". Another student Jayeda added that DE students are often considered as, "*second class graduates*" while Doly perceived that, "*People in our society do not have any respect for the BOU graduates*". While problematic, this form of social discrimination can be addressed through the 2nd triad of the ASTIDE model 'domination-facility-power', by focusing on the human development approach (Sein & Harindranath, 2004). As Sen (1999) argues, through providing individuals with the opportunity to develop themselves to lead enjoyable lives, societal attitudes can be changed and this is what is required within Bangladeshi society. Recognition of the value

added to the lives of individuals through education, could change societal perceptions towards DE.

Another concern related to the time frames provided for covering the DE course content. According to teacher-tutor Jahangir, "*The course material is equal to the traditional education but the duration of the classes is very limited to complete the course. Only 20 classes we get to complete a subject which is not enough*". Another teacher-tutor, Nawab mentioned that, "*in case of BA programs, there are only eight classes per course … it is very hard for us to even touch each of the topics*". The majority of student participants also expressed concerns about the limitations of face-to-face offerings, where the syllabus was rarely completed. Often delays in supplying books or outdated course materials worsened the situation. It implies the expectation of the traditional teaching styles within the DE environment, which requires changes in beliefs and assumptions among all associated stakeholders. Giddens (1984) defines the structural changes in social practices, which is extended for DE by the ASTIDE model (Aktaruzzaman & Plunkett, 2016a), focusing on its 1st triad 'signification-interpretive scheme-communication'. This triad suggests interaction between different agents involved in DE to produce meaningful structures in order to change existing ones. Therefore, it would appear that the long-established transmission structure of teacher-centered learning currently perceived as part of BOU programing, needs to gradually shift to an interactive constructivist structure of student-centered learning in order to improve the overall quality of teaching and learning.

Tutor roles and training needs also play an important role in providing quality DE, particularly in developing countries. Although BOU is the standalone DE provider in Bangladesh, it basically employs general education teachers from affiliated high schools and colleges to teach DE students on weekends, after completing a heavy workload in their own respective institutions during the week. This was reflected in the comments of informed public member, Anwar, who completed a Bachelor degree from BOU, "*The teacher-tutors are usually busy for the whole week for their traditional classes …. So we cannot expect maximum support from them*". Surprisingly, none of the teacher-tutors commented on this point. As per the context of the developing countries, they either endure the workload for income or cannot deny the top management (Sarker & Alam, 2007). Apart from the workload of tutors, the other issue arising from having the same tutors teaching both conventional and DE programs is the difficulty of switching roles and teaching methods between the two programs. It implies the need for tutor training towards DE orientation at BOU, which is currently very limited according to academics Mak, "*training is there but not frequent…Centrally the university has no provision or do not offer this effectively right now*" and Sarker, "*We are giving very limited scale training to them - it is really negligible*". Evidence of a communication disconnect between tutors and administrators was also obvious. The consequence is that they are bound to revert to the methods they are most conversant with, which is the conventional system of instruction. Linking this to the underlying theory of the ASTIDE model, the concept of self-development, policies and the instructional design together explicate the requirements of a DE tutor in developing countries. Therefore, it is important that BOU focuses on providing appropriate training and adequate support for tutors. The role of tutors may need to be redefined with the incorporation of effective support structures.

The concerns driving the conflict in the perceptions of quality also include the admissions process and absenteeism. The issue of admission processes was reflected in the commentary of informed public member, Tuhin, who pronounced "*… I think the quality of distance education of BOU is very poor. There is no entry requirement for admission in BOU programs. So how can you maintain the quality?*". Regarding the absenteeism issue, tutor Nurul observed, "*there is a misconception among the students that if we get admission into BOU programs, we will pass. No need to attend any classes, we only have to attend the examinations.* This leads to graduates with questionable levels of competence and affects the general public perception towards BOU programs and graduates in Bangladesh. There was no mention by SRG participants of the presence of a rigorous quality assurance system through accreditation by national/international agencies at BOU, such as AACSB for

business programs, AMBA for MBA programs and ABET for engineering and technology programs.

SUGGESTIONS

Based on the data, the review of literature and context of developing countries, the following recommendations emerged as worthy of consideration by BOU:

> Structuring a comprehensive support system for students, teacher-tutors in study centers and academics at BOU headquarters appears to be critical for an effective DE system in Bangladesh. Regular training for tutors and academics needs to be prioritized.

> Incorporating universities in Bangladesh into the BOU operation with cross-institutional credit possibilities, could provide more dedication of BOU staff to research and development and more options for BOU students to obtain a degree from multiple institutions, thereby gaining better recognition in the community.

> A flexible option of study in terms of content delivery method (study center model/fully Internet based model/study at home model (traditional), institutions (university/degree colleges/BOU itself), and type of education (general/technical/integrated).

> Course materials that are self-instructional, interactive and up to date. Timely delivery of printed texts needs to be ensured alongside their availability in mobile/online formats through mobile apps or BOU website. ICT oriented courses could be introduced along with other foundation courses for students before entering any formal programs at BOU.

> Generating skills is important in the new global agenda of the 'green economy', where individuals from all walks of life and in all countries would concentrate on sustainable competencies for future workplace. Therefore reform needs to support convergence in content of general and vocational education aimed at new skills development through DE.

> The quality assurance and accreditation of DE programs appears to be a difficult task for individual institutions to handle, and therefore needs to be tackled at a broader, national and international level. It is a viable and cost-effective method to promote and strengthen cooperation and collaboration among institutions operating through DE such as Commonwealth Open School Association (COMOSA) in Commonwealth member states.

CONCLUSION

The study described in this paper investigated the distance education system in Bangladesh from the point of view of local Bangladeshi community and institutional representatives of BOU. The major themes/issues emerging from the juxtaposition of the data were: flexibility and support, course materials and delivery, use of ICTs, integration of VET into DE programs, and overall quality of DE programs and provisions at BOU. The ASTIDE theoretical model was used as an analytical tool to address the underlying issues of DE in Bangladesh, with findings suggesting that community perceptions differ from institional ones, though similarities were evidenced in some cases. A well-structured policy framework would be important in assisting with the implementation of the above recommendations in light of the propositions of the ASTIDE framework. Therefore, educationists and policy makers of developing countries need to develop an effective and sustainable DE system through incorporating community perceptions in the policy formulation process and associated practices that will help prepare developing countries like Bangladesh for the challenges of the 21st century.

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Semi-Structured Interview and Focus Group Discussion Guide

Individual interviews for Senior Academics and Directors from BOU:

The individual interviews will focus on existing condition of distance education in Bangladesh along with its historical development, mission and vision, and the role played by their institution towards promoting quality education at home and abroad. The interviews will explore the following topics and questions:

1. Can you give a brief description of the historical or chronological development of distance education in your country as well as your institution?
2. What is the role of your institution in promoting quality education at home and abroad?
3. What are the existing conditions of distance education in your institution in terms of
   a) infrastructural support;
   b) course construction and delivery;
   c) research and evaluation and
   d) overall management?
4. In your view what are the challenges that your institution face in developing innovative and creative practices with new information and communication technologies (ICTs)?
5. What are the missions and visions of your institution in promoting national and transnational distance education? Do you have any policy framework to materialize these objectives?

Focus group discussion for the Bangladeshi community:

The focus group is an opportunity for a group of BOU students, teacher-tutors and informed members of the public within Jhikargacha Thana of Jessore, Bangladesh to talk together about their views and the challenges they see as impacting distance education and its graduates in Bangladesh. The following topics and questions will be explored:

1. What do you know about the distance education program of the Bangladesh Open University (BOU)?
2. How do you perceive the quality of distance education in Bangladesh offered by BOU?
3. What do you think about the job prospects for distance education graduates in Bangladesh? Are they getting equal opportunities in the job selection?
4. What do you think about the social value of distance education graduates? What type of recognition does their degree get in society?
5. How do you think distance education in Bangladesh can be improved?

In addition to the above questions,
- The students group will be asked a number of questions on their courses, teacher support, examination and grading and use of ICTs in their program.