Learners' Perceptions about Teaching Methods and Technological status in Bangladesh, India and Nepal: Policy Recommendations for Bangladesh Open University

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Abstract

This study has been conducted on learners, teachers and academic officials from open universities of Bangladesh, India and Nepal. Both the qualitative and quantitative methods have been used for collecting different types of data and information. Content analysis, Focus Group Discussion (FGD) and Key Informant Interview (KII) have been conducted for collecting qualitative data and moreover, survey has been conducted on randomly selected 120 learners, academics, officials. The respondents have been interviewed by using a survey questionnaire for collecting quantitative data. The study found that the ODL institutions of these three countries have their own methods and techniques which are technology enabled and has converted to ICT based learning in recent years. Bangladesh, India and Nepal all are using ICT in ODL. Simultaneously they are practicing face to face tutorial service also. Therefore, this study suggested that monitoring the system of tutorial services, study material must be delivered before starting the tutorial class. BOU can open the process of printing and marketing their SLM through enlisted vendors, a central repository (like e-GyanKosh of IGNOU) can be developed with all SLMs of BOU under OER initiative. BOU can start 'on-demand examination' like NIOS, ensure e-books for all courses of all programmes, strengthen mobile phone learning, SD cards, apps, SMS service should be practiced, automation or online service must be enhanced, complain management, name or any other information correction, all sorts of bill payment should be digitalized, set up own TV channel (at least Youtube channel) for BOU's education and IVCR and use of multimedia in classroom should be strengthened.

KEYWORDS: *Teaching methods, Technology, ODL, Learner, Policy.*

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The ODL (Open and Distance Learning) method is very familiar in Bangladesh, India and Nepal. The distance education institutions (Bangladesh Open University in Bangladesh, Indira Gandhi National Open University & National Institute of Open Schooling in India and International Center for Academics and National Center for Educational Development in Nepal) of these three countries deliver education and educational materials to their learners through various technology oriented media. Such as, these institutions use face to face and online methods in delivering the lectures which also broadcast in national TV and Radio channels. To lead the country forward and to ensure the optimum development of the country by creating good citizens, education for all is a must (Mian & Hossain, 2005). Global requirement of knowledge in rapid changing situation is not easy to meet due to the changes in world economy. However, the expansion, access, equity and cost-effectiveness of conventional education systems are limited to sufficient infrastructural facilities which need to provide education and training at all levels (Matubber and Rahman, 2005). So, for the large population of Bangladesh technology based education is must. Sometimes the open universities of Bangladesh, India and Nepal use different methods and technologies in delivering education to their learners. For example, the open universities these countries use e-books, audio-visual lectures etc, for delivering education. Moreover, Indira Gandhi National Open University (IGNOU) of India broadcast their education on two educational channels Gyanbani and GyanDhara and this university has a national digital repository namely e-Gyankosh. As an overseas study centre of IGNOU, International Center for Academics (ICA) in Nepal also uses the channels and repository. For providing that facilities Bangladesh Open University broadcast its audio-visual lecture on Bangladesh Television, Bangladesh Betar, BOU WebTV, BOU Web Radio, BOU Tube and Youtube. Therefore, this study is very important for Bangladesh Open University (BOU) for making better option for methods and technologies in delivering education and to implement it effectively.

JUSTIFICATION OF THE STUDY

The open and distance learning deliver education through a country wide network in India as like in Nepal and Bangladesh. Among the three countries the land boundary of India is huge with a large number of population. So, it is quite tough to incorporate education for mass people due to the verities in socio-cultural and geographical location. On the other hand, Nepal is another country for this study which has a vast land with all through hilly areas that makes communication and transportation system hard. As,

the open and distance learning saves times, money and energy, India and Nepal use many techniques and technologies in delivering education for their unreached people. The present study is important for Bangladesh because of searching the techniques and technologies of India and Nepal for delivering education which will be applicable for Bangladesh. Although, Bangladesh Open University uses several techniques and technologies for delivering education, but the mixture of techniques and technologies of India and Nepal helps to modify the policies of open and distance learning in Bangladesh.

REVIEW OF LITERATURE

Bast (2021) used eight independent variables such as, gender, religion, electronic devices, household type, age, academic institute, economic background, and technology acceptance to identify learners' perception on online learning in the article titled "Perception of Online Learning among Students from India Set against the Pandemic." The most significant finding of this study was that the learner acceptance of technology from urban area was higher than the learners from rural area in India. Pangeni (2016) stated that although the national education system of Nepal is dominating by face-to-face but the open education system is becoming popular through online learning day by day in the article titled "Open and Distance Learning: Cultural Practices in Nepal." The author expressed the need the open and distance learning in Nepal by establishing Open University as the popularity of ODL through online learning is increasing day by day.

Rahman (2006) discussed Brahmawong's (1998) four different stages of the development of course materials for the distance learners in his article titled "Developing Course Materials for Open and Distance Learning: BOU Perspective". However, these four stages such as preplanning stage, planning stage, authoring stage, and production stage for development of ODL's study materials while the author discussed Brahmawong's self-pretest, advance organizer, body of content, activities, feedback and self-post-test with keys as six components of distance learning materials. In this article the author also discussed coordinator, authors, referee, instructional designers, editors (structural and style editor), graphic artists, and media specialists as the member of course development team. Rahman's article is only focused on the development of ODL materials. The author did not mention the delivering system or technologies that would be used in open and distance learning.

Rahman, et., al. (2018) assessed the learners' attitude towards the lesson structure while the self-learning materials are different from normal text materials, learners' attitude towards with subject matter as Bangladesh Open University follows some principles for the development of the content, learners' attitude toward self-assessed questions. The article of Rahman et., al. only focused on the quality of the self-learning materials while the authors did conduct a quantitative research by questionnaire based on 5 point Likert Scale to examine the attitude and perception on the quality of self-learning of the distance learners of Bangladesh Open University.

Maijo (2021) explored the learners' perception and preparation of open and distance learning in the Tanzania in the article titled "Learners' Perception and Preference of Open and Distance Learning Mode at the Institute of Adult Education, Tanzania. The author found positive perception of the learners towards open and distance learning while they were relaxed with learners support services and the content of the modules, they were also pleased with the face-to-face session of ODL. However, the author recommended the OLD stakeholder to design and implement effective academic program for the learner of ODL. Parvin (2017) identified the suitable technology for developing a virtual interactive teachers' program for the disadvantaged English teachers of Bangladesh. The secondary level English teachers, B.Ed tutors, BOU teachers' accessibility and acceptability of ICT and their need were assessed in her article. The researcher found that the most of the respondent had the accessibility in TV and mobile phone and suggested that BOU need to take the challenge to offer virtual interactive teacher training program to train the disadvantaged unreached English teachers. However, the above article of Parvin did not identify the technologies of the delivering ODL materials to the learners and even there is no comparative analysis among any stakeholder.

Rashid & Rahman (2010) mentioned that BOU provides mixed-media packages which combine printed course materials with audio-visual cassettes which are of self-directed study to enable students to understand course content without the help of tutors. The authors mentioned that although the print media is important for delivery course content to the learners but there are deficiencies in delivering and in understanding of course content by the learners. This article mentioned about the delivery mechanism of content through audio-visual cassettes while it did not mention other technologies such as social media, SD cards, CD cards etc. for delivering materials. Islam, M. T. et., al. (2006) said about the process of selecting academic programs and development

of curricula. The authors also said that the universities are adopted the technologies those are easier to reach their distance learners that authors mentioned. The authors coded that BOU is using print material, television, radio, audiocassettes and occasional face-to-face tutoring to teach its learners (Islam et al., 2004). The author also explain the delivering technologies of education and they did not compare the delivering technology to other country or institute.

The academic staff of Bangladesh Open University has conducted some works on e-learning, online learning, learner's enrollment and drop out, student support services, learner's socio-economic condition, tutoring methods, using technologies/ICT in ODL etc. But as far we know there is no work related to the topic.

OBJECTIVES OF THE STUDY

The broader objective of this study was to discuss learner's perception regarding teaching methods and their status on delivering technologies for ODL in Bangladesh, India and Nepal. The Specific objectives of the study were:

1. to explore respondents' perceptions on delivering methods and technologies;
2. to analyze the respondents' status on digital devices, internet connectivity and learning;
3. to find out the methods and technologies for delivering education and
4. to recommend policies for Open and Distance Learning in Bangladesh

METHODOLOGY

This study has been conducted on learners, teachers and academic officials from open universities of Bangladesh, India and Nepal. Content analysis, Focus Group Discussion (FGD) and Key Informant Interview (KII) have been conducted by using checklist for collecting qualitative data. Moreover, a survey has been conducted through semi structured survey questionnaire on randomly selected 120 learners, academics, teachers and tutors of different open and distance learning institutes of Bangladesh, India and Nepal namely Bangladesh Open University (BOU), Indira Gandhi National Open University (IGNOU), Delhi; National Institute of Open Schooling (NIOS), Uttar Pradesh, India and International Center for Academics, Nepal (an overseas study center of IGNOU) and National Center for Educational Development, Nepal as respondents. Secondary data has been collected by reviewing related documents, books, research papers, articles, seminar findings, conference proceedings, periodicals, internet/

website, social media (Facebook, Twitter, and Youtube etc.), Leaflet, Brochure etc. Both qualitative and quantitative data were collected. Among the 120 respondents 40 from India (20 from IGNOU and 20 from NIOS), 40 from Nepal and 40 from Bangladesh. The respondents were selected purposively from three countries. The data has been collected from the mentioned respondents through face-to-face interview by travelling to India and Nepal. The academics and other supporting staffs helped to collect data from respective institutes of India and Nepal. The first visit was to Nepal for data collection and then India and finally in Bangladesh.

FINDINGS AND ANALYSIS

Socio-economic Background of the Respondents

Among the respondents of Bangladesh, India and Nepal about 51.7 percent was male followed by 46.7 percent female and 1.7 transgender. The highest 21.7 percent respondents' age were between 21-25 years followed by 20.8 percent respondents' age were between 26-30 years, 12.5 percent respondents' age were between 16-20 years, 11.7 percent respondents' age were between 36-40 years. On the other hand, 10.8 percent respondents' age were between 41-45 years and another 10.8 percent respondents' age were between 51-55 years followed by 5.8 percent respondents' age were between 31-35 years and another 5.8 percent respondents' age were between 56-60 years. The majority 55.8 percent of the respondents were married whereas 35 percent were unmarried followed by 4.2 percent were separated, 2.5 percent were divorced and another 2.5 percent were widow and widower among the all respondents from Bangladesh, India and Nepal. Among the respondents, 30 percent were enrolled in HSC program or equivalent, 20 percent were enrolled in SSC program or equivalent, 20 percent were enrolled in graduate level program, 20 percent were enrolled in post-graduate level program and rest 10 percent were enrolled in diploma program. The highest 20 percent of the respondents' occupations were housewife followed by 15 percent student another 15 percent were unemployed and 15 percent respondents' occupation were pretty business. On the other hand, 10 percent respondents' occupation were big business followed by 10 percent respondents' occupations were teaching, 5 percent government service holder and another 5 percent non-governmental service holder and rest 5 percent engaged in agriculture. Among the respondents, 60 percent followed Hinduism, 25 percent Islam, 10 percent Buddhism and rest 6 percent Christianity.

Objective 1 - to explore respondents' perceptions on delivering methods and technologies

The Table 1 depicts that 87 percent of the respondents of India read the topics before attending tutorial classes compared to 75 percent of the respondents of Nepal and 40 percent respondents of Bangladesh. The highest 83 percent of the respondents of Nepal asked question to tutors in the tutorial class compared to 79 percent of the respondents of India and 51 percent respondents of Bangladesh. About 78 percent of the respondents of Nepal attended in the tutorial classes compared to 73 percent of the respondents of India and 46 percent respondents of Bangladesh. The Table also shows that 40 percent of the respondents of India said that their tutors just delivered the lecture in the tutorial classes compared to 43 percent of the respondents of Nepal and 73 percent of the respondents of Bangladesh. The highest (76%) of the respondents of India mentioned that the tutors solved the exercise of the SLMs in the tutorial classes compared to 72 percent of the respondents of Nepal and 42 percent respondents of Bangladesh. The majority (95%) of the respondents of Nepal cited that the tutors took initiatives for the assessment of the respondents compared to 91 percent of the respondents of India and 49 percent respondents of Bangladesh. About 84 percent of the respondents of Nepal said that the tutors made hard topics easier in the tutorial classes compared to 78 percent of the respondents of India and 70 percent respondents of Bangladesh. Moreover, 90 percent of the respondents of Nepal quoted that the tutors responded to queries in the tutorial classes compared to 85 percent of the respondents of India and 73 percent respondents of Bangladesh. About 89 percent of the respondents of India mentioned that tutors suggested the respondents for watching media program and read the study materials compared to 81 percent of the respondents of Nepal and 70 percent respondents of Bangladesh. The majority (90%) of the respondents of India said that the SLMs were tutorial classes compared to 84 percent of the respondents of Nepal and 64 percent respondents of Bangladesh. On the other hand, 93 percent of the respondents of Nepal mentioned that they were satisfied about teaching method and tutorial classes.

**Table-1: Percentage distribution of respondents'
perceptions on delivering methods and technologies**

Items	Bangladesh (%)			India (%)			Nepal (%)		
	Yes	No	Neutral	Yes	No	Neutral	Yes	No	Neutral
Reading topics before attend tutorial class	40	57	3	87	10	3	75	20	5
Asking question to tutors in the tutorial class	51	35	14	79	11	10	83	4	9
Attending in the tutorial classes	46	12	42	73	16	11	78	14	8
Tutors' only deliver lecture in the tutorial classes	70	23	7	40	55	05	43	50	7
Solving exercise of the SLMs in the tutorial classes	42	53	5	76	10	14	72	14	14
Taking initiatives for the assessment of the learners by tutors	49	43	8	91	2	7	95	0	5
Making hard topics easier in the tutorial classes	70	25	5	78	15	7	84	10	6
The tutor response to queries in the tutorial classes	73	7	20	85	10	5	90	3	7
Tutors suggest for watching media program and read study materials	70	7	23	89	3	8	81	9	10
SLMs are tutorial classes	51	39	10	90	9	1	84	14	2
Teaching method and tutorial classes satisfied learners	64	29	7	82	10	8	93	5	2

Objective 2 - to explore respondents' perceptions on delivering methods and technologies

The Table 2 shows that the highest 70 percent of the respondents from Bangladesh have android mobile phone set whereas 68 percent of the respondents from India have android mobile phone set and 60 percent of the respondents from Nepal have android mobile phone set. The highest 68 percent of the respondents from Bangladesh have internet connectivity in their android mobile phone set compared to 58 percent of the respondents from India and 51 percent of the respondents from Nepal. The highest 49 percent of the respondents from Nepal had laptop compared to 45 percent of the respondents from India had laptop and 43 percent of the respondents from Bangladesh had laptop. 40 percent of the respondents from Bangladesh have internet connectivity in their laptop compared to 39 percent of the respondents from India and 32 percent of the respondents from Nepal had internet connectivity in their laptop. The highest 50 percent of the respondents from Nepal have tab compared to 44 percent of the respondents from India have tab and 31 percent of the respondents from Bangladesh have tab. 45 percent of the respondents from Nepal have internet connectivity in their tab compared to 43 percent of the respondents from India and 30 percent of the respondents from Bangladesh have internet connectivity in their tab. The majority (83%) of the respondents from India use internet for their learning purpose compared to 78 percent of the respondents from Nepal used internet for learning purpose and 53 percent of the respondents from Bangladesh use internet for their learning purpose.

Table-2: Percentage distribution of respondents'
by digital devices, internet connectivity and learning

Statement	Bangladesh (%)		India (%)		Nepal (%)	
	Yes	No	Yes	No	Yes	No
Having android mobile phone	70	30	68	32	60	40
Having internet connection into phone	68	32	58	42	51	49
Having laptop	43	57	45	55	49	51
Having internet connection into laptop	40	60	39	61	32	68
Having tab	31	69	44	56	50	50
Having internet connection into tab	30	70	43	57	45	55
Using internet for learning purpose	62	38	83	17	78	22

Bar chart showing percentages for India, Nepal, and Bangladesh across categories:

- Having android mobile phone: India 68%, Nepal 60%, Bangladesh 70%
- Having internet connection into phone: India 58%, Nepal 51%, Bangladesh 68%
- Having laptop: India 45%, Nepal 49%, Bangladesh 43%
- Having internet connection into laptop: India 39%, Nepal 32%, Bangladesh 40%
- Having tab: India 44%, Nepal 50%, Bangladesh 31%
- Having internet connection into tab: India 43%, Nepal 45%, Bangladesh 30%
- Using internet for learning purpose: India 83%, Nepal 78%, Bangladesh 62%
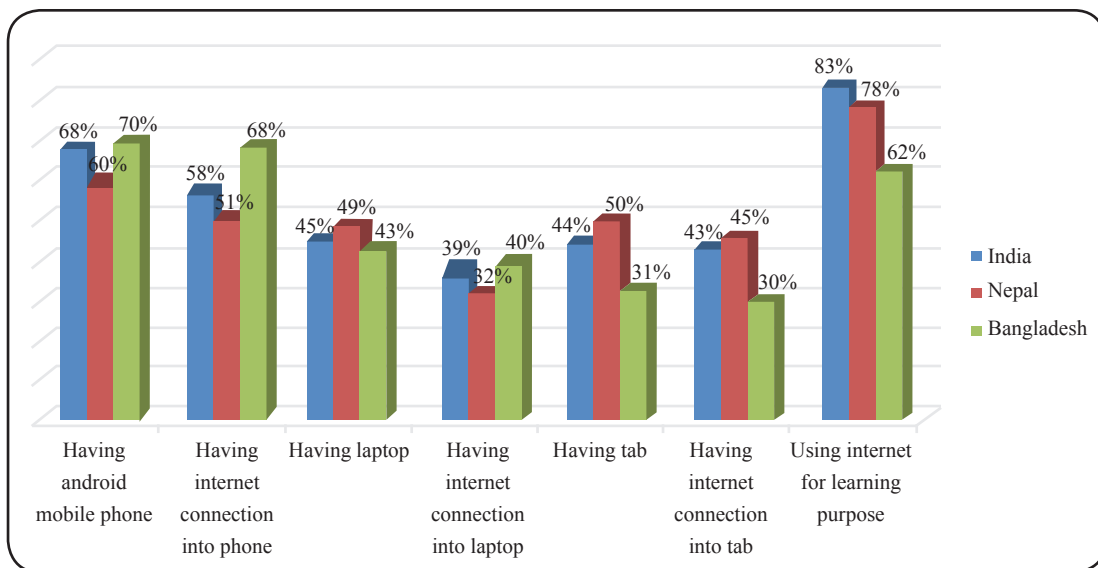
Figure 1: Respondents' status on digital devices, internet connectivity and learning

Objective 3 - to find out the methods and technologies for delivering education

The Table-3 shows that highlights that the majority (92%) of the respondents said that their institute followed face to face (F2F) method for delivering education compared to 90 percent of the respondents of India and 87 percent of the respondents of Nepal. On the other hand, the majority 98 percent of the respondents of India said that their institute used SLMs for delivering education compared to 91 percent of the respondents of Nepal and 85 percent of the respondents of Bangladesh. The highest 53 percent of the respondents of India said that their institute used CDs containing lecture for delivering education compared to 45 percent of the respondents of Nepal and 20 percent of the respondents of Bangladesh. The majority (98%) of the respondents of India did mention that they watched broadcasted lecture on national television and national radio compared to 95 percent of the respondents of Nepal and 75 percent of the respondents of Bangladesh. Moreover, about 83 percent of the respondents of India said that their institute used e-books for delivering study materials compared to 74 percent of the respondents of Nepal and 61 percent of the respondents of Bangladesh. The majority (86%) of the respondents of India cited that the institute used social media for delivering education compared to 59 percent of the respondents of Nepal and 48 percent of the respondents of Bangladesh. The highest (58%) of the respondents of Nepal quoted that the institute used SD card containing lecture compared to 45 percent of the respondents of India and 13 percent of the respondents of Bangladesh. On the other hand, 71 percent of the respondents of India mentioned that multimedia has been

used in the class lecture compared to 64 percent of the respondents of Nepal and 16 percent of the respondents of Bangladesh.

Table-3: Percentage distribution of the respondents'
by methods and technologies for delivering education

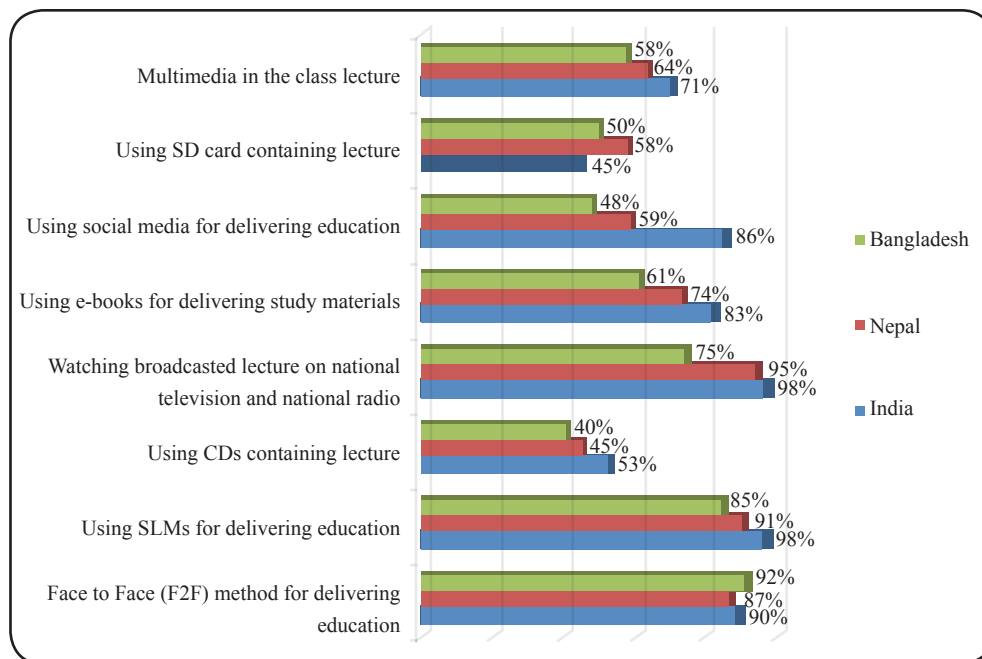| Methods and Technologies	Bangladesh (%)			India (%)			Nepal (%)		
	Yes	No	Neutral	Yes	No	Neutral	Yes	No	Neutral
Face to Face (F2F) method for delivering education	92	3	5	90	2	8	87	7	6
Using SLMs for delivering education	85	--	15	98	--	5	91	--	9
Using CDs containing lecture	40	30	30	53	7	40	45	10	45
Watching broadcasted lecture on national television and national radio	75	--	25	98	--	2	95	--	5
Using e-books for delivering study materials	61	19	20	83	7	10	74	12	14
Using social media for delivering education	48	50	2	86	10	4	59	35	6
Using SD card containing lecture	50	10	40	45	9	46	58	12	30
Multimedia in the class lecture	58	15	27	71	9	20	64	16	20

Figure-2: Methods and technologies for delivering education

Objective 4 - to recommend policies for Open and Distance Learning in Bangladesh.

Bangladesh, India and Nepal are operating their ODL in their own context. Their methods and technologies regarding ODL are effective and fruitful. There are many similarities among the methods and technologies in delivering education of these countries. But in some cases, there are many scopes of practicing quality ODL system in Bangladesh. BOU should given rigorous attention to monitoring system in tutorial class, e-book, media programme, vocational education etc. Thousands of students are engaged in ODL system in the country. To create skill manpower, diminish the unemployment, eradicate poverty and finally achieve the goals of sustainable development quality education is must. The following recommendations would be supportive for quality open and distance learning in Bangladesh.

(i)   Ensure monitoring and supervision in tutorial services.

(ii)   Study material must be delivered before starting the tutorial class.

(iii)   A central repository (like e-GyanKosh of IGNOU) can be developed with all SLMs of BOU under OER initiative.

(iv)   BOU can start 'on-demand examination' like NIOS.

(v)   Ensure e-books for all courses of all programmes.

(vi) Strengthen mobile phone learning. SD cards, apps, SMS service should be practiced.

(vii) Automation or online service must be enhanced. Complain management, name or any other information correction, all sorts of bill payment should be digitalized.

(viii) Now the time to operate own TV/Video channel by BOU. So, need own TV channel (at least youtube channel) for BOU's education.

(ix) Use of multimedia in classroom should be strengthened.

(x) Vocational programme should be started.

In this circumstance, the researchers have recommended some policies for betterment of ODL of Bangladesh Open University. These are as follows:

CONCLUSIONS

Open and Distance Learning (ODL) is a flexible teaching-learning process. It has own methods and techniques. ODL is technology enabled learning also. It has converted to ICT based learning in recent years. Bangladesh, India and Nepal all are using ICT in ODL. Simultaneously they are practicing face to face tutorial service also. According to the research-information, India and Nepal are almost in similar position in many cases i.e. tutorial service, use of ICT in learning purpose etc. But Bangladesh is in backward position comparison with India and Nepal. There are many scopes of improvement regarding tutorial service in BOU. A significant number of the learners use android mobile phone, laptop, tab, internet connectivity etc. But many of them don't use it for their learning purpose. Most of the learners depend on face to face method of education.

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