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Analyzed-vis-à-vis Assessed-Tasks: the Case of Ethiopian Health Professionals' Licensure Examination Development Process

Firdissa Jebessa Aga, PhD¹

Abstract

The study assessed the extent to which the results of task analysis were- used for blue print/curricula content review, amendment, and necessary adjustments and/or-incorporated into the curricula from which learning outcomes were derived. In addressing the aim, exclusively a qualitative method was used. Data were generated by reviewing relevant documents and conducting interviews with five test development professionals: 3 from Ministry of Health (MOH) and 2 from Addis Ababa University (AAU), Ethiopia. The results have shown that there were timing, claimed, and implementation-inconsistencies. Irregularities were also observed in listing the components to be assessed-as some (sections) of the MOH documents give knowledge, skills, and attitude, and others give just cognitive domain hierarchies. Furthermore, no consistent efforts were made to incorporate task analysis results into the curricula from which assessed learning outcomes were derived as the basis for exam development. Based on the results, it has been concluded that there were very little conscious efforts to assess the tasks analyzed. The effectiveness of the task analysis and its pragmatic implementation was, therefore, questionable. By implication, a long way is left to walk the talk, i.e. putting the provisions and promises within the MOH documents into action.

Keywords: *Task analysis, Tasks Assessed, Health Profession, Licensure Examination, Exam blue print*

1. Introduction

The current global trend demands producing competent health professionals endowed with relevant knowledge, skills, and attitudes. At the front-line of health care and services, they “are clinicians, health managers and other health professionals who are intimately familiar with the needs of patients and the realities of the system’s operations” (WHO, 2015:1). It is a common day awareness that “[s]imply training and graduating more health

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professionals” does not guarantee health care and services delivery that meet patients’ needs (WHO, 2013:11). The graduates should possess appropriate competencies that enable them to respond to the demands of patients, employers, and the society. The health workforce (HWF) competencies, therefore, need to be analyzed, identified and incorporated into the blueprint/curricula of medical education programs and assessed accordingly. Though there is “no single accepted definition of HWF competencies”, (WHO, 2015:3) has defined it “as the essential complex knowledge based acts that combine and mobilize knowledge, skills, and attitudes with the existing and available resources to ensure safe and quality outcomes for patients and populations”. Inherent with this definition are six key features namely: competencies take time to acquire; they inform recruitment, evaluation and training; they are measurable; they must be flexible; they are not only clinical-technical skills; and they unite HWF (WHO, 2015).

By implication, acquiring competencies is not a simple task. As WHO (2015) further indicates, it takes time passing through several levels of proficiency ranging from novice to expert. They also serve to inform standards—and consequently they are made known to HWF upon entry to master them and get assessed. Assessments of competencies focus on improving the competency rather than on penalizing the lack of achievement of a certain level of competency. The assessments of competencies lead to licensures, which is a process whereby concerned regulatory bodies determine the fitness of HWF for certain health care and services delivery. The licensures enable the licensees to comply with regulator’s statutes, standards, and regulations (WHO, 2013). The fact that competencies serve to inform standards, does not preclude them to be flexible and “to be improved based on the changing nature of patient and population needs” (WHO, 2015). Competencies also go beyond medical-technical skills and include “soft skills: communication, collaboration, working in teams”; which in turn “guide the choice of tools to strengthen them” (Ibid). Finally, competencies of health professionals are different from that of other disciplines and/or professionals. It is also common that there are variations among professional groups within a profession. For instance, the competencies of nurses are different from those of pharmacists. There are, however, assessed competencies that can unify and facilitate collaboration of the HWF to guarantee “quality and socially responsible care” (WHO, 2015:4).

Regardless of their varying specialties/disciplines, therefore, HWF need to be versed in: *providing patient-centered care, working in interdisciplinary teams, employing evidence-based practice, applying quality improvement, and utilizing informatics* (Health. nd.). Health (nd.) has further explicated (see below) these core competencies that enable HWF meet the needs of the 21st-century health care system.

- 1) ***Provide patient-centered care:*** identify, respect, and care about patients' differences, values, preferences, and expressed needs; relieve pain and suffering; coordinate continuous care; listen to, clearly inform, communicate with, and educate patients; share decision making and management; and continuously advocate disease prevention, wellness, and promotion of healthy lifestyles, including a focus on population health.
- 2) ***Work in interdisciplinary teams:*** cooperate, collaborate, communicate, and integrate care in teams to ensure that care is continuous and reliable.
- 3) ***Employ evidence-based practice:*** integrate best research with clinical expertise and patient values for optimum care, and participate in learning and research activities to the extent feasible.
- 4) ***Apply quality improvement:*** identify errors and hazards in care; understand and implement basic safety design principles, such as standardization and simplification; continually understand and measure quality of care in terms of structure, process, and outcomes in relation to patient and community needs; design and test interventions to change processes and systems of care, with the objective of improving quality.
- 5) ***Utilize informatics:*** communicate, manage knowledge, mitigate error, and support decision making using information technology.

These core competencies are regularly identified, analyzed, and documented at the stage of task/ job analysis so as to feed into curricula contents and learning outcomes and guide exam development magnitude, scope, and level of difficulty. The WHO's plea for quality health care and services by competent health professionals, has revitalized the need for transforming health professionals' preparations, certifications and licensures vis-à-vis the world standard. This has humbly been attended by different countries to put in place "licensure exam for independent verification of competence and fitness to practice prior to granting a license" (MOH, 2019b:1). The Ethiopian Federal Ministry of Health (MOH) has also launched a licensure exam since July 2015. The initiative is in line with the World standard and the country's commitment to provide quality health care and services to the Ethiopian people. The initiative is expected to address: 1) Ethiopia's wide gap of health professionals compared to the WHO standard, 2) the quality of Health education in general and teaching and learning process in particular, and 3) collaboration and participation of different stakeholders towards the health care and services provided by professionals (MOH, 2019a).

The licensing exam includes both written- multiple choice questions (MCQ) and performance assessments-objective structured

clinical examination (OSCE) both of which could last at least half a day for each candidate. Preferably the MCQ shall precede the OSCE (MOH,2019b:9, 10). Consequently, 1) institutional and structural arrangements have been put in place, 2) a series of deliberations have been made with pertinent stakeholders, 3) experiences of different examining institutions in- and outside of- the country have been solicited, 4) experts from different higher teaching institutions and Jhpiego¹-Ethiopia have been involved, and 5) different documents have been prepared to facilitate communications and transparency for effective exam development, and implementation processes and strengthen sustainability (MOH, 2019a).

Six basic of the documents developed include: 1) Exam Development Manual, 2) Implementation Guideline, 3) Candidates' Manual, 4) Exam Administration Manual, 5) Examiner Manual, and 6) Registrar Manual. The first manual, *Exam Development Manual*, serves as a springboard for introducing the principles of defining and maintaining standards in health sciences education. It outlines the objective; exam development/preparation roles, responsibilities, phase, processes, and security issues (MOH, 2019a). The *Implementation Guideline*, which has three sections (exam development, exam administration and management, and monitoring and evaluation), outlines the purpose, timing, means of maintaining consistency, and the formats in support of the overall development and implementation process of exams (MOH, 2019b). The *Candidates' Manual* provides general and specific information about exam center and important preconditions, rights and responsibilities-before, during, and after exam, followed by a number of appendices and formats (MOH, 2019c). The *Exam Administration Manual*, which has the purpose of guiding effective implementation of exam administration, outlines flow chart; pre-, during-, and post-exam administration activities; ratification of examinee results; handling complaints and appeals; giving feedback and reporting; discarding exam materials; means of quality assurance; and describing of roles and responsibilities of exam team followed by a number of appendices that give additional information and communication (MOH, 2019d). The *Examiner Manual* provides effective guidance to the examiner; and description of roles and responsibilities, code of conduct, and accountability (MOH, 2019e). Finally, the *Registrar Manual* provides directions regarding registration, documentation, communication, certification, and authentication processes for effective and efficient implementation of the Exam. It outlines roles and responsibilities of the registrar case team; releasing results and handling appeals; documentation and certification; communication; and ethical conduct followed by a number of appendices (MOH, 2019f). Supported by these documents, the

¹ Johns Hopkins Program for International Education in Gynecology and Obstetrics; which is an international non-profit health organization affiliated with Johns Hopkins University.

licensure exam development process consists of six basic steps namely: task/job analysis, exam blueprinting, exam items development, reviewing and validating exam items, assembling and field testing exam items, and standard setting (MOH, 2019b).

1.1 The Rationale of the Study

The rationale for why this study was conducted emanates from different apprehensions both globally as well as locally. Globally, there are worries about “health workforce crisis in 57 countries” (WHO, 2013:1). This is a critical shortage equivalent to a global deficit of 2.4 million doctors, nurses and midwives which by implication suggests millions of people worldwide who do not receive the essential health care and services that are desperately needed (WHO, 2013:11). Moreover, low quality, maldistribution, imbalance in skill mix of teams and uneven geographical distribution of health professionals has left millions without access to health care and services (WHO, 2013). This then have “led to the need to rapidly and effectively increase the number of registered health professionals” (WHO, 2013:39) as a result of which different countries have committed to increase the number of health professionals and to put in place licensure exams.

The Ethiopia government’s efforts to “increase the number of health professionals by: 1) increasing the intake capacity of available- and opening new-public health education institutions, and 2) accrediting private health education institutions have contributed to reduce the gap the country had compared to the WHO standard of health professionals to population ratio for developing countries. There, however, are still increasing public demands and concerns regarding the: 1) quality of health services, education teaching and learning; 2) efficiency of health care and services provision; 3) management of the mushrooming public and private health education institutions; 4) rigor of the curricula and training of health education; 5) quality of health services; and 6) demands of the global standards for better regulation combined with aspirations to produce competent health professionals. These concerns and the global influences have necessitated the introduction of licensure exam for independent verification of competence and fitness to practice prior to granting a license (MOH, 2019b:2). Previously in Ethiopia, the practice of licensing had “largely been an administrative function completed on the basis of review of education credentials obtained from training institutions” (MOH, 2019b:2). Internal concerns along with the global demands have pressurized the country to learn the experiences of different countries to ensure the quality of health care and services. Consequently, it has been learnt that licensure exams are widely practiced internationally in different countries of the world. The MOH has, therefore, taken the initiative to launch licensure exam since July 2015 wherein necessary arrangements

and preparations have been put in place (MOH, 2019a, MOH, 2019b). The level of assessing the tasks analyzed has, nonetheless, remained an issue of concern among different stakeholders.

1.2 Objectives of the Study

The aim of the study was to gauge the extent to which MOH walks the talks regarding health Professionals' Licensure Exam (EHPLE) development practices. In doing so, the study assessed whether or not the tasks analyzed are actually assessed by taking the Ethiopian Health Professionals' Licensure Exam (EHPLE) as a case. The study has, thus, tried to address the following specific objectives

1. To identify inconsistencies in terms of timing, claims, and practicality of task analysis and curricula enrichment;
2. To verify whether or not the results of task analysis were incorporated into the curricula from which learning outcomes were derived, i.e., task analysis results alignment with blue print, and
3. To identify whether or not task analysis was conducted regularly, at least every 5 years to keep pace with changes in health care and services delivery.

2. Methods

Exclusively a qualitative method was used in this study. Data were generated by reviewing relevant documents and conducting interviews with five test development professionals (3 from MOH and 2 from AAU). The interviewees have been given codes as Int1, Int2, Int3, Int4, and Int5. Issues related to timing task analysis and blue print review, amendment and adjustment; the extent to which the claims and the provisions within the MOH documents could be practiced; and whether or not the results of task analysis were incorporated into the curricula contents from which learning outcomes were derived were presented to the interviewees with the purpose to confirm and/or refute the results solicited from document reviews. For triangulation purpose, the researcher's reflections have also helped in refining the results as he actively participated in the 2021 licensure exam development process as a reviewer.

The study dealt just with the written exam type, i.e. multiple choice questions and it did not include performance assessments, i.e. the objective structured clinical examination assessment. In generating the required data, just the exams development process in 2021 has been considered. This is because, the researcher had highly engaged in the exam development process as a reviewer in this year. Finally in this study, terms such as components/tasks and learning domains would have equivalent meanings and accordingly used interchangeably to denote health professionals' knowledge, skill, and attitude.

3. Results and Discussions

With the purpose to assess the extent to which tasks analyzed were actually assessed, exhaustive analysis of documents was made taking the Ethiopian Health Professionals' Licensure Exam (EHPL) as a case. Normally, EHPL would begin with task/job analysis, which is a systematic method of collecting and documenting data and/or tasks to be performed by HWF in line with the dynamisms and demands. A completion of task analysis studies would be normally followed by review, amendment, and necessary adjustments of exam blueprints/curricula contents; and availed to exam developers upon training for understanding, review, and/or amendments as required. There, however, are unattended promises to walk the talks, including timing-, claimed-, practicality and/or implementation-inconsistencies, all of which have been discussed hereunder.

3.1 Timing Inconsistencies

MOH, "in collaboration with respective professional associations", vowed to conduct task/job analysis every 5 years; and use its results to review, amend, and make necessary adjustments on exam blueprints on annual basis (MOH, 2019b:7, 10). Here, there are two issues of concern. In the first place, whereas task analysis would be conducted every five years, blue print revision, amendment and adjustment would be done every year. This shows that blue print review is more frequent than task analysis. By implication, no way to make use of task analysis results to update contents within the blue print as the basis for exam development. Secondly, even the practice of the claimed five year task analysis and annual-based blueprint review, amendment and adjustment has remained sporadic. Observations and interviews have shown that exam developers have been given pre-defined learning outcomes without task analysis-based review, amendment, and adjustments on curricula contents.

3.2 Claimed Inconsistencies

There are claimed inconsistencies regarding the analyzed- and assessed- tasks. On the one hand, very little conscious efforts have been made to align analyzed tasks to exam blue prints and/or learning outcomes, which are actually assessed. Second, there are inconsistencies among different provisions within the documents of the MOH regarding the tasks to be assessed. Whereas many of the documentation of the MOH indicate that the components/domains to be assessed are "knowledge, skill, and attitude" (MOH, 2019a:9, 19), practically, nonetheless, just the cognitive domain was assessed at different levels of difficulty. For instance, MOH (2019a:9) indicates that the "[c]omponents of the task to be assessed" include the "learning domains" such as "knowledge, skill, and attitude". The same source (p.19) indicates, "Exams put in a bank are believed to accurately measure the knowledge, skill, and attitude of the candidate"; and exam blue

print “communicates values of knowledge, skill, and attitude that are needed for effective practice and minimal competency” (P. 9). Furthermore, one of the content areas to be checked in reviewing multiple-choice items is to look into whether “it measures knowledge or a skill component which is worthwhile and appropriate for the examinees that will be tested” (Ibid P.45). Practically, nonetheless, there was no tangible evidence on how the domains related to affective (e.g. attitude) and psychomotor (e.g. skills) were assessed. Adding onto the inconsistencies, the different documents of the MOH give different domains to be assessed. For instance, MOH (2019a:11) indicates, “each item of MCQ should assess the application of knowledge, not recall of an isolated fact”. The same source (P.18] further presents that “cognitive level of items across Bloom’s Taxonomy” should be one of the information to be included for exam banking.

In explicating the components in developing MCQs (stem, lead-in, options/alternatives, suggested solutions-key: the correct choice for the item, and distracters: the incorrect choices for the item), MOH (2019a:11) has given samples of just recall item stem and application of knowledge item stem for basic sciences. Moreover, in describing cognitive skills, MOH (2019b:31) presents just three aspects of the cognitive domains such as comprehension and recall, application, and analysis with the purpose to measure memory, basic interpretation of data, and the application of knowledge respectively. In the same vein, one of the content areas to be checked for reviewing multiple-choice items is to look into whether “the item addresses the desired domain of knowledge and corresponds to the exam blueprint (MOH, 2019a:45). The above cases show that just cognitive domain was assessed at different levels of difficulty. The case casts doubts on why different domains have been given when not assessed. The case further puts a question to the relevance and practicality of task analysis itself unless otherwise it is assessed. This is in addition to the concerns regarding the level of alignment of task analysis results and blue print as the basis for learning outcomes, which was actually unattended.

3.3 Practicality and/or Implementation Inconsistencies

In principle, task analysis deals with systematically defining and documenting the tasks that a specific cadre of health care workers performs on-the-job “rather than relying on obsolete curricula or out-of-date national documents” (MOH, 2019a:9; MOH, 2019b:7). Practically, nonetheless, very little conscious efforts had been made to review and make amendments and necessary adjustments to blueprint/curricula contents on annual basis based on the task analysis results/findings. That means, there was no any evidence and even effort to incorporate task analysis results into the curricula from which assessed learning outcomes were derived to guide exam development and eventually assessed. As a result, exam developers were given a pre-formulated curricula documents majorly learning outcomes without aligning

them with task analysis results. As indicated under claimed inconsistencies, one of the checklists for reviewing multiple-choice items for content area deals with looking into whether a specific “item addresses the desired domain of knowledge and corresponds to the exam blueprint” rather than tasks analyzed (MOH, 2019a:45). Impracticality also comes on how to measuring attitudes and skills other than the cognitive domains’ different levels. Many of the documentation of the MOH (e.g. MOH, 2019a:9, 19, 45, see under claimed inconsistencies) indicate that knowledge, skill, and attitude are the components/domains to be assessed. As indicated under claimed inconsistencies in this paper, there was no tangible evidence on how the domains related to affective (e.g. attitude) and psychomotor (e.g. skills) were assessed. Rather, evidences give that the different levels of the cognitive domains were actually assessed. The results obtained from conducting interviews with five test development professionals concurred with those from document review. The interviewees had similar views on the issues of concern. Three of the interviewees (Int1, Int2 & Int5) strongly argued that there was no conscious effort to regularly incorporated task analysis results into the curricula from which learning outcomes were derived. All of them also had shown their observations that there were inconsistencies in terms of timing task analysis and blue print review, amendment and adjustment. Two of the interviewees (Int2, Int4) indicated that task analysis was not conducted regularly, at least every 5 years to keep pace with changes in health care and services delivery.

In short, it has further been learnt from the interviewees that there were timing-, practicality- and/or implementation- inconsistencies entailing that the tasks analyzed were hardly assessed on a regular basis. Equally, three interviewees (Int3, Int4, and Int5) acknowledged that inconsistencies were observed in listing the components to be assessed- as some say knowledge, skills, and attitude, and others give just cognitive domain hierarchies. This also casts another doubt regarding the effectiveness of the task analysis and its pragmatic implementation. Four of the interviewees (Int1, Int3, Int4, and Int5) further acknowledged that just the cognitive domain was assessed at different levels of difficulty.

4. Conclusions

The investigated the extent to which MOH walks the talks regarding health Professionals’ Licensure Exam (EHPL) development practices. In doing so, it assessed whether or not the tasks analyzed are actually assessed by taking the Ethiopian Health Professionals’ Licensure Exam (EHPL) as a case. It has, therefore, been concluded on the basis of the results and discussions that the practices of task analysis, its alignment with curricula contents, consistent implementation, and assessment of the analyzed tasks were sporadic. This adds a doubt onto the relevance, practicality, and implement-ability of the task analysis practice, and the claims and

provisions within the MOH documents. Very little conscious efforts were made to walk the talks, i.e. putting the provisions and promises into action. Many of the provisions within the documents of MOH had hardly been practiced. There were a number of shortfalls in doing things consistent with what the documents claimed. Notwithstanding the limitations of the current study being a bit general and lacking rigorous quantitative analysis; the results shed lights on the extent to which task analysis results were- used for blue print/curricula content review, amendment, and necessary adjustments and/or-incorporated into the curricula from which learning outcomes can be derived for the licensure exam development in Ethiopia. Inasmuch as exam development processes follow comparable and/or similar steps, the results can also be beneficial to other health educators around the world. Finally, it has been suggested that further studies in the area could focus on specific issues in terms of discipline, time, and area; and employ rigorous quantitative analyses to guarantee wider generalizability (external validity) of study results.

References

- Health. (nd.) *Health Professions Education: A Bridge to Quality* [available at <https://www.ncbi.nlm.nih.gov/books/NBK221519/>]
- MOH (Ministry of Health, the Federal Democratic Republic of Ethiopia] (2019a). *Exam Development Manual* [available at <http://repository.iifphc.org/bitstream/handle/123456789/541/Exam%20>
- MOH (Ministry of Health, the Federal Democratic Republic of Ethiopia] (2019b). *Implementation Guideline: A Working Document* (UP)
- MOH (Ministry of Health, the Federal Democratic Republic of Ethiopia] (2019c). *Candidates' Manual* [available at <http://repository.iifphc.org/bitstream/handle/123456789/537/>
- MOH (Ministry of Health, the Federal Democratic Republic of Ethiopia] (2019d). *Exam Administration Manual* [available at <http://repository.iifphc.org/bitstream/handle/123456789/537/>
- MOH (Ministry of Health, the Federal Democratic Republic of Ethiopia] (2019e). *Examiner Manual* [available at [http:// repository.iifphc.org/bitstream/handle/123456789/537/](http://repository.iifphc.org/bitstream/handle/123456789/537/)
- MOH (Ministry of Health, the Federal Democratic Republic of Ethiopia] (2019f). *Registrar Manual* [available at [http:// repository.iifphc.org/bitstream/handle/123456789/546/](http://repository.iifphc.org/bitstream/handle/123456789/546/)
- WHO [World Health Organization] (2015, editors, Langins, M. and Borgermans, L.).*Strengthening a competent health workforce for the provision of coordinated/ integrated health services*. Working Document. Denmark: WHO Regional Office for Europe

Challenges of Online Learning for Rural Students during the COVID-19 Pandemic: a Study at the Higher Secondary Level in Bangladesh

Md. Anisur Rahman¹

Abstract

The study aimed at investigating the impact of schools closures due to COVID-19 on online education of higher Secondary learners of rural areas of Bangladesh. An online and an offline survey were conducted from 10 July 2021 to 15 September 2021 to collect the data. To obtain required relevant data a structural questionnaire link using 'Google form' was sent to students through the WhatsApp and Facebook messenger. A total of 125 higher secondary rural students and 8 teachers from 8 upazilla of 5 Districts were selected for the survey. The simple percentage distribution was applied to assess the learning status of the study participants or respondents. During the schools closure period, around 11% of learners were regularly involved in online education. Most of the learners were used smartphones for attending online classes. The present study found that around 62 % students were seen involved in agriculture activities or helping their parents in doing small trade or business during school closure instead of attending online classes. In addition to this, 30% students never joined online classes during the entire session. The overall findings from this study revealed that in rural areas COVID – 19 pandemic had affected more adversely on online education, where people already were unwilling to give importance to education. Higher education institutions may be benefitted from these findings by formulating strategies to support students during this pandemic. Moreover, to promote education in COVID 19 era strong strategies are urgently needed.

Keywords: COVID-19, College students, Lockdown, Online classes, Electronic devices.

1. Introduction

The COVID-19 pandemic is the crucial global health disaster of century, and the greatest challenge the world has been facing in this decade (Goyal, 2020). The COVID – 19 disease-causing Corona Virus apparently started to spread in China during December 2019, and then moved to the

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rest of the world at the end of January 2020. On 11 March 2020, the World Health Organization (WHO) declared the COVID-19 a pandemic (WHO, 2020). By 31 July 2020, COVID-19 had spread across 217 countries and territories. No one in the world is untouched by the current COVID-19 pandemic, by any way. However, its impact and consequences of individuals are felt differently depending on the source of earning, education, family background, age, working status, etc. Some people are trying to get used to working online, home schooling their children, online classes, , but some have no choice but to be exposed to the virus while keeping society functioning (Goyal, 2020; Kapasia et al., 2020).

Bangladesh has officially registered more than 2794,000 Coronavirus cases and over 28000 deaths to date. The March 26, 2020 nationwide lockdown and school closures brought everything in the country to a near standstill, and were forced nearly 40.6 million students out of school of all education levels. Though the Bangladesh government issued lockdown measures after two months, education institutions are expected to remain closed until October 31. Bangladesh currently has an estimated 21.6 million students enrolled in its elementary and primary schools, another 13 million in secondary schools, and 4 million students studying at universities and colleges. The whole world is coping up with the reality of the Covid-19 pandemic by finding alternatives to the disruptions caused by the deadly virus. The government and many companies are allowing their workforces to work from home, while schools and colleges are moving classes online.

According to the Ministry of Education, 76% of Bangladesh's secondary schools are located in rural areas. It says roughly 60% of primary school children attend government-run schools, which are mostly in rural areas as well. "The schools and colleges in the rural areas lack infrastructure including digital equipment, internet and electric facilities, qualified teachers, and hygiene facilities," says Prof. Dr. Md Enamul Hoque, a Research Director at the Education and Development Research Council (EDRC). Prof. Dr. Hoque says these shortcomings have slowed down online schooling efforts in the country. He added that the rural and suburban academic institutions are poorly structured with almost no facilities for providing education in the global digitalized world. In Bangladesh, people are relying heavily on strong internet connections, computers, or smartphones to get back to business during the new normal. The crisis has pushed students to pick up e-learning opportunities, as there is no end in sight.

As the country takes to online education, the current pandemic is impacting rural students more than those who live in urban area. In addition, purchasing internet data plans from the mobile operators for learning could also incur a lot of expenses for families who are already facing financial constraints. It could further affect the participation levels of both teachers and students in the live classes. Digital literacy and the digital divide have

been serious concerns for our country for over a decade. Many teachers and students in rural areas are not able to match up to the technical skills of educationalists and students in cities. In villages, students severely face challenges to access the online courses conducted by their institutions mainly due to poor data connectivity, lack of access to laptops and smartphones, and power issues.

Unfortunately, the students in rural areas in Bangladesh are denied the newest devices and levels of accessibility to online contents that urban students usually enjoy daily. Unlike their counterparts in urban schools and colleges, a lower percentage of students in villages possess desktop or laptop computers. They usually depend on their family members' mobile phones for learning and attending online classes, making it an arduous exercise. Watching small screens to consume as much information as possible for long hours could be detrimental to students' health. It was noticed that the private schools, on the other hand, was a bit quicker to adopt online learning methods in the wake of the lockdown, providing online lectures delivered via social media platforms like, WhatsApp, Facebook, Zoom Platform, and YouTube. The schools and colleges located in urban areas, started online education comparatively better way. Not only are the schools better equipped and prepared, students are also more likely to have access to required technologies at home, with parents who are usually computer literate having multiple devices at home. At the beginning of the lockdown, the Bangladeshi government has asked state-owned radio and television stations to broadcast and telecast live and recorded lectures to address the interruption of schooling due to the COVID-19 pandemic. Teachers were also giving students instruction on syllabus-oriented contents via mobile phone. However, many faculty members show no interest in delivering online lectures, exacerbating our limitations." He says another problem they have is that student attendance can never be confirmed.

Corona virus has created a disruptive situation in Bangladesh as well as in many other countries. The lockdown helped to slow down the spread of infection and prepare better to face imminent large-scale infection. However, suspension of normal course of functioning of manufacturing and services sectors has resulted in significant financial uncertainty. In the education sector, the outbreak has struck at a critical time when last few classes and examinations were to be held to close the academic year 2020-21. The lockdown meant that it was not possible to complete the syllabus with the regular classes in many academic institutions. There has been a question mark over how and when to conduct examinations. Many institutions have resorted to online classes to complete the syllabus. But there have been challenges in execution and effectiveness of online classes especially in the case of students in the rural areas.

2. Literature Review

The rapid development of such a large COVID-19 has affected students of all ages. It was previously noted that the continued spread of illness, travel restrictions, and the closure of educational institutions across the country had significant impacts on student education, social life and mental health (Gonzalez et al., 2020).). Rural students in particular are experiencing greater adverse effects from the outbreak of COVID-19 (Bao, 2020). These behaviors can have long-term implications for student life (Cohen, Hoyt, & Dull, 2020). With COVID19, all education has moved to online mode. This has proven to be a major challenge for local education, with little record of success worldwide. Long-term declines in family income, inadequate access to digital resources, and restricted internet connectivity have disrupted students' academic lives. Recent findings show that more than 1.5 billion students worldwide are deprived of basic education (Cao et al., 2020). In addition, this also affects the income of many self-employed students. Changes in daily life routine, including lack of outdoor activities, disturbance of sleep patterns, social distancing, family and financial stress affected the mental health of students (Cook, 2009; Cohen et al., 2020).

Another key factor behind the same is less attention of students towards higher education as these were mainly involved in farming in rural areas. Attending online classes requires an efficient android phone or laptop, leave from farming jobs, long hours of uninterrupted internet network, and calm and silent space for each student in a family (Cook, 2009). It was found that the same was not affordable for every student. Financial inefficiency was found to be a major reason to keep many untouched students from education during the whole period of lockdown (McCarthy, 2020). Previous studies confirmed that this might have added feelings of helplessness and shame among such kinds of students (Gonzalez et al., 2020; McCarthy, 2020). In addition, many students could not continue their education even with their Android Smartphone because they were not accustomed to using educational applications and search engines or were not trained (Saha, Barman, & Chouhan, 2020). Last year, much research was done on the impact of Covid19 and the blockade on student education, revealing many causes and adverse effects of the blockade during the COVID 19 pandemic on student education of undergraduates. Although teacher access to technology and electronic devices has improved, concerns still remain about the perpetuation, or widening, of a digital divide amongst teachers and students in rural areas. Some studies revealed that teachers of rural and underrepresented students were less knowledgeable about techniques to effectively operate the technology (Davis & Hall, 2018; Kalonde, 2017). A study in 2015 in Washington State investigated the student achievement and teacher quality; a wide range of quality measures, including licensure exam scores, experiences, and effectiveness, found low-

income schools featured unequal distribution of quality teachers. The most prominent disparities were found in seventh grade reading and mathematics (Goldhaber et al., 2015).

3. Significance of the Study

This study is significant as it revealed the impact of lockdown on the education of college students in rural areas where people did not give importance to education and students were mostly involved in farming and small business. The potential impact of the COVID 19 pandemic on student life is being investigated. This research also elucidates the practical issues of rural students with special reference to online learning. The findings of this study are useful to educationists, especially curriculum developers and teachers, to adopt appropriate teaching and learning strategies to promote education during pandemics and other emergencies, especially for economically vulnerable rural students. The results and recommendations of this survey would also serve as a reference for students and teachers to gain an up-to-date knowledge of the technologies available in the countryside of Bangladesh. The findings suggest that students with financial disabilities need to be provided with physical resources to continue e-learning. This study also revealed a wide gap between government policies and the actual situations at the grass root level.

4. Research Questions

This study was conducted to understand the issues related to the impact of the COVID-19 pandemic on the sudden shift of education to the online mode of teaching and learning and challenges of the online mode of education in rural areas in five districts in Bangladesh. The study was guided by two research questions:

- 1) What are the learning challenges faced by the rural Higher Secondary students during the COVID-19 pandemic in Bangladesh?
- 2) How can online learning be enhanced in the context of COVID-19?

5. Methodology of the Study

This study is located within the broader space of the transformative paradigm. It used mixed-method (MM) approach to collect data from the participants. Another reason for using MM approach for this study is that it “investigates the actual practices and not abstract practices and learning about the real, material, concrete, and particular practices of particular people in particular places:

5.1 Participants

The participants in this study were 125 rural higher secondary learners and 8 teachers who were engaged with online teaching and

learning, and faced problems that were intensified by the presence of the global pandemic of COVID-19. The interviewee teachers were given pseudonym, and were introduced as T1, T2, T8 in this study. The interview participants were all college teachers teaching higher secondary students in sub-urban and rural colleges. A total of 125 students were taken for this study, of which 85 students were boys and 40 were girls. The participants were randomly selected from 8 upazillas of 5 districts. The research sites (districts) include- Tangail, Cumilla, Gazipur, Jamalpur, and Chadpur districts.

5.2 Instruments

The study applied questionnaire surveys and conducted interviews with the students and teachers. The questionnaire survey was conducted among the students, while the interviews were conducted with the teachers. To collect data, in line with the need for social distancing, the study utilized WhatsApp, Facebook Messenger, Google Form, and Zoom Platform.

5.3 Data Analysis

This study applied the mixed-method (MM) approach because it is an approach that encourages active participation of affected people to construct their new identities. The quantitative data was collected from the questionnaire survey was analysed through SPSS software for windows, while the interview data was analysed through thematic analysis method.

6. Results and Discussion

To establish the validity of the findings, the study conducted member checking, during which process the researcher presented the analysed data that had been thematised to participants to obtain confirmation that the data responded to their ongoing experiences in the context of COVID-19, specifically, teaching and learning using online platform. This allowed the researcher and the participants to analyse the collected data to see if it reflected their contributions on COVID-19 and reality. In response to the research questions, the participants raised a number of issues, which were summarised by pointing out the main themes that arose from the respondents participated in this research. In the following section, The findings are presented:

6.1 Findings from the Student Questionnaire Survey

It emerged during the study that, in spite of online learning seeming to be one of the best ways of learning during the COVID-19 period, the teaching-learning was seriously hampered for a number of reasons and hindrances.

6.1.1 Challenges of Online Learning in Rural Areas

In response to the questions, the participants raised a number of issues, which are summarised by pointing out the main themes that arises from the participants of this research. In the upcoming sections, the study presents and discusses findings based on the major themes and issues of the study- unavailability of network in rural areas, expensive internet data, shortage of devices for online learning, lack of familiarity with digital technology, and lack of computer skills of some rural teachers:

6.1.1.1 Unavailability of Internet Network in Rural Areas

The study found that the teaching-learning was seriously hampered by the unavailability of internet connectivity in some rural contexts. The core of the participants' responses is that they were not prepared to do online learning, due to limited or no network access. The study finds that in the rural areas only 11% rural students studying at the higher secondary level receive uninterrupted internet connection; on the other hand 30% students have never get internet facilities for online classes. The findings on the access of internet in the rural areas are projected in the following figure (Figure-1):

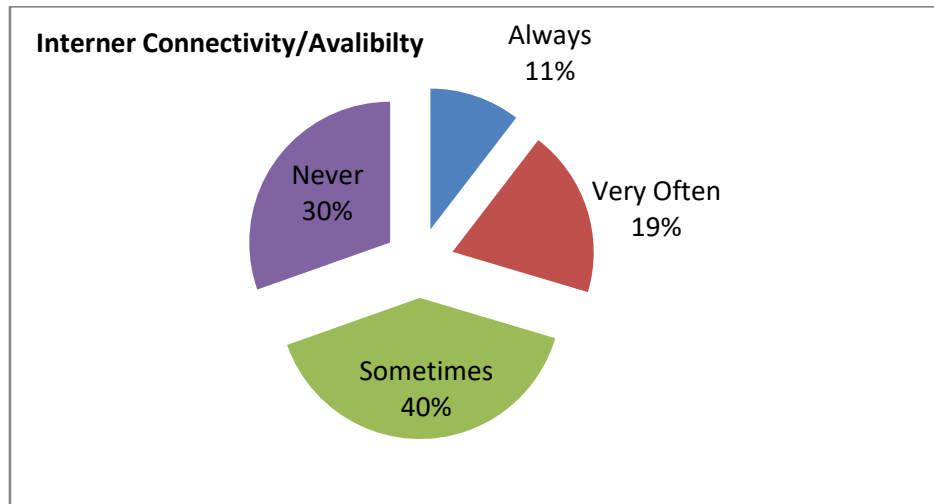


Figure-1: Internet availability for online class

The study shows 69% students suffer from poor internet connectivity, while 92% learners suggest that internet pack is too costly to use it for online classes. It is also found that 33% are involved agricultural activities; 29% students are found in small business; and 28% students are involved in family chores, and the rest 12% pass time idly. It emerges that, in spite of online learning seeming to be one of the best ways of learning during the COVID-19 period, the approach is severely hampered by the unavailability of connectivity in some rural areas. This vividly implies that,

while the plan to use online learning to compensate for the loss of face-to-face contact is noble, it does not include all learners.

To this end, World Bank (2020) highlights out that the students who will be able to make the best use of online learning are those who are already competent and knowledgeable about using technology tools to support their learning, online sources in particular, who have sufficient access to good bandwidth and connected devices, and who are supported by their family and peers. A large number of students in Bangladesh are living in rural areas. The students are required to use various online learning platforms that need a high-speed internet connection. But, in remote areas, it is hardly possible to get an internet connection to attend online classes smoothly. Usually, the students face interruption poor connection which is a hindrance to in the processes of continuing classes. Sometimes, it frustrates the students to take part in the online classes.

6.1.1.2 Shortage of Electronic Devices for Online Learning

Another big challenge raised by research participants is the lack of devices to connect for online learning. When the study look at the domain of online teaching and learning, it is essential to consider the availability of the right devices to every student for accessing digital content. Very few people in rural in Bangladesh have access to personal laptops or computers, and phone screens are not conducive to long learning hours. The study has revealed that only 7% students have their own devices for joining the online classes while 34% cannot join online classes because they do not any device to join classes. The following figure (Figure-2) projects the findings regarding the availability and access to digital devices:

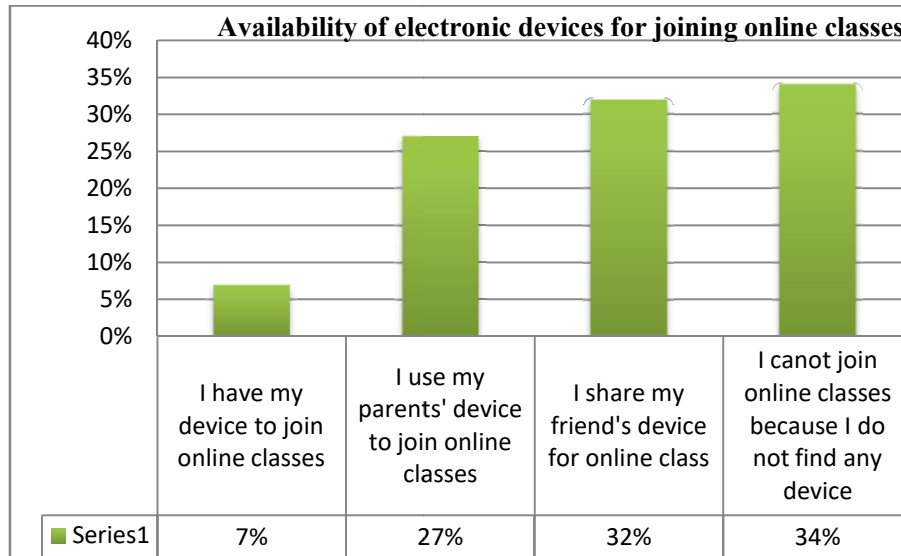


Figure-2: Availability of electronic devices for joining online class

The devices mentioned by the participants included smartphone, computers, and laptops that are compatible with online classes. In addition, data packs, and internet costs is a big deterrent both for teachers as well as learners, especially for online classes. The current study reveals among the online learners 97% students use mobile phones to join the online classes, while only 03% students use laptop or computer. A survey (Hoque, 2021) found that 95% of students in secondary and higher education levels use their smartphones for online education. However, while smartphones can provide a variety of advantages, they also create challenges that can be a detriment to students' educational goals. Though it is flexible and convenient, Smartphone has numerous technological and social drawbacks, as the screen of the smartphone is small, in many cases viewing and downloading large document on the smartphones is difficult or impossible. The findings of the study coincides with study conducted by Bangladesh Rural Advancement Committee (BRAC) which found that 54% of Bangladesh's rural households lacked internet access, while 59% did not have access to smartphones. It has caused a great deal of suffering in rural lives; in addition, buying a smartphone and data packs "in this crisis" would only worsen family's economic woes.

6.1.1.3 Lack of Knowledge in Digital Technology Use

The study reveals that only 7% higher secondary students are efficient in using their electronic devices for joining their online classes delivered by their teachers while 27% students do not have any ability to join the online classes due to their no efficiency or lack of knowledge in joining their online classes. It is also found that only another 45% students possess only poor knowledge in operating electronic devices to join their class (Figure-3):

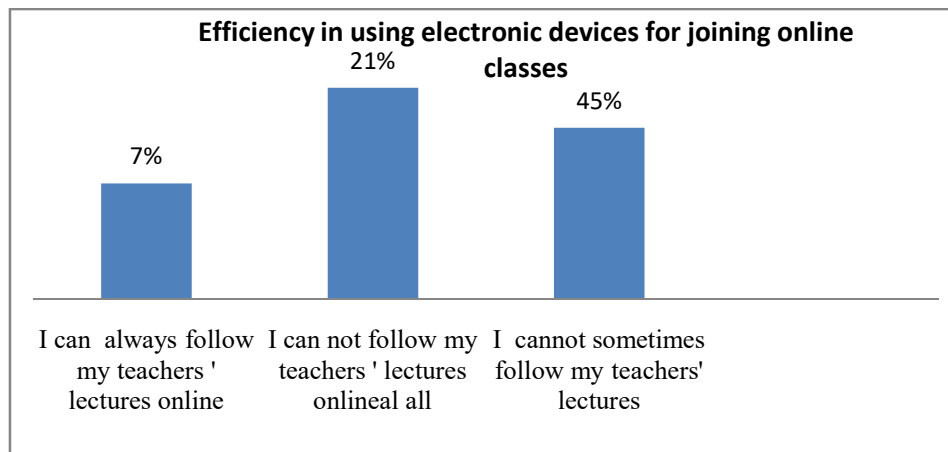


Figure-3: Efficiency in using electronic devices for joining online class

It is found that 63% students face problems while in the class or at the beginning of online classes. In Bangladesh, students in the rural areas are not used to the online learning style compared to urban students in Bangladesh, so they have very poor knowledge in electronic device use. Not only students, but also many teachers lack the knowledge of technology use. The teachers are also reluctant to use the online platform for teaching (Hoque, 2021). The study reveals that the competence in technology use is very crucial for attending online classes. During online classes, teachers lose communication with students because they do not respond to the teacher's classes. When students turn off cameras, teachers cannot make eye contact or read body language. Students sometimes lose the pace of learning due to the poor presentation of lectures and therefore prefer to remain silent instead of asking questions. This attitude is also worrying for teachers, as students show no interest in communicating with their respective teachers (Hoque, 2021).

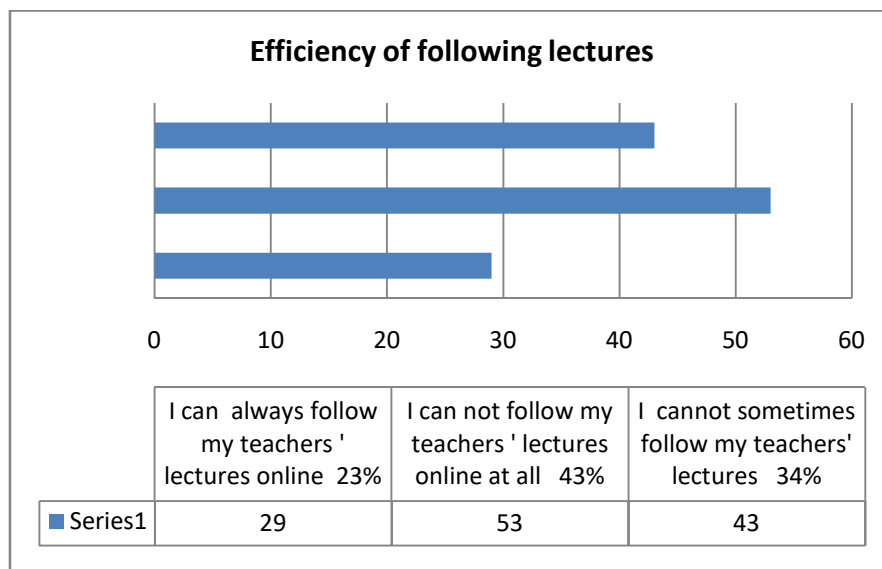
In addition to limited infrastructure, people living in rural areas have been forced to grapple with lack of income since the lockdown began. Buying a smartphone for someone's schooling is definitely out of the question because the income parents went down in recent months due the coronavirus pandemic. While digital learning has already made a way in urban educational setups, some rural areas still rely on traditional teaching methods for their lessons. Therefore, shifting from traditional pedagogical methods to the digital one cannot happen overnight. In COVID-19 Pandemic situation, there is no scopes for traditional teaching methods rather teachers as well as students require proper training and more user-friendly platforms to make them familiar with digital technology so that they can be comfortable teaching/learning using them.

6.1.1.4 Shortage of Trained Teachers to Conduct Online Class

Shortage of trained teachers or the poor teacher-to-student ratio in villages poses another challenge towards making learning entirely digital in such areas. In the present study, 71% students remark that their teachers cannot properly handle the online classes. Surprisingly, 83% students are with the opinion that the teachers stay nervous, and talk irrelevant while conducting the online classes. It is also found that 43% (n=53) students cannot follow the teachers lectures, while another 34% (n=43) students sometimes face problem in the online classes. However, only 23% (n=29) students can follow the lectures.

To make complete digitization of education in rural areas, this ratio needs to be improved and a large number of skilled and well-trained teachers are required so that each and every student receives complete attention even during an online class. While the contemporary online classroom solutions are designed to facilitate engagement and intuitiveness

among students towards learning, a teacher's guidance and attention remain indispensable for learners. The findings are presented below:



6.2 Findings from the Teacher Interviews

The present study has interviewed 8 rural college teachers of different subjects. The findings of the interviews are cross-examined with the findings of questionnaire survey conducted among the students. A number of issues and challenges of online teaching learning are discussed. It is revealed that in villages, students face many challenges to access the online classes conducted by their teachers. According to the interviewees, the major challenges mainly due to poor data connectivity, lack of access to laptops and smartphones, high-cost of internet data packs, shortage of trained teachers, and power issues. The findings of the study corresponds to Hoque (2021) which suggests while students might be accustomed to reading text on the relatively small screens of their handheld devices, they could be harming their eyesight in the long-term process. The online students who spend long hours doing required reading from their devices could develop what Allamby calls "screen sightedness". During the interviews, the participants gave different responses. The T3 reports "most of the learners in rural areas are experiencing the acute problem with network; it is hard for them to access online learning material provided by the teachers or the authority". On the other hand, T5 added:

This online class is like giving someone pots to cook without food and expect you have addressed his or her needs. He adds I am scared that this year will be wasted because of COVID-19 and online learning that does favour us as rural learners.

Another challenge raised by a research participant (T7) is the lack of devices to connect for online learning. The devices mentioned by the participant (T7) include smartphones, computers, laptops, and smart phones that are compatible with low-tech teaching apps. During the interviews, the participants made the various comments. In this, T2 adds:

I have a laptop but that would not help much since my learners are not having gadgets to complete the tasks that I would have given them. Sometimes, I try to use WhatsApp, I see that most learners are not online or simply do not have devices to support online learning. In this regard, I agree with an observation by the World Bank (2020), that the move to online learning at scale typically benefits students already advantaged in various ways disproportionately (e.g., rich over poor, urban over rural, high-performing over low-performing, students in highly educated families over students in less well educated families).

With regard to taking online classes, a college teacher (T8) mentions:

The principal sent a message to us that we will start with online teaching, and to me this was new and I was confused because at home we do not have even a single laptop. The one I am using is my Smartphone. She adds that online teaching would be very difficult for me because I do not have any computer or laptop of my own; even I do not know how to operate it.

With the COVID-19 putting a halt on classroom learning sessions, online learning has paved a new way to retain normalcy for students and teachers. It is heartening to see that not only urban educational institutes, but the state-run schools in rural areas have also gone digital and resorted to online classes to avert academic losses. Although, not every village and town in Bangladesh is infrastructural developed to sustain online education, it is motivating to see a few rural schools and colleges adapting online teaching-learning during these times.

7. Conclusion

In the present study, the teaching-learning image of remote rural areas was presented, where students were more inclined for physical classrooms over virtual classrooms. Currently, the online classes have become an alternative to regular physical classes under the circumstances of the present COVID-19 pandemic. The study has also revealed that digital devices like, smartphones, laptops, computers, internet and technology services need to be considered as a daily necessity and not a luxury at all. The major challenges the rural students and teachers are facing are the unavailability of modern devices to the students, poor internet connectivity, not much facility to access internet data, efficiency of using devices,

shortage of trained teachers, etc. This study also finds that less face-to-face interaction between teacher and students, absence of classmates, network problems, new structure of classes cause irritation, frustration, and anxiety among studied students. Here, a significant decrease in student attendance in online courses has been reported. Certain tools such as social presence during the online course, requesting personal information from students, encouraging the exchange of interaction between students and supporting video communication can help increase their interest and concentration in virtual classes. Based on the findings, the study recommends that the rural learners and teachers should have access to data that allows them to engage in the online learning process. The biggest challenge faced for the online education is that Internet connection is very expensive and, in some cases, very limited for rural students in Bangladesh. Finally, the study has outlined the challenges relating to online learning encountered by rural learners and teachers in Bangladesh during the COVID-19 pandemic. The study has found that learners and teachers have difficulties with online learning, which frustrates efforts to teaching and learning.

References

- Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2, 113–115.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287.
- Cohen, A. K., Hoyt, L. T., & Dull, B. (2020). A descriptive study of coronavirus disease 2019–related experiences and perspectives of a national sample of college students in spring 2020. *Journal of Adolescent Health*, 67(3), 369–375.
- Cook, D. A. (2009). The failure of e-learning research to inform educational practice and what we can do about it. *Medical Teacher*, 31(2), 158–162.
- Davis, M., & Hall, C. (2018, June). Technology integration professional development for rural educators. In *EdMedia+ Innovate Learning* (pp. 1808-1817). Association for the Advancement of Computing in Education (AACE).
- Hoque, M. E. (2021). Impact of online teaching during COVID-19 pandemic: An empirical Study. *JEFLER*, 7(3), 13-28.
- Hoque, M. E. (2017). Three domain of learning: Cognitive, affective, and psychomotor. *The Journal of EFL Education and Research*, 2(2), 45-52.
- Goldhaber, D., Lavery, L., & Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. *Educational Researcher*, 44(5), 293–307.

- Goyal, S. (2020). *Impact of coronavirus on education in India, 2020*. Retrieved from Jagran Josh website: <https://www.jagranjosh.com/general-knowledge/impact-of-coronavirus-on-education-in-india-1587642880-1>
- Gonzalez, T., Rubia, M. A., Hincz, K. P., Comas-Lopez, M., Subirats, L., & Fort, S., (2020). Influence of COVID-19 confinement on students' performance in higher education. *PLoS ONE*, 15(10). e0239490.
- Kapasias, N., Paul, P., Roy, A., Saha, J., Zaveri, A., Mallick, R., ... Chouhan, P. (2020). Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India. *Children and Youth Services Review*, 116,
- Kalonde, G. (2017). Technology use in rural schools: A study of a rural high school trying to use iPads in the classroom. *Rural Educator*, 38(3), 27-38.
- McCarthy, N. (2020). *COVID-19's staggering impact on global education*. Retrieved from World Economic Forum website: <https://www.weforum.org/agenda/2020/03/infographic-COVID19-coronavirus-impact-global-education-health-schools/>
- Saha, J., Barman, B., & Chouhan, P. (2020). Lockdown for COVID-19 and its impact on community mobility in India: An analysis of the COVID-19 Community Mobility Reports, 2020. *Children and Youth Services Review*, 116, Article 105160.
- World Bank. (2020). *Remote learning and COVID-19*. The use of educational technologies at scale across an education system as a result of massive school closings in response to the COVID-19 pandemic to enable distance education and online learning. Revised draft 16 March 2020.

The Application of Behaviourist Theory for Speech Learning at the Secondary Level in Bangladesh

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Ayesha Siddiqua²

Abstract

Behaviorism is a theory of learning that suggests learning occurs through teachers' rewards and punishments that lead to changes in behaviour. The objective of the study was to test the application of Thorndike and Skinner's Behaviourist Learning Theory (1974), particularly in storytelling learning. The issues studied in this research were the law of readiness, the law of exercise, and the law of effect in storytelling learning of the students at the secondary level. The approach employed was a mixed-method approach. The object of research was speech learning, particularly storytelling. The subjects of the research were students of class-9, consisting of 32 learners studying in a two high schools. Techniques of collecting data used were questionnaire survey, interview, and observation during the learning process. The technique of analyzing data used was an interactive model of analysis including (1) data collection, (2) data reduction, (3) data display, and (4) conclusion drawing. The conclusion of research was that the application of law of readiness, law of exercise, and law of effect developed by Thorndike and Skinner effectively improved the speaking skills of students. The study found that 62% learners are 90% (maximum) successful in the storytelling while 28% learners are partially (50%-79%) successful in storytelling following the "Behaviorist Theory" of learning

Keywords: Behaviorism, learning, readiness, exercise, effect, storytelling, secondary level

1. Introduction

Behaviourism has offered a number of classroom learning techniques that teachers use on a regular basis. The key application that the behaviorist psychology teaches us is the roles of external factors in learning. The factors include the people around the learner, the reinforcements given and the learning environment either physical or psychological environment.

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Effective teaching starts with effective classroom management. In order to ensure meeting target goals, teachers should apply the most appropriate approach in motivating interest, managing behaviour, and keeping order in the classroom. Motivating the students using the behaviorist approach entails laying out objectives at the beginning of every lesson. Each day, before the teacher starts with the lesson, s/he discusses the learning objectives to the students. This focuses the students towards attaining goals. Behaviorists usually offer a classroom management style that ensures meeting these objectives, while preparing students to overcome future challenges at the same time. Learning theories are research-based ideas about how students learn. Theories combine what is known about genetics, development, environment, motivation, and emotions to explain how students acquire, store, and apply knowledge. The present study will take a look at the theory and how to apply it in the classroom. Learning theory in the classroom can be tough or easy for some students and it is up to the teachers to supervise and help better their progress using models that change their behavior. Thus, the readers may learn more about learning theory, student learning, behaviorist models, and cognitive learning theories.

By giving valuable and quick feedback, rewarding good behaviours, and getting students used to routines, teachers start to create habits in students that make them improve their learning; and this can give teachers greater control over the class and empower them to take lead of the lessons. In an age of smartphones and games consoles all vying for students' attention, it's important that we create healthy habits around schoolwork and the concentration it needs. Doing too much could put them off school work altogether, whilst doing nothing could mean losing out to devices that are a little more enticing than homework. The real question for teachers is whether they believe this is the best approach. With so many schools turning to flipped learning and student centred classrooms, have traditional behaviourist techniques had their day? This article will focus on behavioristic learning theory in the EFL classroom to teach *speech learning*, especially storytelling.

1.1 The Application of the Law of Readiness

The law of readiness explains a student's readiness for engaging in an activity. Before teaching, the teacher should help make the student ready to learn. Learning is reflected in apperception. The teacher can debrief the students in relation to the subject delivered previously, or the teacher can deliver an attractive introduction to the learning before entering into new material. For the students to be interested in learning, they should be motivated by means of hearing an explanation about the advantage of learning the material to their own lives. The law of exercise states that the more frequently the stimulus-response relation occurs, the stronger the relation, and vice versa are.

The law of exercise basically builds on an assumption that stimulus and response will have a close (strong) relation to each other when the repetition process occurs frequently, so that engaging in an activity a greater number of times will lead to a more automatic relation. A student dealing with a problem he/she encounters frequently will respond to it quickly, corresponding to his/her previous experience. The application of the law of readiness in learning can be described as follows:

- a) the teacher should lead the class through a topic;
- b) the students should listen silently;
- c) the teacher then sets a task based on the information;
- d) the students complete the task and await feedback; and
- e) the teacher gives feedback, then sets the next task;
- f) With each round of feedback, the student is being conditioned to learn the material

Quick feedback - The sooner teacher gives feedback after a task, the more effective it will be in shaping that student for success (Hoque, 2016). If the wait is too long between completing a task and receiving feedback, it's less likely students will associate the feedback with the work they did and any effects are lost (ibid).

Reward revision - Revision is never a fun. But, if someone introduces a reward system that praises students for doing a certain amount of revision, with some kind of incentive, teachers can begin to create positive associations. This should combat cramming (which rewards last minute efforts as they happen closer to the time of feedback).

Start of lesson routine - Almost all teachers have a start of lesson routine, and it is a main example of conditioning. Over time students learn to come into the classroom and either sit down and await instructions or begin working on a task on the board. It's simple but it works.

Even though we all belong to the same species known as "humans," we are completely different in many aspects of our personality that determine shape, height, size, appearance, reaction rate and behavior. Some are small and some are large. Some react harshly and others react slowly. Some learn quickly and adapt to the environment, while others take time. We all behave differently. According to Klein (1996), *behaviorism* is a school of thought that emphasizes the role of experience in guiding behavior. Both the impulses that initiate behaviors and the specific behaviors motivated by those impulses are learned through interaction with the environment (p. 23).

behavior to reoccur (Hoque, 2016). Example: A teenager is caught cheating in an examination. His parents then forbid him to use his car and also reduce his allowance. The teenager does not cheat in his present exams anymore. To have a better understanding of these concepts, here is a table which summarizes the characteristics of positive /negative reinforcement and positive /negative punishment:

Mode	Decreases likelihood of behaviour	Increases likelihood of behaviour
Addition	Positive punishment	Positive reinforcement
Removal	Negative punishment	Negative reinforcement

1.3 Reinforcement

Reinforcement is used to help increase the probability that a specific behavior will occur with the delivery of a stimulus immediately after a behavior is exhibited. The use of reinforcement procedures have been used with both typical and atypical developing children, teenagers, elderly persons, animals, and different psychological disorders (Sadowski, 2009, para. 1). There are two types of reinforcement, and negative reinforcement. **Positive reinforcements** are favorable stimuli that are given after the display of behaviour. Positive reinforcement strengthens the probability of a behavior by means of the addition of something. Example: Salma studied hard and got an A+ in her English exam. Her mom rewards her by treating her to her favorite restaurant. After this, she study hard again and also got an A+ in her Math exam. Her mom rewards her by going with her to see a movie she likes. For your next examinations, she studies hard once more. According to Sadowski (2009), positive reinforcement is a very powerful and effective tool to help shape and change behaviour. Positive reinforcement works by presenting a motivating item to the person after the desired behavior is exhibited, making the behavior more likely to happen in the future.

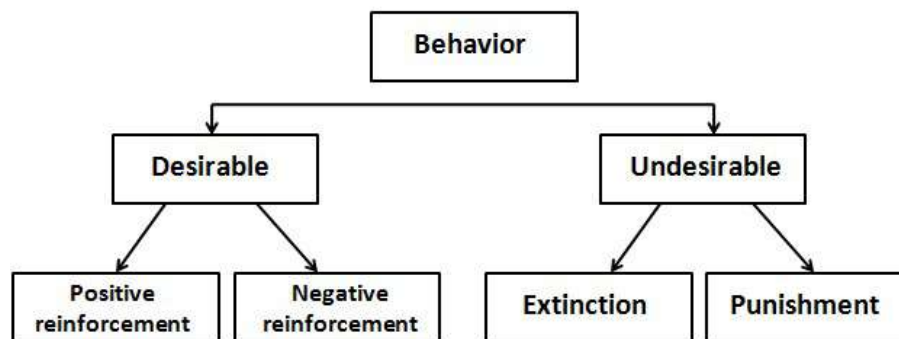


Figure-2: Positive and negative reinforcement

According to Bainbridge (2012), extrinsic motivation refers to motivation that comes from outside an individual. The motivating factors are external, or outside, rewards such as money or grades. These rewards provide satisfaction and pleasure that the task itself may not provide. Besides physical items, positive reinforcement also can be done verbally. For example, the teacher may praise a particular student for answering a question. Positive punishment is the addition of something which causes the decrease in repeating the behavior that was displayed (Hoque, 2016). Negative punishment, also known as punishment by removal, occurs when a favorable event or outcome is removed after a behavior occurs. Example: A child teased his sister, making her cry so loud. The mother spanked him on his back because of this. The child never teased his sister again.

Negative reinforcement involves a removal or a decrease in intensity of a stimulus (Hamilton & Ghatala, 1994, p. 43). In other words, it involves taking away a person's stuff, activities, and hobbies when he or she performs an undesirable behavior. For example, a mother bans her son from watching his favourite TV channels when he failed to finish his homework on due date. So, how can negative reinforcement be applied in the classroom in order to enhance learning? One of the common negative reinforcements used in the classroom is to take away the student's recess. This can be done when the student fails to complete his or her homework, thus late submission. Therefore, the teacher may ask him or her to do the homework during the recess. The teacher understands that recess is very important to students, especially those in primary school. It is the time for them to play, to talk, and to have snacks. Recess is an exciting time. Therefore, taking it away breaks their hearts. Eventually, students learn that if they do not finish their homework, they will not be allowed to do their favourite activities. Therefore, they have to finish the assigned tasks. *Negative reinforcement*, is the removal of the unfavorable stimuli after the display of behaviour. In negative reinforcement, the behaviour or response is intensified by the removal of something. Example: Habib leaves home at 8 am to drive his way to work, and he always encounters heavy traffic. He leaves his home earlier the next day, causing him to avoid the heavy traffic. He leaves home earlier than 8 a.m during the next days and he keeps on avoiding the heavy traffic. This means that his behaviour of leaving home earlier than 8 am is intensified by the consequence of getting to avoid heavy traffic.

From some learning theories above, it can be concluded that the fundamental element of learning theories in psychology is the change of behavior occurring based on the stimulus-response (S-R) paradigm, the process of responding to something specifically coming from outside. A stimulus in learning is a stimulation given to the students to improve their learning spirit.

2. Literature Review

The teacher is the key to successful learning. In the teaching-learning process, the teacher's mastery of the material to be learned and the methods of teaching are essential. In addition, the teacher should also have mastered learning theories. By being conversant in learning theories, the teacher guides students more easily to provide meaningful learning. This is in line with the appendix of National Education Minister's Regulation (Permendiknas) Number 16 of 2007 (Permendiknas, 2007) about Standard Academic Qualifications and Teachers, which states that the mastery of educative learning theories and learning principles is one of the elements of pedagogic competency that a teacher should have. Different scholars of learning psychology have different points of view and areas of emphasis with respect to the essence of learning and the process toward the change that results from learning. Learning theories include: (a) behaviorism, (b) cognitivism, (c) social psychological learning theory, and (d) Gagne's learning theory.

Adherents of behavioristic theory believe that human beings are highly affected by events in their environment that give them particular experiences. Behaviorism emphasizes what is seen (behavior) and pays less attention to what occurs in the mind (Aunurrahman, 2012). Thorndike and Skinner's behavioristic learning theory is explained as follows. What is called the law of effect, which posits that learning will be more successful when the learner's response to a stimulus is followed immediately by a feeling of pleasure or satisfaction (Sunardi, 2016 & Herrnstein, 1970). Pleasure or satisfaction can result when students get praise or other rewards. Such a stimulus constitutes reinforcement. Stimulus-response learning theory, as proposed by Thorndike, is also called connectionism. Essentially, learning is the process of establishing a relationship between stimulus and response. There are some propositions or laws related to connectionism: the law of readiness, the law of exercise, and the law of effect. They are explained as follows. This learning readiness will, of course, make the students more responsive. It is in line with Sanjaya (Sanjaya, 2011), who explains that, when an individual responds or acts from a position of readiness, the action or response done will give satisfaction. Sanjaya (Sanjaya, 2011), said that, to create a certain behavior, it should be done repeatedly.

The law of effect explains that, when an association established between stimulus and response is followed by satisfaction, it will increase over time. That means that the positive feeling resulting from a teacher's reward will give the students satisfaction and will predispose them to do or to improve what they have achieved. Praise or reward given by the teacher will affect the students positively. They will feel appreciated for their achievement, and self-satisfaction will emerge in the students as a result of their success. Skinner states that reward or reinforcement plays a very

important role in the learning process. Reward is different from reinforcement. Reward is a response that is enlivening in nature and a subjective behavior, while reinforcement is something leading to the increasing probability of a response or the more observable and measurable things (Herrnstein, 1970 & Klinger, 1975).

3. Research Question

The present study was conducted at the secondary level. Thorndike and Skinner's behavioristic learning theory has been applied to storytelling learning. The present study set up a research question- "How can behaviorism be applied to enhance learning in the classroom? The study attempts to answer this question. Therefore, this study describes the application the "Behaviourist Theory" and its results.

4. Methodology

This study was conducted in mixed-method approach. The subject of the study was the secondary students consisting of 32 boys and girls. Two teachers were also observed. Data collection was conducted through questionnaire survey, interview, and observation during the learning process. The objective of research was to investigate the speech learning, particularly storytelling applying the Behaviourist Theory of Learning. The technique of data analysis used was an interactive model encompassing: data collection, data reduction, data display, and conclusion drawing.

5. Findings of the Study

The study found that learning can take place if the behaviourist theory is implanted systematically. The study found that 62% learners are up to 90% (maximum) successful in the storytelling while 28% learners are partially (50%-79%) successful in storytelling following the "Behaviorist Theory" of learning. The study shows that learning with stimulus-response methods is an effective strategy to apply to storytelling skill. Speaking learning strategy refers to stimulus-response principle (Iskandarwassid et al., 2008 & Griffiths C, Parr J.M. 2001). The stimulus-response paradigm is a fundamental characteristic of behaviorist thought. The application of learning theory suggested by Thorndike and Skinner has been practiced by students and teachers of 2 urban schools in Bangladesh with the following results.

Considering the result of observation, it is found that teachers seem to teach enthusiastically. Before the learning begins, the teacher discusses the lesson learned in the previous meeting. The teacher, along with students, makes apperception by means of debriefing about the material from the previous session. Afterwards, the teacher announces the learning objectives. The teacher motivates the students by informing them that public speaking

skill is very important to master. Furthermore, the teacher explains that the ability to pour out ideas and thoughts into oral form is useful to support our studies, our careers, and life within society. For that reason, the teacher should be able to help resolve whatever difficulties the students may encounter.

From the class observation conducted, it is seen that students still have difficulties in speaking skills. Speaking skill in class 9 has not achieved the maximum outcome yet. Some students still seemed to be nervous, standing rigidly and frequently forgetting what they were going to say. In dealing with such situations, self-motivation is very important to help improve the students' self-confidence (Zimmerman, B.J. 2002). After the students' self-confidence has grown, they will be expected to learn more actively. Successful learning can be seen, among other ways, from the students' being active. Therefore, the teacher should attempt to motivate the students to participate actively in the learning process. For that reason, teachers should give stimuli that can activate the students. Those stimuli can be debriefing, practice and exercise, summary development, critique and comment, and assignments (Majid, 2013). For the students to be active, Bangladesh secondary English language teachers have developed stimuli that can activate the students. Giving more stimuli will result in more responses from the students. The students can also be told to write a summary of what the teacher delivered orally. By writing their idea first, the students will have an easier time delivering it orally.

5.1 The Application of the Law of readiness

Considering the result of observation on the students of class-9, it is found that teachers seem to teach enthusiastically. The application of the law of readiness in learning can be described as follows. Before the learning begins, the teacher discusses the lesson learned in the previous meeting. The teacher, along with students, makes apperception by means of debriefing about the material from the previous session. Afterwards, the teacher announces the learning objectives. The teacher motivates the students by informing them that public speaking skill is very important to master. Furthermore, the teacher explains that the ability to pour out ideas and thoughts into oral form is useful to support our studies, our careers, and life within society. For that reason, the teacher should be able to help resolve whatever difficulties the students may encounter.

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5.2 The Application of the Law of Exercise

In the learning of public speaking skills, the biggest problem the students encounter is the difficulty of delivering ideas, thoughts, and wishes to their teachers and friends. In addition, the students also speak hesitantly, choose words with difficulty, and speak nervously. Students often find difficulty in speaking before the public (Hoque, 2020). Their words and sentences are suddenly lost and discontinued. Their hearts beat very quickly and they tremble. Finally, they become nervous and can say nothing. Considering this, a learning model should be developed that can activate the students and enable them to speak self-confidently before the public (Ferris & Tagg, 1996). The method offered is the stimulus-response cooperative script method.

The stimulus-response cooperative script method is a learning method stimulating the students to tell stories more bravely, in the context of being paired up with a partner. In each pair, both students practice storytelling in their own seats (not in front of the class). They tell their stories in turn. When A tells a story, B listens to it, and vice versa. While listening to the story, the listener makes a written assessment of the friend's storytelling method, using the assessment form (corresponding to the indicator of storytelling assessment). After the student telling the story has finished, the listener explains the strengths and the weaknesses of his/her friend's storytelling manner (method).

Peer correction technique in storytelling skill has been studied in his research. The present study found that the application of a pragmatic approach with peer correction and teacher correction techniques can improve the storytelling experience and skill in students of classes IX-X. Peer tutorial can be structured effectively for Malaysian students. Students learn to have interaction using questions and a script.

The stimulus-response-based cooperative script method can stimulate the students to be more active and to practice more with their friends. Practice can be done both inside and outside class. If possible, practice can also occur at home (when one's partner lives nearby). For that reason, practice and repetition are effective ways of improving speaking skill. The implication of this principle is that, the more frequently the learning is repeated, the more the lesson is mastered. It is relevant to Dick and Carey's (Dick, 1978) argument that the learning process will be successful when students practice directly and relevantly to the objective of the learning specified. Teachers should accomplish this by means of (1) giving the students the opportunity of practicing their knowledge, attitudes, and skills, and (2) giving feedback to the students' learning outcomes. In language skill learning, language practice is the important factor to improve an individual's language ability.

When the students practice language use, the teacher should give feedback to the students' learning outcomes so that the students can discover their strengths and weaknesses in language practice. From the field observation, the language teachers observed in secondary school show themselves to be active in giving feedback to their students' storytelling practice. Teachers can give reinforcement. Reinforcement should be given as soon as there is a correct response. With appropriate reinforcement, the students' motivation is expected to improve.

In the learning process, feedback is very important. Teachers' appropriate feedback can trigger the students' spirit. Feedback given can be information about students' learning progress, reinforcement for a correct answer, correction of an incorrect answer, comment on students' work, or comprehensive feedback on students' presentations. Essentially, feedback is the teacher's response to how the students have learned, to find out whether or not the students have made progress and whether or not the students' learning outcomes and performance still need correction or improvement. Teachers' feedback should be followed with anything that can motivate the students to have a learning spirit, as reinforcement will give the students a strong impression. Those getting praise for their success in completing their assignment or answering a question will usually want to complete subsequent assignments vigorously.

Before the students tell a story, they are told first to pay attention to how to tell a story, or modeling using a stimulus-response cooperative script method. The modeling is performed by two students. The models take turns telling a fantasy story titled "*The Magic Story*." Furthermore, they assess each other based on assessment indicators including completeness, diction, sentence, smoothness, pronunciation, intonation, expression, and self-confidence. When the models tell a story before the class, all students seem to pay attention to them until they complete their story. Then, the teacher asks the students for their comments on the storytelling technique in pairs,

and then the teacher explains again the assignment the students have to do after listening to the models.

Sanjaya (Sanjaya, 2011) states that every specific component or behavior the students have responded with should be rewarded and reinforced in order to enhance their pleasure feeling. Students will then repeat the behavior continuously and go to the next behavioral component. An example of positive reinforcement is, among others, praise given to the students. Teachers' cheerfulness in answering the students' questions is a positive reinforcement as well. To change the students' negative behavior to the positive one, teachers should recognize the psychology that can be used to estimate (to predict) and to control student behavior.

5.3 The Application of the Law of Effect

In a closing activity, the teacher, along with students, makes reflections and concludes the learning material discussed that day. The teacher tells the students to form groups based on the number present and gives them homework. The teacher instructs the students to summarize a story, the title of which has been prepared first by the teacher. Students develop a framework and summarize the story in their groups. The students willing to come to the front to tell the story first will get added value from the teacher. Skinner states that reward or reinforcement plays a very important role in the learning process. Reward is an enlivening response and a subjective behavior (Sunardi, 2016). The reward in this instance is that the teacher gives added value to the students willing to come to the front to retell the story first. Reinforcement in the form of reward or praise will motivate the students to learn diligently and to maintain the achievement they have gained.

6. Conclusion

Behaviorism is an effective tool used to enhance learning in the classroom. Understanding its definition and procedures gives fair advantage to the teacher in both, controlling his students' behaviors more effectively, and helping them improve their learning up to another degree. Applying behaviorism in the classroom involves simple strategies such as punishment, positive and negative reinforcement. Yet, all of which are extremely effective if applied to the right person, especially secondary level students, at the right time and place. Therefore, the teacher should know his students well enough before deciding which method to implement considering whether it is punishment, positive reinforcement or negative reinforcement. I strongly suggest that behaviorism should always be practiced in every school, especially those in secondary schools. Considering the results of the research, the following conclusions can be drawn: Learning will be successful when the teacher prepares everything well. Readiness also

includes preparing the students to receive the lesson readily. For that reason, the teacher should motivate the students continuously in order to grow their self-confidence and learning spirit. Successful learning can be seen, among others, from the students' activeness. Therefore, the teacher should attempt to motivate the students to participate actively in the learning process. For that reason, the teacher should give stimuli that can activate the students. It is proved that the stimulus-response-based cooperative script method is a learning method that can stimulate the students to tell a story more bravely, as storytelling is conducted with a partner. The learning process will be successful when students practice an activity that is directly relevant to the specified learning objective.

Teachers should accomplish this by means of (1) giving the students the opportunity to practice their knowledge, attitudes, and skills, and (2) giving feedback to the students' learning outcomes. In language skill learning, language practice is the important factor to improve an individual's language ability. It is also found that- to motivate the students, English language teachers at secondary level should promise to give added value to the students who are willing to practice storytelling first. Reward or reinforcement plays a very important role in the learning process. Reinforcement in the form of prize or praise will motivate the students to learn diligently and to maintain the achievement they have gained. From the explanation above, it can be concluded that the application of Thorndike and Skinner's law of readiness, law of exercise, and law of effect effectively improve the speaking skills of students of secondary level in Bangladesh.

References

- Aunurrahman (2012). *Belajar dan pembelajaran* [Learning and learning]. Bandung: Alfabeta.
- Bainbridge, C. (2012). *Extrinsic motivation*. From <http://giftedkids>.
- Dewantara IPM (2013). [Implementation of pragmatic approach (principles of language use) accompanied by friends and correction correction technique by master to improve skill of telling of experience to students of class viie smp negeri 5 negara]. *Jurnal Santiaji Pendidikan*, 3, 110-121.
- Dick, C.(1978). *The systemic design of instruction*. New York: Longman;
- Ferris, D & Tagg T. (1996). Academic listening/speaking tasks for ESL students: problems, suggestions, and implications. *Tesol Q*, 30, 297-320.
- Griffiths C, Parr J.M. (2001). Language-learning strategies: teory and perception. *ELT J*, 55, 247-254.
- Ghatala, E.& Hamilton, R. (1994). *Learning and Instruction*. The United States ofAmerica: McGraw-Hill, Inc.
- Herrnstein, R.J. (1970). On the law of effect. *J Exp Anal Behav*. 13, 243-266.

- Hoque, M. E. (2017). Three domain of learning: Cognitive, affective, and psychomotor. *The Journal of EFL Education and Research*, 2(2), 45-52.
- Iskandarwassid, Sunendar, D. (2008): Strategi pembelajaran bahasa [Language learning strategy]. Bandung: Remaja Rosdakarya;.
- Klein, S.B. (1996). *Learning: Principles and Applications*. The United States of America: McGraw-Hill, Inc.
- Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. *Psychol Rev*, 82, 1-25.
- Majid, A. (2013). *Strategi pembelajaran* [Learning strategy]. Bandung: Remaja Rosdakarya.
- Muammar (2008). *Bahasa dan sastra dalam berbagai perspektif* [Language and literature in different perspectives]. Yogyakarta: Penerbit Tiara Wacana.
- Ormrod, J.E. (1995). *Educational Psychology: Principles and Applications*. Jew Jersey: Prentice-Hall, Inc.
- Regulation of the Minister of National Education (Permendiknas) (2007). Regarding Academic Qualification Standards and Teacher Competencies.
- Sadowski, K. (2009). *The difference between positive and negative reinforcement*. From <http://nspt4kids.com/parenting/the-difference-between-positive-and-negative-reinforcement/>
- Sanjaya, W. (2011). Curriculum and learning: theory and practice of curriculum development level of education unit (KTSP)]. Jakarta: Prenada Media Group;.
- Steiner, G. (1999). *Learning: Nineteen Scenarios from Everday Life*. United Kingdom: University of Cambridge.
- Sunardi S (2016). Learning Resources of PLPG Support: *Pedagogic Material*. Ministry of Education and Culture Directorate General of Teachers and Education Personnel];
- World English Dictionary. (2012). *Behavior*. www.behaviour.org.
- Zimmerman, B.J. (2002). Becoming a self-regulated learner: an overview. *Theory into Pract*. 41: 64-70.

Online Education at Secondary Level in Bangladesh during COVID 19: the Challenges and Prospects

Abul Kalam Mazumder¹

Abstract

Online education, as an alternative to traditional face-to-face classroom teaching, has got a sudden stimulation in Bangladesh during the COVID 19 pandemic situation as the traditional classroom teaching was suspended on 20 March, 2020 for avoiding contagion of corona virus among students and teachers. The study intends to explore the current scenario as regard to prevailing challenges and prospects of online education in the present context in Bangladesh. The present researcher randomly selected 365 students, 108 teachers, and 361 parents of secondary schools as sample on the basis of convenient sampling technique. The Mixed-method approach was employed to conduct the research. The study found that only a small number of students availed the online education and majority students were detached from this trend. Internet accessibility, lack of technological knowledge, and absence of concerted management are the prevailing challenges. The introduction of online education at the secondary level was considered as a new mode of teaching-learning which might be more effective if academic and logistical support were provided to the learners and the teachers as well.

Keywords: COVID 19, online, education, corona virus, pandemic, disruption, and introduction.

1. Introduction

Online education basically indicates a mode of learning where most of the contents, more than 80%, are delivered via online and no scope of meeting face to face (Allen, Elaine & Seaman, 2008). 21st century has brought about a revolutionary change in the field of technology. The application of technology in the field of education started in the 1950s with the introduction of television and slide projectors. Online learning is a form of imparting education where both the learners and teachers get connected via internet from wherever they stay connected by using particular apps with the help of computer, mobile phone or tab (Alam, 2020). In the world's

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history, online learning started in 1950 in the University of Illinois though internet was not invented then. Students' computers were connected to the terminal which were linked and formed a network. The introduction of internet has added a new dimension in different fields. The University of Toronto facilitated the complete online course in 1984 for the first time. Later, the University of Phoenix emerged itself in 1987 as the online based institution offering both graduation and post-graduation degree (Sarkar, 2020). Many studies have found no difference between the traditional classroom teaching and online teaching in respect of their effectiveness if the strategies and technological expertise are sufficient (Patton & Alston, 1998). Students' attachment with the process of online learning is as important as their presence in offline or classroom learning but there are challenges to develop proper and adaptable method as per the requirement of the learners (Jacobs, 2013). The trend of online courses has been increasing in the United States to make learning easy and affordable across the country keeping the view that learning should be lifelong to keep pace with the dynamic society. According to the General Accounting Office of the USA, 84% institutions offered four years' online graduation in 2020 where 1.5 million students got their enrollment and continued their graduation course (Jacobs, 2013).

Preparedness of Bangladesh against COVID 19 was not well designed and coordinated from the very beginning of its outbreak. Education sector was not sufficiently equipped to discover an alternative or supplementary way in the place of conventional classroom teaching system during the pandemic situation (Khan et al., 2021). Lockdown was declared across the country to limit the social closeness among people which was regarded as the most responsible cause of mass infection (WHO). Government closed all types of educational institutions: primary, secondary, higher secondary, tertiary and Madrasa since 26 March, 2020 considering the health risk of the students (ibid, 2021). Though different sectors like garments sector, tourism, transport sector and shopping malls were released from the lockdown in different phases, education sector remained closed for indefinite period of time. Only some private universities, cadet colleges, a small number of public school and colleges administered by army personnel and some English Version and English Medium schools initiated to run their academic activities using online platform via Zoom and Google Meet. But the number of students under this online learning facility is very small comparing with the large number of students of the whole country. There are 3.15 million students in tertiary and 36.79 million from primary to higher secondary institution in Bangladesh who are facing disruption in education for COVID 19 pandemic situation (Ramij & Sultana, 2020). The study aims at illustrating existing scenario as regards to prospects and challenges of online education at secondary level in Bangladesh.

2. Literature Review

There are pros and cons of both online and offline mode of education. Online mode of learning is a congenial alternative platform for the students who are independent, self-driven, well-disciplined, self-motivated, self-organized with sound level of maturity. On the other hand, online environment of learning is inconvenient and inappropriate for the learners who are dependent, immature, not self-managed, undisciplined and unable to take the responsibilities (Kumar, 2010). Generally, online mode of learning is less expensive and convenient in many aspects such as there are no travelling and housing cost for attending the classroom irrespective of geographical locations, continuing jobs while going on course, participating in the class both in oral and writing expression, making class virtually interactive rather than facilitator-led one, scope to create international platform ignoring the barrier of time and distance, no disparity of religion, sex, nationality, dress, age and color and acquisition of technological expertise. There are also some disadvantages of online mode of learning like technology costing, time scheduling, data costing, learning new technology to adjust the new atmosphere, lack of face-to-face interaction, no scope to give special attention to the weak students, absence of absolute socialization which is the pre-condition of education due to physical absence in the class, difficulty in applying teaching aids and tools and challenges in assessing or measuring learners' achievement.

Alom (2020) conducted a study titled 'Challenges and Possibilities of Online Education during COVID 19' where he showed the emergence of online Education is a blessing but there are also many limitations of this mode of education. He also added that during the uncertain and unprecedented period of pandemic situation, online education has paved a great opportunity for the students and teachers to accomplish their academic activities and pass their quality time with significant assignment which also strengthened the relationship between teachers and students. He further revealed the challenges of adaptability from traditional face-to-face classroom teaching method to online mode of education, instability of internet connection, affordability to bear the cost of internet data, poor knowledge in using different apps, smart phone, and computer.

Islam & Selim (2006) conducted a research on "The Existing Situation and Possibilities of E-learning in Promoting Distance Learning in Bangladesh". The study showed the advantages and disadvantages of online learning in respect of developing countries like Bangladesh. They also added that E-learning (as cited in Gallahar, 2001) has added a new dimension in the field of distance learning which is gradually becoming affordable and accessible to all classes of people overcoming the barrier of distance and space. According to the study, there are, on the other hand, some challenges in online education such as initial costing of equipment, lack of sufficient knowledge, cost of internet connection and maintenance

for which this mode of education is yet to be successful in developing countries. According to the study titled “Education During a Pandemic: A Feasibility Study of Online Classes in Bangladesh to Counteract Potential Study Gaps by COVID 19 Related Lockdowns” conducted by Shama&Ikbal (2020) showed that the tertiary level students of Bangladesh are not sufficiently equipped and ready to keep pace with the online mode of learning because of their unaffordability to purchase smart gadgets and to buy internet data. Consequently, they are not getting the benefits of online education and many are worried about their future.

Khan, Rahman & Islam (2021) carried out a research on “The Online Education System in Bangladesh during COVID 19 Pandemic”. The conducted survey on 2038 students of 43 private and public universities and colleges found that only 23% students favored online class, 77% disfavored, 55.3% owned PC, laptop and tablet to attend online class whereas 44.6% could not attend due to having no logistics. Moreover, 87% students did not favor the assignment provided to them and 82% did not think online class as fruitful as face-to-face class which indicates the dissatisfactory attitude of the students to online class. Putri, Purwanto, Pramono, Asbari, Wijayanti and Hyun (2020) conducted a research focusing on the students of primary level titled “Impact of the COVID 19 Pandemic on Online Home learning: An Explorative Study of Primary Schools in Indonesia” where they found the absence of socialization and cultural interaction, learners’ unfamiliarity to e-learning, teachers’ inadaptability to new mode of teaching, difficulties of cultural acclimatization with the new mode of learning, extra expense for devices and internet quota, internet instability, incompleteness of lesson in scheduled time and parents’ extra time spending for kids in online classes.

Allen & Seaman (2008) carried out a survey research on “Staying the Course: Online Education in the United States”. The study was mainly conducted on the baccalaureate, diploma and post graduate institutions regarding the rise of online education and its extension. The study found online education economically cost effective and affordable for the students of higher studies, increase the enrolment for course flexibility and convenience, learning effective for many courses like liberal arts, social science and psychology other than engineering but precarious for long time continuation. Tabassum, Mannan, Parvej & Ahmed (2021) conducted a study titled “Online Education during COVID 19 in Bangladesh: University Teachers’ Perspective”. The study argued that online learning is challenging for the developing countries like Bangladesh as online teaching and learning are situational onset rather than pre-planned due to COVID 19 situation though there are many advantages of online mode of learning (Seage & Turegun, 2020). The study also revealed most of the teachers did not have familiarity with the e-teaching mode and almost all the students other than the students having ICT background had little knowledge on online class. Jacobs (2013) carried out a research on “The Challenges of

Online Courses for the Instructors where he showed the significance of online education for gaining the adaptability with the modern society. The study also found that there is no significant difference between traditional classroom teaching and online mode of teaching if the course materials and course conducting are effective. Teachers should adopt different strategies and invent novel ways as per the course to make online teaching more attractive and effective for the learners (Dasher-Alston & Patton, 1998). The researcher also added that understanding the characteristics of the students and adapting the teaching materials and teaching strategies accordingly are other ways to make online course more effective.

3. Study Gap

Since the outbreak of COVID 19 had taken pandemic shape across the world, many researchers started conducting researches at home and abroad focusing on the different aspects of online education as face-to-face classroom teaching and learning was stopped to maintain social distance during the corona pandemic situation. Indeed, education sector has been largely affected like many others. Like many other countries, Bangladesh has launched online education at a small scale to cover up the loss of stopping traditional classroom teaching. It is a very new concept in Bangladesh though it has been practicing at a large scale in the developed countries for longtime. Most of the researches conducted in this field focused mainly on the students and teachers of primary, pre-tertiary and tertiary level. There is hardly any research on the challenges and prospects of online education at secondary level which is also a critical transitional stage for the students of secondary level during the COVID 19 pandemic situation. Therefore, the researcher has taken a humble initiative to carry out a research in this field.

4. Objectives of the Study

- ✓ To find out the general scenario of online education at secondary level in Bangladesh.
- ✓ To identify the common challenges and prospects of online education at secondary level in Bangladesh.
- ✓ To reveal possible solution to the existing challenges.

5. Research Methodology

The Mixed-method approach was employed to conduct the research. A number of 365 students, 108 teachers, and 361 parents were selected from different secondary schools. The study applied random sampling technique for selecting different groups of participants. The study was mainly based on primary data collected from 12 secondary schools (6 government schools and 6 non-government schools). Data collection continued from 01 April,

2021 to 5 July, 2021. The study employed a close-ended questionnaire for students, semi-structured interviews with teachers and observation checklist for guardians for collecting data. Email IDs of teachers were collected from the institution heads via online and offline. Both offline and online data were collected. Google questionnaires were sent to the respondents to collect data online from students and guardians and Google Meet and Zoom apps were used to conduct interview with teachers.

The Researcher used SPSS software to analyze data. Descriptive statistics (Mean, Percentage, Frequency, and Standard Deviation) were used to find out the objectives of the study. In the questionnaire for students and guardians, there were two options such as ‘Yes’ and ‘No’ to answer each question which were coded as ‘Yes=1’ and ‘No=2’. There were also five options in the teachers’ questions such as ‘Agree’; ‘Strongly Agree’; ‘Neutral’; ‘Disagree’ and ‘Strongly Disagree’ (according to Likert Scale, 1932) to answer from where the respondents could choose the best one. The responses were coded as ‘Agree =1’; ‘Strongly Agree =2’; ‘Neutral =3’; ‘Disagree=4’ and ‘Strongly Disagree =5’.

6. Findings of the Study

The study initiated to explore the current scenario of online education at secondary schools in Bangladesh during COVID 19 and to identify the prevailing challenges and possibilities. Researcher applied descriptive analysis (Percentage) for students and guardians’ questionnaire and Mean, Standard Deviations for teachers’ questionnaire to reveal the current scenario of online education in triangular point of view and also find out the factors that make the online education prospective and challenging in the perspectives of Bangladesh.

SL	Items	No of Students	Yes %	No %
1	My school conducts online class	65	39.7	60.3
2	I use laptop to attend the online class	365	20	80
3	I use mobile phone to attend the online class	365	49.9	50.1
4	I use tablet to attend the online class	365	10.1	89.9
5	I do not have any device to attend the class	365	70.1	29.9
6	My family is able to afford device for online class	365	29.7	70.3
7	My family is able to afford data cost for online class	365	39.7	60.3
8	I use Wi-Fi for internet connection	365	20	80
9	I use data package for internet connection	365	80	20
10	I face internet disruption during online class	365	80	20
11	I attend all the online classes conducted by my teachers	365	44.9	55.1
12	My school conducts more than one class everyday	365	50.7	49.3
13	I face difficulty to attend online class	365	70.1	29.9

14	I need the help of my family members to join and continue online class.	365	39.7	60.3
15	I find pleasure in online class as much as face-to-face class	365	30.1	69.9
16	My school conducts online examination	365	29.9	70.1
17	My syllabus has been completed by my teacher	365	24.4	75.6
18	I take online examination as seriously as face-to-face examination	365	35.6	64.4
19	I remain honest in the online examination as there is a scope to adopt unfair means,	365	40	60
20	My institution/ teacher conducts classes using Google Meet /Zoom	365	31.7	68.3
21	My institution/ teacher conducts classes using Facebook/YouTube	365	68.3	31.7
22	The introduction of online class at least has made up the minimum academic loss caused by the corona pandemic situation	365	82.5	17.5

2Table-1: Findings from the Students Questionnaire

6.1 Students' Data Findings and Discussion

Students' questionnaire revealed that only 39.7% schools initiated to conduct online class, 20% students owned laptop, 49.9% used mobile phone, 10.1% used tablet, and 70.1% did not have any device to attend the online class. 60.3% family did not have the affordability to bear data expense, 20% had Wi-Fi connection, 80% used package data and 80% of them faced internet disruption during the class. Moreover, 44.9% students attended all the classes conducted by the teachers and 50.7% schools conducted more than one class daily. 31.7% teachers conducted online class using Google Meet/Zoom whereas 68.3% used Facebook/What's app. As regard to online examination, 64.4% students did not take online examination seriously and 60% adopted unfair means in the online examination. But there is good thing that 82.5% students who attended the online class expressed happiness that online class made up their minimum academic loss during the pandemic situation.

SL	Items	Number of Students	Yes %	No %
23	Institution has arranged the online class	361	36.1	63.9
24	My ward attends the online class regularly	361	32.1	67.9
25	I can afford the device to let my issue join the online class	361	31.4	68.6
26	I can bear the data expense that my ward needs to join online class	361	36.2	63.8
27	I have arranged Wi-Fi for my ward's online class	361	22.5	77.5
28	I find my ward enjoying the Online class	361	32.6	67.4

29	I observe my ward's online class	361	35.3	64.7
30	There are internet unavailability and disruption in my area	361	65.4	34.6
31	I observe my ward getting addicted to device	361	54.3	45.7
32	I see my wards being busy with device after the class time as tasks and assignments are given via online	361	48.1	51.9
33	I notice that technological skill of my ward has developed staggeringly.	361	60	40
34	My ward got introduced to new technology due to the introduction of online class.	361	56.7	43.3
35	I find my son/daughter being busy with social media rather than the study after online class ends	361	60.3	39.7
36	I observe the abuse of internet & Technological access of my ward	361	60.1	39.9
37	Sometimes my ward roams here and there carrying the mobile phone at hand connected with the online class.	361	51.8	48.2
38	I see my wards being busy with HW after the class time as it was before the Pandemic	361	31.9	68.1
39	The introduction of online class at least has made up the minimum academic loss caused by the corona pandemic situation	361	85	15

Table-2: Findings from the Parent Questionnaire

6.2 Guardians' Data Findings and Discussion

Guardians' response exposed that 36.1% secondary schools conducted online class, 32.1% students attended the online class, 31.4% afforded device to their issues for online class, 36.2% could bear the data expense, and 22.2% managed the Wi-Fi connection. Only 35.3% guardians observed their wards' online class, 32.6% found their wards enjoying online class and 65.4% opined internet disruption and unavailability. Moreover, 54.3% guardians found their wards getting addicted to device, 48.1% guardians found their issues busy with online in the name of tasks and assignments, 60.3% students got engaged with social media after class had been finished but 56.7% and 60% parents respectively admitted the technological development of their wards due to the introduction of online education. 51.8% guardians also admitted that their wards roamed here and their carrying the mobile phone at hand connected to the online class though 31.9% admitted their issues remaining busy with study as they were before pandemic started. The most important impression was that 85% guardians considered online education as something is better than nothing in this corona pandemic situation.

SL	Items	Mean	Std. Dev
1	I conduct online class under the institutional arrangement.	3.76	1.58
2	I conduct online class by own arrangement.	2.67	1.20
3	I am able to purchase device for online class.	3.74	1.08
4	My institution has afforded me device for online class.	4.25	1.24
5	I use laptop/desktop/tablet to conduct online class.	4.31	1.58
6	I use smart phone to conduct online class.	3.36	1.37
7	Extra cost of device and data is a burden for me.	2.22	.63
8	I am sufficiently skilled to conduct online class.	4.16	1.28
9	My institution has trained me on how to prepare online class and how to conduct online class.	3.70	1.44
10	I use Google Meet/ zoom for conducting online class.	4.41	.93
11	I use Facebook, YouTube/What's app/Viber to conduct class.	2.88	1.39
12	All the students of my class join the online class	3.75	1.26
13	Students stay connected during the whole class	4.33	1.44
14	Students attend all the classes in the routine on the same day.	4.15	1.21
15	Students leave the class whenever questions are asked in the class	2.53	1.31
16	Online classes are as congenial and comfortable as face-to-face class	4.06	1.56
17	Online class can make up the vacuum created by the closure of face-to-face class due to corona pandemic situation.	2.75	1.55
18	I cannot complete syllabus as I cannot conduct as many classes as the traditional class	2.94	.45
19	All the subjects can be equally and comfortably taught in the online class.	3.08	1.33
20	I have sufficient resources for online class.	3.24	1.76
21	The introduction of online class at least has made up the minimum academic loss caused by the corona pandemic situation	2.29	.96

Table-3: Analysis of Data Collected from Teachers.

6.3 Guardians' Data Findings and Discussion

Teachers' response exposed teachers' perception as well as the general scenario of online education at secondary school in Bangladesh during the corona pandemic situation. Online classes were conducted by teachers individually rather than institutional arrangement. Educational institutions did not provide financial support to the teachers for purchasing device or internet data to conduct class and consequently cost for device and data purchase has become burden for the teachers. Most of the teachers conducted online class using smart phone instead of laptop/desktop/tablet by which the necessary teaching aids cannot be used smartly. Majority teachers admitted that they were not skilled enough to conduct online class and institutions did not provide necessary training to the teachers. Moreover, most of the teachers used Facebook/Viber/What's App to conduct class instead of Google Meet/Zoom. Teachers found maximum students remained absent from the class and even the attended students were found leaving the class when questions were asked. Teachers also opined online class less congenial and less interactive than face-to-face class and syllabus could not be completed. In addition, teachers admitted their insufficiency of resources to conduct the class. But they confirmed that online class has covered up the minimum academic loss created by the closure of face-to-face class due to pandemic situation.

7. Recommendation

On the basis of research findings, the following recommendations may be made: Firstly, internet facilities should be made free of cost for the teachers and students and made available both in the urban and rural areas. Secondly, loan or grant should be allowed to both teachers and students who are really in need. Thirdly, teachers should be trained in technology and the use of online teaching aids so that they can easily and comfortably conduct the online classes. Fourthly, teacher should make online class attractive, lively, and interactive to draw the interest of the young students. Fifthly, students should be oriented to the use of required technologies so that they can feel comfort and get maximum output from online class. Sixthly, online class/online education should be run under institutional management. Seventhly, education department and educational institution should take initiative to raise awareness among guardians and students regarding the online education. Eighthly, guardians should monitor their wards whether they abuse technology and time in the name of online education/online class.

8. Conclusion

Corona pandemic has had a devastating impact on the educational sector of Bangladesh causing the closure of face-to-face class since March, 2020. Though the education sector of the most countries of the world got affected by corona pandemic, developed countries have been able to overcome the crisis continuing the online education by using their advanced technology. According to the Bangladesh Bureau of Statistics, there are 37.3% houses which have the internet facilities and 5.6% families have PC (Ramij& Sultana, 2020). It is, indeed, challenging for Bangladesh to create platform for making online education a success. There is cheering news that online education has been started in Bangladesh and at least a small number of students get the benefit of this mode of learning. On the other hand, it is also a matter of great concern that a large number of students are completely detached from this facility and therefore is creating a large gap between the facilitated and the deprived students. There are limitations of this study. Firstly, the researcher collected data from online and offline sources. In this respect, there might be different in response from the respondents. Secondly, the survey was limited within Cumilla region which may not represent the whole country, as there are socio-economic variations from region to region

References

- Dasher-Alston, Robin M., and Gerald W. Patton. (1998). Evaluation criteria for distance learning. *Planning for higher education*, 27.1 11-17.
- Jacobs, Pearl. (2013). The challenges of online courses for the instructor. *Creative Education*, 12.2 , 441-452
- Kumar, Dharendra. (2010). Pros and cons of online education. *Manuscript, North Carolina State University, Raleigh, NC, USA*
- Alam, Alaul. (2020). Challenges and possibilities of online education during Covid-19. ." *Creative Education*, 12.2, 441-452
- Ramij, Md, and Afrin Sultana (2020). Preparedness of online classes in developing countries amid COVID-19 Outbreak: A Perspective from Bangladesh." *Afrin, Preparedness of Online Classes in Developing Countries amid COVID-19 Outbreak: A Perspective from Bangladesh*.
- Khan, Mohammad Monirujjaman, SM Tahsinur Rahman, and Sabik Tawsif Anjum Islam. (2021). Online Education System in Bangladesh during COVID-19 Pandemic. *Creative Education*, 12.2 441-452.
- Mashile, E. O., and F. J. Pretorius. (2003). "Challenges of online education in a developing country: research in higher education." *South African Journal of Higher Education*, 17.1 132-139.
- Islam, Md Tofazzal, and Abu Sadeque Md Selim. (2006). Current status and prospects for e-learning in the promotion of distance education in Bangladesh. *Turkish Online Journal of Distance Education*, 7.1

- Shama, Shafia, and JavedIkbal. (2020). EDUCATION DURING A PANDEMIC: A feasibility study of online classes in Bangladesh to counteract potential study gaps caused by COVID-19 related lockdowns. *Creative Education*, 12.2 (2021): 441-452
- Khan, Mohammad Monirujjaman, SM Tahsinur Rahman, and SabikTawsif Anjum Islam. (2021). Online Education System in Bangladesh during COVID-19 Pandemic. *Creative Education*, 12.2 441-452.
- Putri, RatnaSetyowati, et al.(2020). Impact of the COVID-19 pandemic on online home learning: An explorative study of primary schools in Indonesia. *International Journal of Advanced Science and Technology*, 29.5 4809-4818.
- Allen, I. Elaine, and Jeff Seaman. (2008). *Staying the course: Online education in the United States*, Sloan Consortium. PO Box 1238, Newburyport, MA 01950, 2008.
- Tabassum, Mimma, et al. (2021). Online Education during COVID-19 in Bangladesh: University Teachers' Perspective. *Aquademia*, 5.1 ep21005.
- Jacobs, Pearl. (2013).The challenges of online courses for the instructor.
- Dasher-Alston, Robin M., and Gerald W. Patton. (1998). Evaluation criteria for distance learning. *Planning for higher education*, 27.1 11-17.

Informal Mentoring of Students in Govt. Teachers' Training College, Dhaka

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Abstract

This qualitative study tried to explore the status of informal mentoring; strategies teachers used in mentoring; the tangible achievement of students because of informal mentoring; and the challenges mentors faced in mentoring in Govt. Teachers' Training College, Dhaka. The study employed semi-structured interview method with two Associate Professors and observed one mentoring session of each of the two mentors; and organized a Focus Group Discussion (FGD) with four mentees selected by the two mentors. Data were transcribed, coded, and then categorized based on the themes the research questions. The major findings show that a small number of teachers in Govt. Teachers' Training College, Dhaka mentor students; they employ personalized approach in mentoring individual students; some mentees have been able to develop English writing skill and publish articles in the newspapers and in the research journals; and one student has given up drugs because of the influence of mentoring; all the four mentees' frustration got minimized because of mentoring; and the mentors face some challenges which include excessive workload, jealousy of colleagues, and conservativeness of female students. It is hoped that this study would make the usefulness of mentoring clear to the education authority and educational leaders in Bangladesh.

Keywords: mentors, informal mentoring, achievement, strategies,

1. Introduction

Mentoring is advising colleagues and students in order to provide them with intellectual, emotional, moral, and sometimes financial supports (Rahman, 2018). In Bangladesh education sector, mentoring is rarely evident (Rahman, 2018) although the researchers' experiences say that

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some teachers are engaged in mentoring students informally. Rahman (2018) and Naomee and Bayezid (2016) claim that mentoring is important in building better future of a student but it is not easy to get a good mentor in Bangladesh educational institutions as the faculty members themselves are not aware of the benefits of mentoring. Although there is no formal mentoring in Bangladesh higher education institutions, a small number of teachers at Govt. Teachers' Training Colleges are engaged in informal mentoring of their students. A report by the World Bank (2019) reveals that Bangladesh higher education follows the traditional ways of teaching-learning and assessment where there is lack of opportunities for creativity practices, critical thinking, and soft skills practices. As a result of the stated practices, learners at the tertiary level cannot reach the goals they set in their mind. In this situation, claim Naomee and Bayezid (2016) that, mentoring service is seriously needed at the undergraduate level of education in Bangladesh. Transition to the Govt. Teachers' Training College, Dhaka from different parts of the country is a difficult and stressful experience to some of the first year undergraduate students. In this situation academic and emotional supports are required for the students to persist in the college and to grow academically in the new environment. Although Govt. Teachers' Training College, Dhaka is a specialised educational institution where practising and would-be secondary teachers are educated and trained, there is no provision of student mentoring as part of the education program.

2. Literature Review

Mentoring is defined as a developmental relationship between a more experienced person (mentor) and a less experienced person (mentee) where the mentor's aim is to support the overall development of the mentee (Hernandez, Bloodhart, Barnes, Adams, Clinton, Pollack, Godfrey, Burt, & Fischer, 2017). Mentoring can be of two types: formal mentoring and informal mentoring (Hernandez et al., 2017; Bynum, 2015). Hernandez et al. (2017) further claims that there is another kind of mentoring which happens indirectly such as being influenced by an outstanding career role model. Being influenced by a charismatic performer is also a kind of mentoring and this kind of mentoring is called indirect mentoring (Hernandez et al., 2017). Formal mentoring or mentoring relationship is inbuilt in a program or in the curriculum and involves one or all of the psycho-social-emotional supports in the form of counseling, guidance, and motivation (Hernandez et al., 2017). Formal mentoring has usually scheduled face to face interactions between the mentor and the mentee(s). In teacher development through formal mentoring, claim Feiman-Nemser and Sharon (1996), that although experienced teachers work in mentoring the novice teachers, they are observed to promote the conventional norms and practices limiting the reforms in education. Informal mentoring or mentorship relationship is not compulsory for the faculty of an institution since mentoring is not an

integral part of the programees students are studying in (Harnandez et al., 2017). Grace College of Indiana, USA in their education website claims that informal mentoring in any organizations is more effective than formal mentoring; people having informal mentors are happier than those having formal mentors and this happens because of the type of mentor-mentee relationship. However, informal mentoring happens by chance without any pre-arranged schedule (Cox, 2005). There are five types of informal mentoring according to the Share my lessons website. They include co-pilot, social seeder, complimentary colours, the lighthouse, and the fortune teller.

3. Research Questions

The current study tried to explore answers to the following questions:

- 1) What is the current status of mentoring in Govt. Teachers' Training College, Dhaka?
- 2) What strategies do the teachers employ in informal mentoring?
- 3) What challenges do the mentors face about mentoring?
- 4) How does mentoring impact the students in Govt. Teachers' Training College, Dhaka!

4. Research Methodology

The proposed study employed qualitative research design, as it is possible to delve deep into the research problem through the use of qualitative methodology (Bogdan & Biklen, 2007). This study employed semi-structured interviews with two Associate Professors having good track records of mentoring. FGD method was used with a group of four students selected by these two mentors. The four mentees were selected based on their observable development through informal mentoring by the mentors. And two mentoring sessions by the two mentors are closely observed. The real names of the mentors and the mentees have not been used for ethical reasons. Therefore, the mentors would be known as T1 and T2, and the mentees have been given the names as S1, S2, S3, and S4 respectively.

4.1 Particulars of the Participants (Ps)

The pieces of information about the participants are presented below:

Ps	Particulars of the Participants	Role of the Ps
T1	<ul style="list-style-type: none"> • Associate Professor, 23 years of experiences as Mentor a teacher educator and trainer. • Ph.D., M.Phil., Master of Education, MA in English Literature. • Researcher, has got some books and articles published. International exposure. 	Mentor

T2	<ul style="list-style-type: none"> • Associate Professor, 20 years of experiences as Mentor a teacher and trainer • M. Phil., Master of Education, M.Com. in Finance & Banking. • Researcher, has got some books and research articles published • International exposure. 	Mentor
S1	<ul style="list-style-type: none"> • Master of Education student; passed 4 years Mentee IS Bachelor of Education. • Published two research articles in international journals and 35 newspaper articles in English dailies. 	Mentee
S2	<ul style="list-style-type: none"> • Master of Education student; passed Bachelor Mentee of Education; and Master in English Language & Literature; published one research article in an edited book. 	Mentee
S3	<ul style="list-style-type: none"> • Bachelor of Education student studying in the 3rd year 6th semester. • Published five articles in the English dailies 	Mentee
S4	<ul style="list-style-type: none"> • Bachelor of Education student studying in the 3rd year 6th semester 	Mentee

The recorded interview and the FGD data were transcribed; edited the transcripts, and read again and again in order to check if anything is dropped out. Then the transcribed data were studied minutely to look for themes. The data were coded. Then the data collected through different tools and from different sources were triangulated.

5. Findings and Discussion

The findings include the status of mentoring at Govt. Teachers' Training College, Dhaka; strategies teachers employed in mentoring; tangible outcome of mentoring; and challenges teachers face in mentoring students at Govt. Teachers' Training College, Dhaka. The findings have been presented in the following sections:

5.1 Status of Mentoring in Govt. Teachers' Training Colleges

Govt. Teachers' Training College, Dhaka is an institution where the practising and would-be secondary teachers are trained and educated. Moreover, this college also educates and trains the future secondary teachers of the country. Both the mentors, T1 and T2, claim in the interviews that they mentor students although it is not mandatory for them or in other words, although mentoring is not a precondition of the programs they teach. T1 claims:

Sometimes students call me over phone or send me a text message asking for appointment. I fix a time and tell them to come. They or

he/she come(s) and ask for the supports they (he/she) need. I support them as per my ability. Sometimes, I ask them if they are in a trouble. Then they (he/she) open up their mouths.

Similar is the opinion of T2. He also claims:

I ask my students in the classroom to see me if they if they need any kinds of supports from me. I do this because the students are far away from their homes and parents. I provide them supports as I believe that a small support will help them gather mental courage.

S4 confesses in FGD that a small number of his teachers explain to him outside the formal teaching sessions what he did not understand in the classrooms. And another participant S3 asserts that one of his mentors very often helps him in academic matters such as providing feedback on his written work.

5.2 Strategies Teachers Employ in Informal Mentoring

Different teachers adopt different strategies in mentoring based on the need and personality of the mentees. T1 mentions in his interview that he identifies the strengths and weaknesses of the students and asks them to see him to talk about how to improve those areas of weaknesses. Sometimes he provides motivation; sometimes gives the students some books and/or articles for reading; sometimes he gives addresses of some websites, and tell them the strategies how to overcome the weaknesses. T1 claims:

I talk about the home work, assignment, personal wellbeing including tension and anger management, accommodation, future career path, higher education home and abroad, local and international scholarships, publishing in the newspapers and in the research journals, personal skill development such as four skills of English language, computer literacy, assessment criteria, IELTS, the probable questioning patterns for written and viva voce tests organized by the recruiters, etc.

T1 also takes the students or mentees to some seminars where the mentees can have exposure among the high profile intellectual people from home and abroad. Other than providing anger management, information about local and international scholarship opportunities, T1 also organizes English speaking skill practice training for the mentees. T1 further claims:

I run an English language speaking practice club named SparkEL Club (Spark English Language Club) where I engage students to practice English speaking. After some days' of practices, some students become fluent in English speaking. Moreover, I organise seminars and lead students to attend seminars in different universities where they can have exposure among highly intellectual personalities.

T2 also mentions the strategies he uses in mentoring students informally. Similar areas of mentoring were mentioned by him. He claims:

I invite students when I understand they are in trouble. I ask them what I can do for them. They disclose their problems s/uch as financial crisis, ragging or bullying by senior students, future of studying Education subject, how to publish in the newspapers, how to choose a topic for writing, how to get a part-time job, etc.

T2 further alleges that he sometimes requests the recruiters to support a student who is on the verge of dropping out from the college due to financial crisis. He claims, "I have some students who do part-time job in the afternoon to meet the expenses of his/her education and to support their families". The mentees in the FGD claim that the mentors sometimes call them to talk about how to achieve better results, four language skills, how to find online educational resources, how to take preparation for the future career, and so on. S1 maintains that he received a lot of mentoring supports regarding how to conduct research and publish a research report in the international research journals. He claims that without the supports of the mentor, it would not have been possible on his part to conduct research and publish the research articles in research journals, and articles in the English dailies. He asserts:

One of my teachers discovered that I had good writing skill and he motivated to write on a topic of my choice. He asked me to choose a topic from the field of teaching and learning. He mentioned some titles such as How to develop English speaking skill; importance of informal education; English teaching-learning situation in secondary schools; and so on. I started writing, received feedback and encouragement from the mentor, re-wrote or edited the write-up, received feedback again and the write-up was finalized for publication. Till today, I have published 35 newspaper articles and two research articles in the last four years at this college.

Another student S2 describes his experiences of being mentored by a teacher of Govt. Teachers' Training College, Dhaka during his stay at the college for Bachelor of Education (B.Ed.) program. He asserts that he gained confidence in research methodology as well as in conducting research after several sessions of mentoring or consultation with his mentor. Now he is confident enough to conduct a research and write the research report. He claims:

My knowledge about research methodology, especially qualitative research, improved a lot through recurrent advices, feedback and feed forward regarding a research. Now I can conduct qualitative research and analyse qualitative data, and present the findings logically. I have already published a research article in an edited book by my mentor and two more articles are going to be published

in a month or two. This has been possible because of the motivation and academic supports provided by my mentor.

During observation of the mentoring session by T1, it was noticed that the mentor had captivating power; he has the power to retain the attention of the mentees; and when T1 was providing motivation, the mentees looked emotional. In the observed session, mentee S2 was talking about quitting from his part-time job for some reasons. The mentor was asking him to find another part time job in a month or two and he promised to provide some financial support to S2 if he needed it to bear the expenses. The mentor also assured them of supports at any stage of the dissertation writing. T2 advises his mentees:

No problem dear students. Start working hard on the dissertation; you will be able to finish it by 30" December. Your progress so far is quite good! No worry! Talk to me any time you need my support. You can also phone me, if urgent.

The stated data show that the strategies used in mentoring differ from mentor to mentor and from mentee to mentee. Some mentees willingly come to the mentors and seek their supports and some mentors proactively invite students to come and receive mentoring support through alluring them for better life. Sometimes they talk face to face and sometimes they talk over phone. Whatever the strategy is, the main aim is benefitting the students. However, through mentoring, the mentors also gain professional knowledge, skills, and insights.

5.3 Effect of Mentoring on Students at TTC, Dhaka

Interviews with T1 and T2 show that there are achievements of some students because of the influence of mentoring. Although there is no provision of formal mentoring in Govt. Teachers' Training College, Dhaka, T1 claims that some of his mentees regularly contribute to the English dailies as a result of informal mentoring. One mentee has published around 100 articles the dailies of Bangladesh in Bangla and English. One mentee has been able to publish 35 articles in English newspapers and three more have published from five to 10 articles each. T1 asserts:

One mentee who is a M.Ed. student has already published two research articles in the research journals and two other articles are ready to be submitted. As a teacher educator, I trust it is a huge achievement of a Master level student as there are many teachers in the college having no research articles published.

T2 alleges that there are some students who are frustrated as they could not be admitted in a reputed public university. After some days of mentoring, they start to love the college and the subject they are enrolled in. T2 claims:

When I told the frustrated student that he can get a scholarship in an Australian or New Zealand university if he can achieve better result in Education, his frustration has become minimized and the student is able to concentrate to his studies and performing better than before.

The students in FGD claim that their lives have changed because of mentoring by some of the teachers of Govt. Teachers' Training College, Dhaka, S3 maintains:

I was psychologically upset for not getting chance to be admitted into a public university. During my depression, one of my teachers came as a savior. He told me, "You can do a lot of things studying here at this college. What you need to do is studying hard, being skilled in English language and ICT. His motivation worked in me and now I am happy in this college. I have been developing my academic English and have published five articles in the English newspapers. Of course, this is the result of good mentoring!

S1 informed during the FGD that they are benefitted through mentoring in various ways including being motivated, knowing about the opportunities, developing four English language skills, developing English writing skill for academic purposes, and information about the availability of international scholarships. S1 alleges, "If I did not have mentoring supports from one of my teachers, it would not have been possible on my part to conduct research and publish research articles". S3 and S4 maintain that, they have been able to develop their English speaking and writing skills through academic supports from a mentor.

S1 further asserts that he knows a drug addicted students who gradually stopped taking drugs because of the continuous mentoring of T1. He claims:

The teacher invites the addicted student occasionally and talks about how to regain his broken health; how to ensure a better future career and take responsibility of his aged parents who are living in utter poverty. The teacher also requested some other classmates of the addicted boy to keep their addicted friend engaged in sports, cultural and educational activities, and friendly chats and discussions so that he forgets drugs.

During mentoring session observations, it was also noticed that the mentees' behave//ours were so polite and submissive indicating that mentors and mentoring has a positive impact on the mentees. The students' gratitude towards the mentors was visible in their appearances and behaviours during the mentoring sessions. The above evidences show that mentoring has a great influence in the intellectual growth, behavioural changes, knowledge gains and skills development of students at Govt.

Teachers' Training College, Dhaka. These kinds of positive influences of mentoring are supported by Rahman (2018), Johnson (2015), and Herrera et al. (2011).

5.4 Challenges Teachers Face in Mentoring Students

The interviews with the mentors, the FGD transcript, and the observation indicate that there are some challenges that teachers face in mentoring. The challenges include work load of teachers; female students' hesitation to come to a male mentor; some colleagues' negative attitude towards mentoring; and lack of students' frankness.

5.4.1 Workload of Teachers

In the interview, T1 claims that he has a lot of workload including teaching in the scheduled classes; preparing tests; examining scripts or marking assignments; invigilating in the examination halls; conducting training sessions with the secondary teachers; and other responsibilities imposed by the Principal of the college and the Ministry of Education. The other responsibilities include being on the Sports Committee, different national days observation committees, and so on. For those reasons, T1 claims:

I cannot meet the mentees immediately when they want to meet me; I have to find free time to tell them to come. And sometimes, I have to shorten my mentoring sessions because of urgent calls from the Principal and/or the Vice Principal in order to manage some unwanted situations such as student unrest.

T2 also mentions the similar challenges. He claims, "I cannot provide written feedback on the students' writing as I have some other extra work to do such as working on the admission committee; teaching practice committee; examination committee; tabulation committee; and other national days observation committees". T2 continues that sometimes the mentees do not maintain the time; sometimes they come late and show excuses of traffic jam which hampers the smooth running of the mentoring sessions. During the FGD, all the four mentees allege that teachers are burdened with workload. Sometimes, the mentors have to leave the mentoring session being called by the Principal or the Vice Principal. S4 maintains, "In many occasions, my mentor T1 had to stop the mentoring sessions because of people coming without prior appointment; or being called by other colleagues of his." S1 maintains, "Sometimes, I had to make phone calls several times to make an appointment. Again, there are many incidents of fixed mentoring sessions being cancelled because of the mentor or myself." During observation of the mentoring sessions, it was noticed that T2 was saying that he had a class then and he stopped the session and left without concluding the session. T2 asked the mentees to see him later but

the time was not mentioned. Not only in Bangladesh context, in other countries also workload of experienced and expert teachers or mentors is a challenge on the way to proper mentoring of students (Plesis, 2019). And it seems to be wise to minimize the workload of the experienced mentors to reap the higher benefits from their mentoring of students.

5.4.2 Female Students' Hesitation with Male Mentors

Mentors T1 and T2 confess that although male mentees easily come to the sitting room of the mentors, the female students hesitate to come alone to the male mentor in fear of being maliciously criticized by others. T2 claims that some of the female students in our college use hijab or head covering where only two eyes are visible. Whatever is the situation, talking between male and female in a solitary or isolated place is not viewed well. The students in the FGD assert that most female students of the college do not like to come to the male mentors for supports. S3 maintains:

One of my female classmates needed academic supports of T1 but she hesitated to go and talk to T1 because T1 is a male teacher. I asked her to go and talk to the T1 but she did not go. She went to a female teacher for help but that female teacher could not help the student because the teacher did not have expertise in the areas the students sought support in.

Although Bangladesh is a country where people from different ethno-religious groups live, all of them are socially and religiously conservative; male and female working together is sometimes viewed negatively. This is a potential challenge against informal mentoring at Govt. Teachers' Training College, Dhaka.

5.4.3 Colleagues' Negative Attitude towards Mentoring

The mentors, T1 and T2, alleged that they have to face hostile behaviours from their colleagues. The two mentors have claimed that the teachers who take care of the students or in other words, those who provide mentoring supports to the students are much loved by many students even by those who are not mentored because of their positive attitude towards students. Mass students' love and obedience to the mentors creates jealousy among some other colleagues of the mentors. Therefore, colleagues of the mentors, in most cases, do not take the mentoring sessions with students positively. T1 claims, for example, "One day my Principal called me and asked – what do you do with the students? Why are you so liberal with the students? If you mix with students so much, they will not obey you; they will not respect you". T2 maintains, "Friendly mixing with students is not considered positive in many educational institutions in Bangladesh. Some colleagues think that the teacher(s) and the student(s) are doing some unnecessary or unimportant things". However, T2 asserts that the informal

mentors ignore the criticism of the colleagues and continue mentoring out of their commitment to the society.

The participants in the FGD also express the similar opinion. S3 asserts:

If we go to some teachers for academic or other kinds of supports, other teachers who are not interested to provide supports to students think that we are spoiling our time by just chatting. But they are not right; they cannot understand the discussion is very important; it is mentoring.

In a mentoring session with T2, it was observed that there were two girls and a boy together. It was assumed from the observation that the boy was not there to receive mentoring. He might be there with the female mentees to show the conservative society that nothing wrong was happening there and so that others might refrain from malicious criticism of the female student and the male mentor.

5.5 Lack of Students' Openness

There are some newly admitted students who do not speak out honestly maybe because they fight shy or they think his weaknesses might be considered negatively by the mentors; they try to hide something in fear of being disrespected. For example, claims T2:

There was a student who did not fare well in the examinations. When I called him to come and asked him to tell me the reasons for bad results, he talked about his father's illness and hospitalization. When I contacted the student's father, the matter of illness and hospitalization was proved to be false. It was later known from his friends that the boy was badly affected by love affairs.

However, when the students become a bit senior and the interpersonal relationships develop with the mentors, they start sharing almost all the weal and woes with the mentors probably because of the development of mutual trust and empathy (DuBois & Karcher, 2005). That is why DuBois and Karcher (2005) claim that achieving benefits from mentoring, long time mentor- mentee relationship is required.

6. Conclusion

This study tried to explore the mentoring situation in Govt. Teachers' Training College, Dhaka. Data collected from two Associate Professors and four students indicate that some students developed academic writing skill, research skill, and published newspaper and research articles as a result of mentoring; some students were supported to get a part-time job that was necessary for some students to continue their studies in the college. Moreover, some drug addicted students started to lead normal life as a result of mentoring, and the major challenges for informal mentoring include the

mentors' workload; female students' unwillingness to be mentored by a male mentor; and jealousy of some colleagues because of mentors' popularity among the students.

References

- Bogdan, R. C. and Biklen, S. K. (2007). *Qualitative research for education: An introduction to theory and methods*. Boston: Pearson Education.
- Cox. E. (2005). For better, for worse: the matching process in formal mentoring schemes. *Mentoring & Tutoring*, 13(3), pp. 403-414.
- DuBois, D. L. and Karcher, M. J. (2005). *Handbook of Youth Mentoring: Theory, Research, and Practice*. USA: Sage Publications.
- Feiman-Nemser and Sharon. (1996). Teacher mentoring: A critical review, *ERIC Digest*, pp. 1-6.
- Hernandez, P. R., Bloodhart, B., Barnes, R. T., Adams, A. S., Clinton, S. M., Pollack, I., Godfrey, E., Burt, M., and Fischer, E. V. (2017). Promoting professional identity, motivation, and persistence: Benefits of an informal mentoring program for female undergraduate students, *PLOS One*, V. 12(11), pp. 1-16.
- Herrera, C., Grossman, J. B. Kauch, T. J., and McMaken, J. (2011). Mentoring in schools: An impact study of big brothers big sisters school-based mentoring. *Child Development*, 82(1), 346-361.
- Johnson, B. (2015). *On Being a Mentor: A Guide for Higher Education Faculty*. New York: Psychology Press.
- Naomee, I. and Bayezid, A. (2016). Teachers' and students' perception and the challenges of introducing mentoring for the undergrad students of Bangladesh. *International Journal of Education*, 4(4), pp. 1-8.
- New Age. (2019, November 3). *On Mentor in Life*. Retrieved on 01.01.2020 from <http://www.newagebd.net/article/89553/on-mentor-in-life>
- Plessis, A. E. D. (2019). *Professional Support Beyond Initial Teacher Education: Pedagogical Discernment and the Influence of Out-of-Field Teaching Practice*. Singapore: Springer.
- Rahman, A. (2018, August 30). Mentoring in educational institutions matters. *The Daily Star*.
- Sanfey, H., Hollands, C., and Gantt, L. N. (2013). Strategies for building an effective mentoring relationship. *The American Journal of Surgery*, 206, pp. 714-718.
- Taherian, K. and Shekarchian, M. (2009). Mentoring for doctors. Do its benefits outweigh its disadvantages? *Medical Teacher*, 30(4), pp. 95-99.
- World Bank. (2019). *Bangladesh tertiary education sector review: Skills and innovation for growth*. Washington DC: World Bank.

Remodeling Bangla Vowels to Diminish Relevant Spelling Challenges

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Abstract

The Bangla vowels are the integral part of Bangla Alphabet. Now there are eleven vowels in Bangla. Nileen vowel, short vowels, long vowels, consonant-like vowel and diphthongs are included in Bangla vowels. Except nileen vowel other ten vowels have their vowel-sign's. Vowels or vowel-signs are used with consonant to form orthographic word. Bangla vowel can be used independently and placed any position with consonant but Vowel-sign cannot be used independently. Vowel-signs are used with consonant and change the pronunciation of the holder consonant. The positions of Vowel-signs with consonant are different for different vowels. Vowels, their shortness and long lines, their kar-signs and their position with consonants made Bangla spelling difficult. This paper revealed that it is necessary to modify vowels to overcome spelling difficulties in logical manner. For this qualitative study is used which is explorative and descriptive in nature. Related documents study method has been employed in collecting the information as data. This study observed the possibility and necessity of limiting the vowels to partially remove the spelling problem in Bangla and redesigned the Bangla vowels.

Keywords: cardinal vowel, Long vowels, consonant-like vowel, diphthongs, and vowel-signs.

1. Introduction

Bangla vowels have eleven letters or sounds or graphemes. In Mr. Nathaniel Brassey Halhed's "A Grammar of the Bengali Language" and Madan Mohan Tarkalanker's Shishu shikkha (1st Edition) vowels were sixteen numbers (অ, আ, ই, ঈ, উ, ঊ, ঋ, ঌ, ঍, ঎, ঔ, এ, ঐ, ও, ঔ, অং, অঃ) and consonants were thirty-four numbers. Ishwar Chandra Vidyasagar reduced these sixteen vowels to twelve vowels. He eliminated two vowels (ঋ and ঌ) and shifted two vowels (অং = ঁ, অঃ = ঐ) to consonants. After this reform, around 125 years have passed where twelve vowels and thirty-nine consonants in Bangla alphabet up to 1991 until Kolkata university and west

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Bengal Bangla Academy combinely took decision to cancel one vowel namely lee (ঈ). Except shoro o(অ) other ten vowels have their vowel-signs. Bangla vowels can take position independently in a word but their vowel-signs cannot do it. Since inherent vowel shoro o(অ) is assumed to attach with all consonants, vowel-signs modify the inherent vowel of the base consonants when they are added with at their different positions. Due to same sound of rosshoo i(ই), dirgho i(ঈ) and their kar-signs ‘rosshoo i-kar’(ঐ), ‘dirgho i-kar’(ঐ), rosshoo u(উ), dirgho u(ঊ) and their signs ‘rosshoo u-kar’(ঔ), ‘dirgho u-kar’(ঔ), consonant-like vowel ‘rosshoo ri’(ঋ) and its sign ‘rosshoo ri-kar’(ঠ), two diphthongs ‘oi’(ঔ), ‘ou’(ঔ) and their vowel-signs ‘oi-kar’(ঔ), ‘ou-kar’(ঔ), shoro a(আ), æ(এ), their signs ‘shoro a-kar’(ঐ), ‘æ-kar’(ঐ) and their curved sound indicating vowel-sign ‘aa-kar’(ঐ) made some of Bangla spelling clumsy and critical though there is a Sanskrit influence to keep their spelling as before. Here vowels were targeted to reform by eliminating some letters to reduce vowel related spelling problems. Related books, documents, journals, articles and writings are used to describe and achieve the goals. .

1.1. Characteristics of Bangla vowels (Swarborno)

Eleven Bangla vowels are shoro o(অ), shoro a(আ), rosshoo i(ই), dirgho i(ঈ), rosshoo u(উ), dirgho u(ঊ), rosshoo ri(ঋ), e/ æ(এ), oi(ঔ), o(ও), ou(ঔ) etc. The short description of vowels is:

Shoro o(অ):

Shoro o(অ) is the first letter in Bangla vowels. There are two types of pronunciation of shoro o(অ). (i) General pronunciation of shoro o(অ) is like vowel sound ɔ (half o) like kotha(কথা), chola(চলা) etc. (ii) Shoro o(অ) Pronounces as o(ও) like oti(অতি= ওতি), Bosu(বসু = বোসু) etc. In modern Bangla, shoro o(অ) with last letter of the word is unpronounced like jol(জল), Dhan(ধান) etc but some adjectives where shoro o(অ) is pronounced at last letter aso(ও) like valo(ভাল), boro(বড়) etc.

Shoro a(আ):

Shoro a(আ) is a cardinal vowel. It has vowel-sign ‘shoro a-kar’(ঐ). (i) Generally shoro a(আ) is a short vowel but it becomes long when there is accent upon it. When shoro a(আ) is used as the starting letter of the word it becomes a half long like aj(আজ), raat(রাত) etc. In apon(আপন), bari(বাড়ি) ‘shoro a’(আ) is short but in single letter word with shoro a-kar(ঐ) ‘na’(না), it pronounces long where as in na jani(না জানি), jabo na(যাব না) where shoro a-kar(ঐ) is short. (ii) When shoro a(আ) carries a nasal sound, it has a tendency to be pronounced long whether it is used with hosonto or not, the long sounds of shoro a(আ) in ashte(আশ্টে), kathal(কাঠাল) etc.

Rossho i(ই):

It's a third and short vowel. It has vowel-sign 'rossho i-kar' (ি) which is placed before the consonant. Generally its vowel-sign 'rossho i-kar' (ি) places at the starting, middle and end of the word like et(ইট), aniccha(অনিচ্ছা), poti(পতি) etc. It makes two regular and three irregular diphthongs.

Dirgho i(ঈ):

It's a fourth vowel. It is a long vowel. It has vowel-sign 'dirgho i-kar' (িী) which is placed after the consonant. It has no diphthong. Generally, there is no difference of pronunciation between rossho i(ই) and dirgho i(ঈ) sound in Bangla. In monosyllabic word both rossho i(ই) and dirgho i(ঈ) pronounce long like bish(বিশ), deen(দীন), bari(বাড়ি/বাড়ী) etc but for spelling 'rossho i-kar' (ি) and 'dirgho i-kar' (িী) both are accepted. If ki(কী) acts as a pronoun, adjective, adverb and connective word, thenki(কী) can be written by 'dirgho i-kar' (িী) like eta ki boi ?(এটা কী বই?), ki anando!(কী আনন্দ!), ki poro ?(কী পড়ো?) etc.

Rossho i(ই) vs Dirgho i(ঈ):

For usable condition in simple vowel-sound there is no existence of dirgho i(ঈ) and dirgho u(ঊ) in Bangla. According to Bangla phonetics, Shortness and longlines of vowels do not make differences of words where as it occurs in English or in Urdu word (Hye, 2018, p.16). Dirgho i(ঈ) and dirgho u(ঊ) became rossho i(ই) and rossho u(উ) by losing their longlines (Rofiqul, 2017, p.65).

Rossho u(উ):

Rossho u(উ) is a pure vowel. It has vowel-sign 'rossho u-kar' (ঊ). Generally, it sits at the starting of the word like upanando(উপানন্দ), udaharon(উদাহরণ) etc but in monosyllabic word it takes place in last of the word like bou(বউ), kou(কউ) etc. Its vowel-sign places at the foot of the consonant to make meaning and combines any consonant of the word where necessary like chul(চুল), bubu(বুবু) etc. It makes two regular and three irregular diphthongs.

Dirgho u(ঊ):

Dirgho u(ঊ) is an aspirated vowel. It has vowel-sign 'dirgho u-kar' (ঊী). Generally it places its original form at the starting of the word and its vowel-sign at the foot of consonant to create pronunciation like uno(ঊন), ushor(ঊষর), Dhula(ধূলা) etc. It has no diphthongs. Around eighty words starts with dirgho u(ঊ) in Bangla. (Bangla Banan Abhidhan, 2013, pp.145-146).

Rossho u(উ) vs Dirgho u(ঊ):

In Bangla, rossho u(উ) and dirgho u(ঊ) have no noticeable differences in their pronunciation. With inside letter of word and last of the conjugal letter of monosyllabic and multisyllabic word, rossho u(উ) becomes dirgho u(ঊ) without following any rules like chul(চুল), Bhul(ভুল) where rossho u(উ) is long but uses ‘rossho u-kar’ (ু) in spelling, alternatively tula(তুলা), mula(মুলা) where rossho u(উ) is short but uses ‘dirgho u-kar’ (ূ) in their spelling.

Rossho ri(ঋ):

The pronunciation of rossho-ri(ঋ) in Bangla is ri(রি). It has vowel sign ‘rossho ri-kar’ (ৃ). Rossho-ri(ঋ) is used to spell Sanskrit word only like rishi(ঋষি), rin(ঋণ) etc. In many times, for short writing rossho ri(ঋ) or ‘rossho ri-kar’ (্র) is used in place of ri(রি) or ro-fola with ‘rossho i-kar’ (্রি) like British (ব্রিটিশ) = British (ব্রিটিশ), khrist (খ্রিস্ট) = khrist (খ্রিষ্ট) etc. Many times students write ‘rossho ri-kar’ (্র) with rossho ri(ঋ) in place of rossho ri(ঋ) like rrishi(ঋষি) in place of rishi(ঋষি), rrin(ঋণ) in place of rin(ঋণ) that exerts extra burden on students to look after this letter minutely. If ‘rossho ri-kar’ (্র) is placed in the foot of the word then it pronounces ri(রি) and ri(রি) is formed by consonant ro(র) and vowel-sign ‘rossho i-kar’ (্রি), then it cannot be treated as vowel. Again if rossho ri(ঋ) or ‘rossho i-kar’ (্রি) is used inside the word with consonants it makes the gemination of that consonant in its pronunciation like akrishto(আকৃষ্ট) = akkrishto(আক্কৃষ্ট), adrito (আদৃত) = addrito(আদ্বৃত) etc.

e/æ(এ):

e/æ(এ) is a pure vowel. It has two pronunciations. (i) e(এ) is straight pronunciation of e/æ(এ) like mesh(মেস), desh(দেশ) etc. Its vowel sign is ‘e-kar’ (ে). In monosyllabic pronoun e(এ) or ‘e-kar’ (ে) pronounces intact like ke(কে), shee(সে) etc. (ii) ae (আ/এয়া) is a curb or crack pronunciation of e/æ(এ) like æk(এক), cat(ক্যাট), bat(ব্যাট) etc. Its respective vowel sign is ‘aa-kar’ (ৈ). By following some rules e/æ(এ) or its vowel-sign ‘e-kar’ (ে) converts to ‘aa-kar’ (ৈ) like beng-bang (বেঙ-ব্যাঙ), ekhon- akhon(এখন-এ্যাখন), tera-tara(তেড়া-ত্যাড়া) etc. e(এ) makes five regular and three irregular diphthongs.

Oi(ঐ/ওই) :

Oi(ঐ) acts as a vowel in Bangla but it is not a cardinal vowel. It is a combination of two cardinal vowels o(ও) and rossho i(ই). Oi(ঐ) becomes Oi(ঐ) from o(ও) + rossho i(ই). Oi(ঐ) is a diphthong and its pronounce is Oi(ওই). It has its own vowel-sign ‘oi-kar’ (ৈ). When Oi(ঐ) is combined with consonant, its vowel-sign ‘oi-kar’ (ৈ) is used. Generally, ‘oi-kar’ (ৈ) sits left of the sheltered consonant like koi(কৈ), choi(চৈ) etc. The

general pronunciation of Oi(ঐ) is unaspirated but in many special case it might aspirated depending on the utterances or when one expresses his or her deep intention or try to attract someone attention like a-re oi-to ora jachche (আরে ঐ-তো ওরা যাচ্ছে!). Generally Oi(ঐ) or its vowel-sign ‘oi-kar’(ঐ) sits at the starting of the word and end of the word like oikko(ঐক্য), oitijjo(ঐতিহ্য) as starting of the word and koi(কৈ), doi(দৈ) as ending of the word etc. it can be expressed by its producers also like oikko(ওইক্য), oitijjo(ওইতিহ্য), koi(কই), doi(দই) etc and accepted grammatically.

O(ও):

O(ও) is a pure vowel. It has vowel-sign ‘o-kar’(ৗ). This vowel-sign sits both sides of the sheltered consonant like rog(রোগ), bhog(ভোগ) etc. Generally it is unaspirated but in some case it is pronounced aspirated in monosyllabic words like jor(জোর), bhor(ভোর) etc. in other cases it is pronounced unaspirated in monosyllabic word like shona(সোনা), bona(বোনা). O(ও) or ‘o-kar’(ৗ) can place any position of the word like ora(ওরা). kon(কোন). koto(কতো) where ‘o-kar’(ৗ) placed at the starting, middle and end of the word respectively. It makes four regular and two irregular diphthongs.

Ou (ঔ/ঔউ):

Ou(ঔ) acts as vowel but it is not a cardinal vowel. It is a combination of two vowels ‘o(ও)’ and ‘rossho u’(ঔ). Ou(ঔ) becomes Ou(ঔউ) from O(ও) + rossho u(ঔ). It is a diphthong and pronounced as Ou(ঔউ). It has vowel-sign ‘ou-kar’(ৗউ). When Ou(ঔ) combines with consonant, its vowel-sign ‘ou-kar’(ৗউ) is used. It is one of the difficult sign that sits both sides of the sheltered consonant like nou(নৌ), chou(চৌ) etc and spelling of these words are also accepted when written by its producers like nou(নোও), chou(চোও) etc.

1.2. Bangla vowels According to the Positions of Vocal Organs

There are seven vowel sounds (অ, আ, ই, উ, এ, ও, ঐ) in colloquial and standard Bangla. The Position of the vocal organs in pronouncing Bangla vowels are as follows:

	Front or Spread Vowels.	Central or Open vowels.	Back or Rounded Vowels.
High	rossho i(ই) dirgho i(ঈ)		rossho u(উ) dirgho u(ঊ)
High-mid	e/ æ(এ)		o(ও)
Low-mid	aa(ঐ)		shoro o(অ)
Low		shoro a(আ)	

Table 1: The Position of the vocal organs

Place of articulation	unaspirated vowels	aspirated vowels
Guttural sound	shoro o(অ)	shoro (আ)
Palatal sound	rossho i(ই)	dirgho i(ঈ)
Labial sound	rossho u(উ)	dirgho u(ঊ)
Retroflex sound	rossho r(ঋ)	
Diphthongs		
Palatoguttural sound	e/æ(এ)	oi(ঐ)
Labioguttural sound	o(ও)	ou(ঔ)

Table 2: Bangla vowels according to their place of articulation

There are two types of sounds used in Bangla, oral and nasalized sound. There are seven cardinal sounds in Bangla and each of them has the nasal form. But now in present Bangladesh the nasalized pronunciation of vowel sounds is rare but in west Bengal the level of nasalized pronunciation is comparatively high (Meena, 2017, pp.67).

Diphthong

It is notable that in ancient Bangla there were no diphthongs but now one of the character of Bangla Alphabet is its huge numbers of diphthongs (Sahidullah, 1998, pp.51). According to Suniti Kumar Chatterjee, diphthongs in Bangla are twenty-five (Chatterjee, 2003, pp.34). Regular diphthongs are nineteen and irregular diphthongs are twelve, total diphthongs are thirty-one in Bangla language (Hye, 1993, pp.26). But there are only two diphthongs oi(ঐ) and ou(ঔ) in Bangla acting as vowels like Sanskrit where diphthongs are only two. Regular nineteen diphthongs are o(অও), oy(অয়), ai(আই), ao(আও), au(আউ), ay(আয়), i-i(ই-ই), i-u(ই-উ), ui(উই), u-u(উউ), ei(এই), eo(এও), eu(এউ), aeo(এ্যাও), aey(এ্যায়), O-o(ওও), Ou(ওউ-ও), Oi(ওই-ঐ), Oy(ওয়) and twelve irregular Diphthongs are a-a(অয়া), ia(ইয়া), ie(ইয়ে), io(ইও), ue(উয়ে), ua(উয়া), uo(উয়ো), ea(এয়া), eo(এয়ো), aea(এ্যায়া), oa(ওয়া), oe(ওয়ে) etc.

The Bangla vowels can take two forms: the independent form and the dependent, vowel sign form. The independent form is used when it does not add with consonant. At the beginning of a word a vowel is always set as independent form. In Bangla vowels dirgho i(ঈ), dirgho u(ঊ) are long vowels, rossho ri(ঋ) is clearly consonant-vowel band, oi(ঐ) and ou(ঔ) are diphthongs and each of them has independent vowel-sign which is frequently used to form consonant vowel band in a word. Except Sanskrit words other words have the uniform word spelling but Sanskrit words tried

to keep as its original spelling were, as a result spelling problems aroused more. Spelling problem existed due to two i (rossho i-ই,dirgho i-ঈ), two u (rossho u-উ,dirgho u-ঊ), rosshō ri(ঋ),oi(ঔ),ou(ঔ) and their kar-signs.Words withdirgho i(ঈ),dirgho u(ঊ),rossho ri(ঋ) and their vowel-signs dirgho i-kar(ঐ),dirgho u-kar(ঔ),rossho ri-kar(ঋ) are the Sanskrit. Some Sanskritspelling with both rosshō i(ই),dirgho i(ঈ), and their Kar-signsrossho i-kar(ঐ),dirgho i-kar(ঐ) (two spelling) are correct like Eti(ঈতি) - Eti(ইতি), Dhomoni(ধমনী) - Dhomoni (ধমনি), Podobi(পদবী) - Podobi(পদবি) etc. Except Sanskrit all other words form with rosshō i(ই) androssho i-kar(ঐ), even female and nation indication words use rosshō i(ই) and rosshō i-kar(ঐ) but still dirgho i(ঈ) anddirgho i-kar(ঐ) are frequently used, like Gari(গাড়ী) - Gari(গাড়ি), Arobi(আরবী) - Arobi(আরবি), Pishi(পিসী) - Pishi(পিসি) etc. Some Sanskrit spelling with both rosshō u(উ),dirgho u(ঊ) and rosshō u-kar(ঔ),dirgho u-kar(ঔ) are correct like Uh(উঃ) - Uh(উঃ), Usha(উষা) - Usha(উষা), Bhru(ভ্রু) - Bhru(ভ্রু) etc.

Except Sanskrit words all other words form with rosshō u(উ) and rosshō u-kar(ঔ), even female and nation indication words use rosshō u(উ) and rosshō u-kar(ঔ) but still dirgho u(ঊ) and dirgho u-kar(ঔ) are frequently used like Chun(চুন) - Chun(চুন), Puzo(পুজো) - Puzo(পুজো) etc. All spelling with rosshō ri(ঋ) or rosshō ri-kar(ঠ) can be expressed alternatively by using consonant-vowel ligature ri(রি) like ritu(ঋতু) - ritu (রিতু), krishok(কৃষক) - krishok(ক্রিষক) etc. aa(এ্যা/ অ্যা) is a curb or crack pronunciation ofe/æ(এ) or shoro a(আ) like bat(ব্যাট), Sanskrit- Bash(ব্যাস), Jamiti(জ্যামিতি), foreign words- and(এ্যাড), Acid(এ্যাসিড), native words- bang(ব্যাঙ), cat(ক্যাট) etc wheree/æ(এ) or shoro a(আ) pronunciation is not clear or curbed or distorted. Its respective vowel sign isaa-kar(ঐ).aa(এ্যা/ অ্যা) is not an independent letter. Oi(ঔ/ওই) is a combination of o(ও) and rosshō i(ই).When Oi(ঔ/ওই) is combined with consonant, its vowel- sign oi-kar(ঔ) is used. Generally oi-kar(ঔ) sits left of the sheltered consonant like koi(কৈ), choi(চৈ) etc.Oi (ঔ/ওই) can be written by its producers and spelling by its producers are also accepted that make confusion like oikko(ওইকা), oitijjo(ওইতিহ্য) etc. Ou(ঔ/ওউ) is a combination of o(ও) and rosshō u(উ). Generallyou-kar(ঔ) sits both sides of the sheltered consonant like nou(নৌ), chou(চৌ) etc.Ou(ঔ/ওউ) can be written by its producers and word spelling by its producers are also accepted that also make confusion to reader's mind like joubon(যৌবন), sourobh(সৌরভ) etc.

1.3 Conceptual Framework

Bangla eleven vowels, ten vowel signs, Sanskrit words and problematic spelling are acting as the primary resources of this study. Two Pairs of vowels (rosshō i-ই,dirgho i-ঈ androsshō u-উ, dirgho u-ঊ) having

similar sounds and their different kar-signs (rossho i-kar-ঈ, dirgho i-kar-ঐ and rossho u-kar-ঊ, dirgho u-kar-ঔ) within the word made different meanings but sometimes double spelling were accepted as correct that make contradiction to reader's mind. Consonant-like vowel 'rossho ri'(ঋ) or 'rossho ri-kar'(ঠ) is specially used for expressing Sanskrit words. For curved or inclined pronunciation aa-kar(ৗ) sign is used but it has no holder letter. Two diphthongs (oi-ঔ, ou-ঔ) and their vowel-signs (oi-kar-ঔ, ou-kar-ঔ) made extra burden on spelling and can be rewritten with their producers (o-ঔ, rossho i-ঐ, rossho u-ঔ). problematic words due to those of Bangla vowels made Bangla language hard and critical. Analysis of vowels through documents studying advised that some spelling problem has aroused due to similar vowels, consonant-like vowel, diphthongs, and their kar-signs.



Eliminating long vowels (dirgho i-ঐ, dirgho u-ঔ) of two Pairs of vowels (rossho i-ঐ, dirgho i-ঐ and rossho u-ঔ, dirgho u-ঔ), consonant-like-vowel (rossho ri-ঋ), and two diphthongs (oi-ঔ, ou-ঔ) resulted the un-contradicted spelling and a smart new Bangla vowels model.

2. Literature Review

The past studies and researches are mainly realized and identified the spelling problems and tried to manage the spelling problem within the existing alphabet keeping Sanskrit spelling intact. They never classified the spelling problems either for vowels or for consonants. After Rabindranath Tagore appeal for eradicating spelling problems Kolkata university prepared and Published Bangla Bananer nitimala at 1936. After that East Bangla Language committee was formed at 1949 and submitted "Easy Bangla" reports at 1950 where third issue was Bangla writing system reform like Letters abolition, Letters creation, Position of 'kar-sign', changes of structure of Bangla consonants, transparent letters and abolition of 'fol-sign' etc. (Ansery, 2017, pp.301-302).

After establishing The Bangla Academy at 1955 through Language movement at 1952, it took initiative for Bangla spelling reform and Bangla script reform at 1959 and 1963 respectively. Academy named its reform proposal as "Pak-Bangla" in place of former 'East Bangla' keeping 'J-fola'(য-ফলা বা জ-ফলা), 'r-fola'(র-ফলা), 'ri-fola'(রি-ফলা) unchanged and abolition all others fola's. Academy again submitted its second proposal at 1963 including abolition of 'rosso ri'(ঋ), 'uma or uo'(ঊ), 'neo' or 'uyo'(ঐ), 'murdhanno n'(মূর্ধন্য ণ), 'bishorgo'(ঃ), 'lee'(ঈ) letters, use of 'ri'(রি) in place of 'rossho ri'(ঋ), 'onusshar'(ঐ) in place of 'u-ma' or 'u-o'(ঊ), 'nch'(নছ),

‘nchh’(নছ), ‘nj’(নজ) in place of ‘uyo’ or ‘neo’(ঔ), ‘donton no’(ন) in place of ‘murdhon no’(গ), for some little exception ‘rossho i’(ই) and ‘rossho i-kar’(ই-কার) in place of ‘dirgho i’(ঈ) and ‘dirgho i-kar’(ঈ-কার) ‘rossho u’(উ) and ‘rossho u-kar’(ঊ) in place of ‘dirgho u’(ঊ) and ‘dirgho u-kar’(ঊ), ‘ho’(হ) in place of ‘bishorgo’(ঃ) where ‘bishorgo’ (ঃ) used as double pronouncer in the middle of the word and end of the word, Transparent consonants in cluster or complex consonants, and abolition of b-fola(ব-ফলা), m-fola(ম-ফলা) etc. National curriculum and textbook board took two initiatives about Bangla Bhasha porikolpona at 1984 and 1988 about Bangla spelling for using primary level books and arranged several seminars, formulated twenty-four rules for Bangla spelling. They prepared a word lists based on the stated rule and published it at 1989 as the name of Spelling for textbooks (Promito Bangla Bhashar Bakoron, pp.306). Bangla academy took initiative at 1991 to make similar spelling for all books and papers in Bangla and published Promito Bangla Bananer Nyom at 1992 depending on expert’s committee suggestions. Except above organizational initiatives some scholars like Yougesh Chandra Roy bidyanidhi, Satish ghos, Muhammmad Sahidullah, Munier Chowdhury, Mofazzal Haider Chowdhury, Ferdaus Khan, Shibprasanno Lahiri and Pobitra Sarker took several steps to reform Bangla script. (meena, 2017, Pp.65). Rather above initiatives, no academic approach is yet to proceed for vowel reformation to reduce spelling conflicts.

3. Significance of the Study

For spelling reform many scholars and organization’s initiative have taken place but the problems did not fuse due to short of find out the root causes of spelling difficulty. Every initiative thought keeping Sanskrit word spelling intact and thinking of use of aspirated or unaspirated vowels or its sign with consonants. They all debated on their own opinion without touching any letter modification agenda. Though here research matter is vowels role in Bangla word spelling puzzle, it is sure that by omitting some vowels the uniform word spelling can be achieved in vowel-prone spelling area. So the topic was and is very much necessary to discuss.

4. Research Questions

Though spelling reforms depend on both vowels and consonants but this research is part of that, means vowel is only concern here. it is very important to justify whether Bangla spelling partially depends on or not on Bangla vowels. To solve vowel related spelling problem Bangla vowel is needed to modify in rational manner. So the research questions of subjected topic are:

- (1) How do Bangla vowels make Bangla spelling hard and confusing?
- (2) How do some vowels create extra pressure on spelling?
- (3) How can Bangla vowels be reshaped?

5. Research Methodology

For conducting this research qualitative method has been used. Several Subject related books, book chapters, Bangla dictionary, Promito Bangla Bhashar Bakoron (First and second part), Bangla Banan Ovidhan, Bangla Pandulipi Pathshomikkha, Dhvani Vijnan O Bangla Dhvani-tattwa, Uchchator Swanirbhor Bishuddha Bhasha shikkha, promito Bangla Bananer niom, Study reports and newspaper were used as a primary source to explain the subject-matter that clearly addressed the topic. To accomplish this paper, several documents study has been adopted.

6. Results

From the characteristics of vowels and the problem statements it is found that Sanskrit words, adjectives, pronoun and female indicating words are written by using dirgho i(ঈ) and its kar-sign but in all cases rosso i(ই) are frequently used and accepted. Then it is clear that the spelling problems have aroused due to presence of dirgho i(ঈ) and its kar-sign. Similarly Sanskrit words, prefixed and conjunct words are written by using dirgho u(ঊ) and dirgho u-kar() like usha(ঊষা)-sanskrit, amul(আমূল)-prefixed word, okul(অকূল)-combined word. But these above trends are not always fixed. Again in presence of rosso u(উ), dirgho u(ঊ) or their kar's do not maintain while pronounced like kul(কুল), Kul(কুল), Dur(দূর), dur(দূর). The pronunciation of dirgho i(ঈ) and dirgho u(ঊ) are absent in Bangla that means their pronunciation are not phonemic (Sarkar. 2019, pp.62). Rosso ri(ঐ) or rosso ri-kar() is used to express the Sanskrit words only but it can be expressed alternatively by using consonant-vowel ligature ri(রি) like rishi(ঐষি)-rishi(রিষি), ritu(ঐতু)-ritu(রিতু) etc.

The presence of rosso ri(ঐ) or rosso ri-kar() in Bangla vowels created extra pressure to readers mind and writing of this letter is difficult. Its pronunciation in Bangla is clearly ri(রি). In Bangla there are nineteen regular and twelve irregular diphthongs but only two have its own letter. Since seventeen regular and twelve irregular diphthongs are expressed by cardinal vowels, then two oi(ঐ) and ou(ঔ) have mere necessity. In Bangla spelling, without using oi-kar(ঐ), ou-kar(ঔ) words can be written by their producers by regular practice. For curb or distorted pronunciation of e/æ(এ) or shoro a(আ), aa(এ্যা/ অ্যা) is normally used. From above analysis it is found that presence of dirgho i(ঈ), dirgho u(ঊ) and their kar-signs made Bangla spelling hard and doubt feelings. Rosso ri(ঐ) or rosso ri-ka() based word can be rewritten by consonant-vowel ligature and oi(ঐ), ou(ঔ) and their Kar-signs oi-kar(ঐ), ou-kar(ঔ) can be expressed by their producers. So the necessity of these vowels is very low in Bangla. Without presence of these vowels Bangla word can be spelled easily and harmlessly. aa(এ্যা/ অ্যা) is frequently

used to express curb or incline pronunciation of some words and it might be the another kar-sign of e/æ(এ).

7. Implication and Recommendation

From the study it is found that there is no aspirated and unaspirated letters in Bangla vowels, Consonant-like vowel rosso ri(ঝ) is totally consonant nature, two diphthongs oi(ঔ) and ou(ও) were made from their products o(ও),rosso i(ই) and rosso u(উ) and vowel-signs dirgho i-kar(ঐ),dirgho u-kar(ঊ),rosso ri-kar (ঝ),oi-kar(ঔ),ou-kar(ও) made word-spelling hard and complicated. Rather there is a sign aa –kar (া) for curve pronunciation but has no holder. By eliminating all problematic vowels are the only way to reduce the vowel related spelling problems. So the topic is very much concerned to achieve the targeted results and also related to all types of Bangla speaking peoples who generally think and realize the spelling problems in Bangla. By detailed analyzing the Bangla vowels and their role in spelling the following recommendation are formulated to reduce the spelling problems. Firstly, long vowels like dirgho i(ঐ), dirgho u(ঊ) should be omitted to get one spelling rather two accepted spelling of some words. Secondly rosso ri(ঝ) should be cancelled from Bangla vowels for its consonant-like nature. Thirdly two diphthongs oi(ঔ),ou(ও) should be eliminated and rewriting by using their independent producer o(ও),rosso i(ই),rosso u(উ). Fourthly aa-kar(া) or sign should be added as the vowel sign of e/ æ(এ) for its curve pronunciation.

Finally, by omitting above problematic five vowels, rest six vowels based Bangla vowels should be reformed to spell related words. Then, the final letters in Bangla vowels and their kar-signs reformed as follows for reducing Bangla words spelling problems:

Finally vowels	Shoro o (অ)	Shoro a (আ)	Rosso i (ই)	Rosso u (উ)	e/æ (এ)	O(ও)
kar or signs		Shoro a-kar(ঐ)	rosso i-kar (ঐ)	rosso u-kar (ঊ)	e/æ-kar (ঢ়) aa-kar (া)	o-kar (ঔ) (ঊ)

8. Conclusion

The finding of the study showed that long letters dirgho i(ঐ) and dirgho u(ঊ),consonant-like vowel rosso ri (ঝ), two diphthongs Oi(ঔ),ou(ও) and their vowel signs made word spelling clumsy and debatable though Sanskrit words have great influence to keep their spelling unchanged. It is dubious that some words are correct for two types of spelling that means similar vowels rosso i(ই)/dirgho i(ঐ),rosso u(উ)/dirgho u(ঊ) and with their vowel-signs, consonant-like vowel rosso ri(ঝ) and its kar-sign, two diphthongs Oi(ঔ), ou (ও) and their signs made critical for Bangla spelling.

So by omitting such vowels like dirgho i(ঐ), dirgho u(ঊ) consonant-like vowel rosso ri(ঠ).two diphthongs Oi(ঔ) and ou(ঔ) spelling would be uniform and easy. Again aa –kar(̣) should be the another vowel sign of letter e/æ(এ) for curve pronunciation .

References

- Promito Bangla Bhaser Bakoron ((2017). Dhaka: Bangla Academy.
- Ashraf, S. A., & Ashraf, A. (1966), *Bengali Diphthongs*. Lahore: Linguistic Research Group of Pakistan,
- Bhattacharj, R. (2021). *Bangla Bananer niom o oniom*. Kolkata: Shishu shahityo sangsad PTV ltd.
- Chatterjee, S.K. (1939). *Vasha-prakash Bangala Vyakaran*. Calcutta: University of Calcutta.
- Chaudhury, B. B. (2011). *Learning an Indian Abugida Script: Bangla*. Kolkata: Indian statistical institute.
- Chowdhury, J. (2015). *Bangla Banan Abhidhan*. Dhaka: Bangla Academy.
- Chowdhury, M. (1963). *Shahitto, Shonkhatotto o bhashatotto*. Dhaka: Bangla Academy Potrika.
- Hye, M. A. (1964). *Dhvani Vijnan O Bangla Dhvani-tattwa*. Dhaka: Bangla Academy.
- Haque, D. M. (2018). *Bangla Bananer niom*. Dhaka: Shahityo Prokash.
- Konger, D. N. (2017). *Notun Banan Bidhi o Banan sanskar*. Kolkata: Anando Prokason.
- Kostic, D., & Das, R. S. (1972). *A Short Outline of Bengali Phonetics*. Calcutta: Statistical Publishing Company.
- Mamud. D. H (2003). *Bhasashikkha*. Dhaka: the atlas publishing house.
- Mia, M. S. (1994). *Bangla pandulipi pathsomikkha*. Dhaka: Bangla academy.
- Mujumdar, B.C. (1920). *The History of the Bengali Language/lecture 6*. Calcutta: University of Calcutta. (Last edition, 8 February, 2015).
- Majumder, P.C. (2014). *Bangla Banan Bidhi*. Kolkata: Desh Publishing.
- Sarkar, P. (1987). *Bangla Dishordhoni*. Bhasha: Calcutta,4–5: 10–12.
- Sarkar, P. (2016). *Bangla Banan Sanskar: samassha o sambhabana*. Kolkata: Desh Publishing.
- Sekhor, D. S. (2020). *Bangla Bhasha o shahitya jiggashya*. Dhaka: Agni Publications.

Methods of Dried Fish Preservation in Cox's Bazar District during COVID-19: the Challenges and Scopes for Improvement

Md Mojibur Rahman¹

Abstract

Dried fish business is a vital part of economy and sustainable development goal 2030. On an average Bangladeshi exports 300 crore taka value dried fish every year. But COVID 19 pandemic had negative impact on dried fish business. The main participants of the study are 50 randomly selected dried fish businessmen of Cox Bazar district. The study was conducted in mix-method approach. For the purpose of the study, a set of questionnaire and a Focus Group Discussion (FGD) through zoom meeting were administered to collect the data. Besides, with the verbal consent of the respondents mobile phone interview also been taken. The collected data analyzed through SPSS software. The major findings of the study reveal that there is a significant lack in dried fish processing and preservation system including other preservation facilities of our country in particular Cox Bazar district. However, this study highlights how the dried fish can contribute to our economy whilst points out the challenges and recommends the ways forward.

Keywords: Dried fish, Preservation, Dried Fish Center.

1. Introduction

Dry fish is a popular traditional food item in Bangladesh. Due to its different test and traditional value people prefer the item not only in different cultural programs but also in regular meal. Cox's Bazar is one of the main sources of dried fish in Bangladesh. Numbers of people are involved in dried fish sector including fishermen, producer, middle men, wholesaler, and retailers. During COVID-19 situation the dried fish workers and businessmen faced tremendous problem to preserve the dried fish. As the markets were mostly closed, transportation was limited and demand in national and international market went down, the supply chain system failed. So, a large amount of dried fish became rotten in the store. In Bangladesh, dry fish is a popular traditional food item for its different test and traditional value. The present study was conducted in a mix- method approach. This study would provide an idea about the challenges in dried food preservation system in Cox's Bazar area that faced during COVID-19

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situation. This information might be useful for the government to improve the quality of dried fish and achieve maximum benefit out of this sector. However, local investors need to develop warehouse for the preservation of dried fish. Besides, if they invest money for the processing purpose and establish modern facility, that will give benefit to all level of businessmen and workers in long run. Finally, this study may help government and private investors to take further necessary steps for the improvement of existing dried fish preservation system.

1.1 Research Questions

The general objective of the research was to explore the problem area of dried fish workers of Cox's Bazar District in Covid-19 situation. To accomplish the study, three research questions were set. The following research questions guided this study:

- (1) What are the opportunities of dried fish sector in Cox's Bazar District?
- (2) What all are the method followed for preservation of dried fish?
- (3) What are the key problems/ challenges of dried fish sector during Covid-19 situation?
- (4) How the challenges can be mitigated?

1.2 Objectives of the Research

The study was carried out to examine the following objectives:

1. To analyze the problems faced by the dried fish businessmen of Cox's Bazar district in preservation of dried fish during Covid-19 pandemic with existing method they followed.
2. To suggest measures to improve the situation in future.

2. Literature Review

A significant amount of literature was reviewed related to dried fish business activities in Bangladesh. Very few literatures were found related to Cox's Bazar dried fish preservation facilities. Besides, numbers of literature were also studied regarding problem area of dried fish preservation system in world. Few mentionable literatures reviewed are:

Dey (2008) described in his publication 'Analysis of demand for fish in Bangladesh' about the fish consumption patterns and how the relative price changes. He also showed how the consumption of fish changed as income. He specially highlighted about the existing contribution of dried fish in the Bangladesh economy. The paper showed that among all the income from the fishery sector, dried fish has the lowest income. According to the report of The Financial Express (15 April 2020) most of the workers of dried fish sector are fighting for survival. They became jobless for long time. Due to COVID 19 situation, the fishermen are not going to sea for

long time. That is why the production rate of dried fish going down and down. On the other hand, transportation problem created another crisis in the dried fish sector. The report also highlighted that, the demand of national and international market has also become limited due to the pandemic. According to the report published in Dhaka tribune on 4th march 2019, Bangladesh sold taka 500 crores of dried fish in the year 2019. As the sector will be a great contributor to our blue economy, so, the government is creating a dried fish industrial zone in Cox's Bazar. That will create a job market for our local people. Meeting the domestic need, the dried fish will earn a significant amount of foreign currency by exporting the additional stock of our dried fish.

Shamsuddoha(2007) mentioned in his seminar paper on 'Supply and Value Chain Analysis in the Marketing of Marine Dried Fish in Bangladesh and Non-Tariff Measures (NTMs) in International Trading' regarding the existing marketing condition of Bangladeshi dried fish. As per his statement, about 20 percent of total marine catch are being dried round the year. They are marketed in domestic market and international market as well. Four intermediary stakeholders are involved between producers of dried fish and consumers. This is a long supply chain of marine dried fish marketing. The main gainers of this chain are the wholesalers (90 %), exporters, and supermarket owners (150%). In both export and local supply primary producers earns less profit (5-8 %). According to the report of The Independent, 09 June 2020, each year dry fish worth Tk. 300 crore is exported from Chattogram port. The export volume is increasing with time.

The maximum labour, time and other involvement of primary producers is much higher than others. Kubra and Hoque (2020) 'Fish Drying and Socio-Economic Condition of Dried Fish Producers in the Coastal Region of Bangladesh' showed the constraints in dried fish marketing activities like lack of storage facilities, lack of capital, poor transportation system and involvement of middlemen etc. They also highlighted the improvement of socio-economic condition of dried fish producers which is an indicator of prospect of dried fish sector. Paul and Reza (2018) claimed sun drying fish preservation method is an important method of fish preservation throughout the world. This method can ensure product specific colour, flavor and texture. A review on dried fish processing and marketing in the coastal region of Bangladesh became the need for time. Training of processors and monitoring of appropriate government authority can ensure better production of dried fish in Bangladesh.

3. Research Methodology

The Mixed method research approach was applied for the purpose of the study. A Questionnaire was used to collect required data from different level people related to dried fish business. Total number of participants for questionnaire survey was 50 who all are working in dried

fish related business. They were selected randomly. The quantitative data collected from the questionnaire participants was analyzed through SPSS software as quantitative method. There were 5 randomly selected warehouse owners and 5 businessmen a Focus Group Discussion (FGD). A zoom meeting was conducted for FGD. Their views and opinions were considered as the field level experience. Besides, after obtaining oral consent, interview of 5 dried fish sector field worker were conducted over mobile. The researcher asked same questions to each of the participants. . The qualitative data of the study followed constant comparative method. The remarks and views of the workers and businessmen during various interview sessions contrasted through research process and were constantly compared. Due to COVID 19 situation there was some limitation for collecting data. Graphic presentation is presented along with some explanation for easy understanding of the reader.

3.1 Data Analysis

Collected data was analyzed through SPSS software. Besides, Microsoft Excel was also used as a means of data analysis. Graphic presentation is presented along with some explanation for easy understanding of the reader.

4. Findings and Discussion

After in depth study on subject matter, the answers of the research questions were found. From the answer of the questionnaire, FGD and interview, few common problem areas of preservation of dried fish is discovered. The responder also mentioned some probable way to solve the existing problem. This research could answer all the research questions. Finally, the study could propose a probable solution of the problem. The study may be used as a guideline for the government and non-government organizations for future investment and development in this sector of Bangladesh.

4.1 General Discussion on Dried Fish in Bangladesh

The basic principle of processing dried fish is to reduce the muscle enzyme and microorganism of fish to a minimum through drawing out the water content by natural or manmade process. Among them, sun drying in a traditional and common way of drying fish in our country. Though Cox's bazar is the main hub of dried fish production but they mostly follow the traditional way of drying fish. The common fishes which all are dried are Loitya (*Harpodonneherius*), Chhuri (*Lepturacanthussavala*), Chapila (*Gadusiachapra*), Rupchanda (*Pampus chinensis*), Lakhua (*Polynemus indicus*) and shrimps etc (Banglapedia 2021). Dried fish farming, processing and marketing are of great importance to Bangladesh economy, about 17 million people including 1.4 million women are involved in this sector.

Dried fish of our country has demand both on the national and international markets. The export of dried fishes earned 5.01 million USD in 2018-2019 and the total amount was 3144 metric tons. (Mit. S. J and Schneider. p. 2021).

4.2 Method followed to preserve the Dried fish in Cox’s Bazar Area

Cox’s Bazar is one of the main hub of dried fish preservation and marketing. From the FGD with various level businessmen the researcher found that, most of the businessmen used conventional method of drying fish. They used salt, sunlight, and natural air. However, some of them used solar panel, electric fan and chemical. Farther more, while preserving in the store, they had to use their wooden or bamboo made stores. They are the most sufferer of the situation. On the other hand, a very few of them could preserve their product in cold storage or store house with electric fan. Most of them are agreed that, they did not have any control over moisture. Finally, they felt the requirement of modern storage facilities in the area.

4.3 Survey Result on Challenges of Preservation of Dried Fish with Existing Method.

A survey questionnaire was sent to the field level workers and businessmen of dried fish sector in Cox’s Bazar (50 personnel). Continuous mobile phone communication was also maintained to learn about their experience on this business during Covid-19 pandemic.

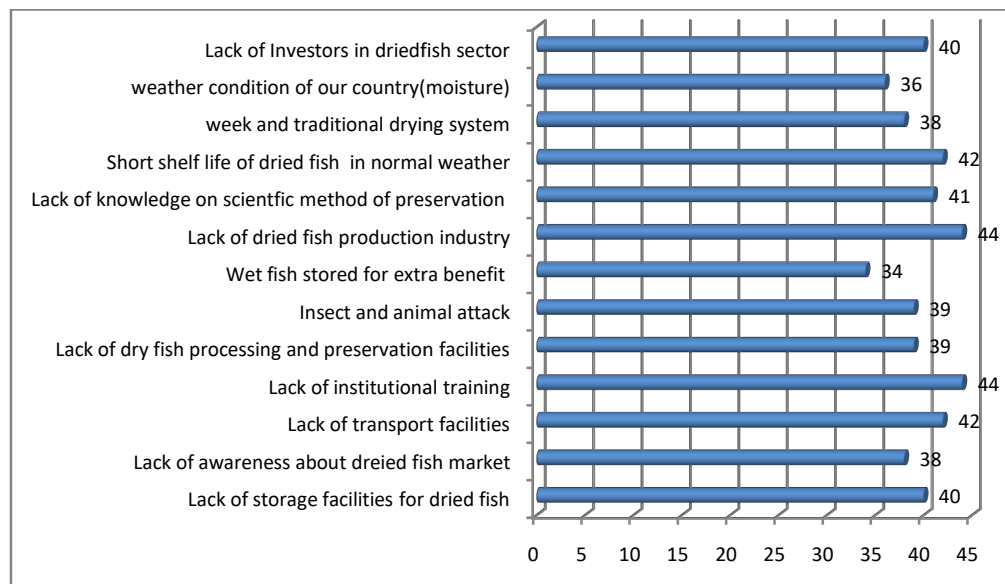


Figure 1: Challenges in dried sea fish preservation during COVID-19

Farther more focused group discussions (FGD) were also conducted through Zoom meeting (10 personnel). Most of them highlighted few

common challenges they are facing during pandemic on dried fish business sector. Out of 50 participants of the survey about 40 opined about lack of storage facility for dried fish is one of the major causes of damage of their products. Besides due to shortage of proper storage they could not stock enough dried fish in the area. That is why they faced problem in marketing. Lack of consciousness about the dry fish market is another problem area of dried fish business they mentioned. About 76 % respondents mentioned in their questioner and during mobile phone discussion that, they could not predict the market requirement of dried fish. That is why they could not supply the items well in time. Due to miss prediction they became jobless for long time. They also mentioned about their lack of knowledge on marketing. The highlighted about the institutional training can develop their knowledge on market and business. During pandemic they faced problem with the transportation in every steps starting from production to marketing. In this regard about 84 % responder gave their opinion. They also mentioned due to lack of transport facility many of their products damaged and they had to sell in lower price. About 88 % respondents view that they do not have any institutional training on preservation system of dried fish. Due to lack of knowledge, they could not preserve the products for long time. During lock down suddenly their products were losing quality and they faced loss. During FGD they also highlighted the importance and requirement of institutional training on dried fish processing and storing.

Almost 78 % respondents highlighted about the insect attack on dried fish. That causes great damage to the product and also reduces the quality of dried fish. Generally, larvae of several species of fly and beetle attack on dried fish (Alam N. 2004). Many businessmen preserve or sell improper dried fish (wet) to get weight benefit. They faced problem with their product during pandemic. Out of 50 respondents about 34 respondents mentioned that improperly stored dried fish could not be sold in the market in time. That created great damage to the business. Bangladesh is lacking with the dry fish production industry with modern technology. The industrial dried fish could last long. About 88% respondent mentioned about the importance of dried fish production industry. Traditional system of drying fish takes long time. In this regard Hoque M. and Rayhan A. (2028) mentioned 'The longer duration of drying causes considerable spoilage, blowfly infestation, broken, contamination with filth and soil particles and widespread use of different types insecticides to avoid insect infestation which make the product unattractive to the consumers'. Lack of knowledge on scientific dried fish production method is another shortfall of our workers. About 82% respondents of the study felt the requirement of scientific knowledge on processing and preservation of dried fish. As they follow the traditional method of production, processing and preservation. So, their product could not sustain in the store for long time. About 84 percent of the respondents also think that, due to nature of fish product the dried fish could not be preserved for long time. They had to sell their

product with in short period and the price became lower. Commercial fish drying is centered in 7 areas of Cox’s Bazar district but traditional drying system is practiced in every fishing village (Alam. N. 2004).

About 76% responder highlighted that, they use traditional system of drying. They use sun and natural air and sometime mix salt as chemical. That is why they cannot preserve their products for long time. They felt the requirement of modern drying facility. Most of them blamed the weather condition of our country is another hindrance for preservation of dried fish. Due to moisture fungus attack on the products easily. That is why the quality of preserved product goes down within a short period of time. The responder also blamed week dried fish market management system for their suffering during pandemic. During FGD they mentioned that, the failure of market management system in Cox’s Bazar dried fish market caused loss of their business. The investors in dried fish sector are very limited. Though the government is very positive and providing all the support for the business but the number of investors in this sector is not significant.

4.4 Way out of the Challenges to Ensure Quality Preserved Dried Fish

Dried fish is a potential sector for our national economy. From the FGD, the survey questions answers and study of various books and publications following ways may be considered as probable solution of the above-mentioned problems:

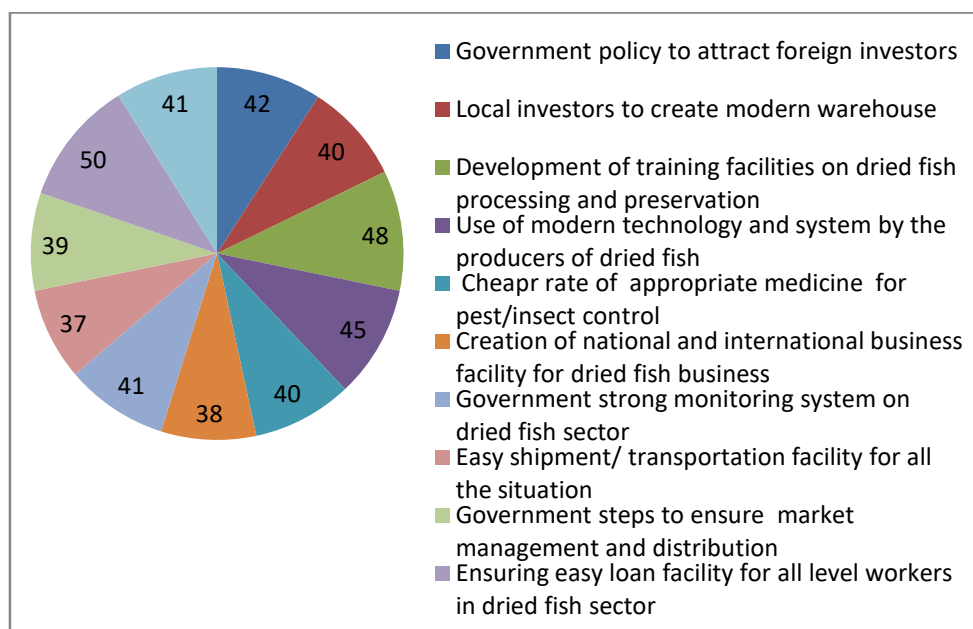


Figure 1: Way out of the Challenges to Ensure Quality Preserved Dried Fish

Bangladesh government has keen interest in dried fish sector which is a vital part of blue economy sector in particular deep-sea fishing. During

FGD most of the responder agreed that government interest in this sector will help to develop the sector. If more foreign investors can be attracted, for the purpose of their business they will bring modern preservation facilities for our country. That will solve many of our existing problems. About 80 percent of the respondents with a view that the local investors need to develop ware house for the preservation of dried fish. Besides if the invest money for the processing propose and establish modern processing facility, that will give benefit to all level businessmen and workers in long run. At present the training facility from production level to end level of dried fish preservation is yet to come to a standard. For the development of the skill of all level personnel training facility in different level is essential. In this regard government and non-government organization can support to develop training facility. About 96 percent of the respondents agreed that it is the time to develop training facility for them. Due to lack of knowledge on preservation system most of them could not hold their product for long time in stock which reduced the price of their product.

The producers of dried fish production in Bangladesh in particular Cox's Bazar area are mostly using the traditional system. They are lacking with modern technology or system of drying fish. They argued that due to lack of modern facilities they could not produce required amount of dried fish before or during pandemic. Farther more they also highlighted that if they could use modern system during production, the quality and shelf life of the product would be extended. About 45 persons are in an opinion that, the use of modern technology and system of production of dried fish can increase the quality and quantity of the product. Shelf life of the products in the store would be extended as well. The cheaper the production cost the higher the benefit. People involved in dried fish preservation mentioned about the high price of medicine and chemicals used for pest control. They told the high price of said items increase their production cost. During pandemic they faced the problem most, as they had to preserve their product for long time. About 80% respondents also mentioned about the importance of low price of pest control material. They opinioned that, the government monitoring and support can help to reduce medicine and chemical cost of pest/insect control.

During Covid-19 pandemic most of the worker of dried fish sector became jobless for long time. The dried fish business facility in Cox's Bazar is mostly traditional and seasonal. About 78 % respondents argued that, if national and international business facility for dried fish business can be developed in Cox's Bazar area, then the job opportunity in all situations for all level workers will be ensured. Government is the key actor to develop the required facilities the responder opined. In this regard TBS report(03 November 2020) related to government plan of establishing dried fish processing center in Cox's Bazar is a great hope for the people. During pandemic period the dried fish businessmen observed lack of government

monitoring in the dried fish business sector. About 82 % respondents highlighted the matter in their questionnaire. Most of them are in a view that, strong government monitoring and support could ensure better supply chain of their products. Their preserved items would not be rotten in the store. They also mentioned if the government organizations could ensure proper supply chain of their products, they would get better price. From this lesson their request to the government authority to be more active in monitoring and support to their business. Though the government declared free flow of business transportation, but due to lock down and general Covid-19 situation they could not transport their products to other district. International transportation and trade were also very slow. To develop the situation in future about 74 % respondents suggested government support in shipment and preservation of their products.

5. Conclusion and Recommendation

Dried fish sector is a vital part of our blue economy activities which contributes directly to our national economy. Cox's Bazar district is the major area from where most of our dried fish is supplied throughout the country. People working from the production to preservation and marketing faced tremendous problem during COVID-19 pandemic. In particular, the most suffering part of the dried fish business in Cox's Bazar during pandemic was the preservation of the products. Due to various reasons, they could not preserve the products for long time and they had to sell the products at a lower price. Besides, the quality of the dried fish went down as well. From the research, few common causes could be identified for the said preservation problem. They are: lack of storage facility, lack of consciousness about dried fish market, lack of transportation during lockdown, lack of training, high price of insect killers, lack of modern industry for dry food production, lack of knowledge of people on modern dried fish preservation system and traditional drying system etc. Preservation also depends upon processing system. During processing of the fish, if it is well dried and pest/insect free, then the shelf life of products could be higher. But due to our weather (moisture) the item could not be preserved for long time.

COVID-19 taught lesson to our dried fish businessmen. For future, the respondents of the survey suggested some measures. The mentionable measures are: development of training facilities on dried fish processing and preservation, cheaper rate of appropriate medicine for pest/insect control, strong monitoring system on dried fish business by appropriate authority, easy loan facility and use of modern technology/ system by the producers of dried fish etc. The respondents also agreed that for future they will be more cautious about savings and alternative business to face any unwanted natural disaster or pandemic situation. They also highlighted that government support in this sector which can solve the issue in future. It is a matter of

hope that, our government is establishing a dried fish center in Cox's Bazar district which will attract local and foreign investors. The dried fish center will have modern facility for preservation. Finally, the improvement of preservation system in Cox's Bazar dried fish sector will definitely increase the profit margin of the business and will ultimately contribute to our national economy.

References

- Dey. M. (2008). Analysis of demand for fish in Bangladesh, Taylor & Francis Journal, 63-81.
- Trade Report. (2020, April 15). Dried Fish Unit Owners, Workers Seek Help, The Financial Express. Retrieved from <https://thefinancialexpress.com.bd/trade/dried-fish-unit-owners-workers-look-for-help-1586962754>
- Tribune desk report. (2019. March 4). Government undertakes initiatives to boost dried fish exports, Dhaka Tribune. Retrieved from <https://www.dhakatribune.com/business/2019/03/04/government-undertakes-initiatives-to-boost-dried-fish-exports>
- Samsuddin. M. (2007). Supply and Value Chain Analysis in the Marketing of Marine Dried Fish in Bangladesh and Non-Tariff Measures (NTMs) in International Trading, Research in Agriculture and Applied Economics, 1-4.
- Kubra. K and Hoque. S. (2020). Fish Drying and Socio-Economic Condition of Dried Fish Producers in the Coastal Region of Bangladesh, Middle East Journal of Scientific Research , 182-192.
- Paul. P. C. and Reza. S (2018). A review on dried fish processing and marketing in the coastal region of Bangladesh, Research in Agriculture Livestock and Fisheries, 2-5.
- Mitu. S. J and Schneider. P. (2021). Socio-Economic Context and Community Resilience among the People Involved in Fish Drying Practices in the South-East Coast of Bangladesh, International Journal of Environmental Research and Public Health, 1-3.
- Alam. N. (2004). Traditional fish drying in coastal villages of Bangladesh: Practices, constraints and scope for improvements, FAO, 12.
- Hoque M. and Rayhan A. (2028). Qualitative assessment of improved traditional fish drying practices in Cox's Bazar, International Journal of Natural and Social Sciences P 30-36.
- TBS and Financial Express report (2020 November 03). Cox's Bazar to get dried fish processing industry, Financial Express. Retrieved from <https://thefinancialexpress.com.bd/public/trade/coxs-bazar-to-get-dried-fish-processing-industry-1604410476>

A Speech Act Analysis of Pakistani Prime Minister Imran Khan's Interview while Discussing Afghan War and Corruption

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Saeed Akbar²

Abstract

The aim of this paper is to analyse the speech acts used with respect to Afghan war and corruption discussed by Prime Minister Imran Khan in his interview which he delivered to the United States Institute of Peace in 2019. This paper analyzed the types of speech acts that were used by Imran Khan. To analyze the speech acts from all these perspectives, both qualitative and quantitative analysis was carried out for the study. The framework employed for this analysis was the Speech Act theory which was introduced by Austin and Searle. The findings revealed that his interview includes maximum Commissive speech acts while the use of directive speech was also apparent. The paper concluded that the speech act analysis highlights the factual, informative, and supportive nature of the Pakistani Prime Minister Imran Khan.

Keywords: Imran Khan, Speech acts of Imran Khan, Illocutionary Acts, Speech Act Analysis, Direct Speech Acts, Indirect Speech Acts

1. Introduction

Pragmatics is the study of deixis, conversational implicature, presupposition, speech acts, and discourse aspects (Levinson, 1983). But here the researchers only discuss and analyze the speech acts in the utterances of the speaker (Prime Minister Imran Khan). Pragmatics is the study of how speakers use language in different contexts and why they use it in certain ways. One of the pragmatic fields is speech acts. It depicts human behavior in a language, and pragmatics is the study of how people behave through their speech. The use of language is emphasized in speech act theory. The study of speech acts looks at how people express themselves, such as promising, thanking, requesting, and apologizing. It implies that when someone says something, she/he also acts on it.

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Human produces utterances to express themselves. These utterances are made up of words and grammatical structures. These utterances are also known as speech acts, and they perform certain actions. A speech act is studied in linguistics in connection to the speaker's intentions and the specific effect it produces on the listener. Basically, a speech act is an activity taken by a speaker in order to evoke a response from his audience. The Requests, warnings, pledges, apologies, greetings, or any variety of declarations are examples of speech acts. (Norquist, 2019). Thus, speech acts are crucial in communication. Austin proposed the speech act theory in 1962, which was further elaborated by Searle in 1969. He divided the utterances into three levels or parts which are given below.

i) Locutionary acts: These are statements that are important to the listener or that say something that the audience understands.

ii) Illocutionary acts: when utterances say something with a purpose is included in this category, for example, to inform the listener.

iii) Perlocutionary acts: These are utterances that elicit a response or action from the listener.

The goal of this research is to look at different forms of speech acts and explain the implied meanings of Prime Minister Imran Khan's speech acts. The researchers investigate the hidden meanings and meaningful structures functioning behind politicians' statements.

1.1 Statement of the Problem

The present researchers have been used speech act theory for the analysis of various leaders' speeches and interviews both nationally and internationally, but there is no previous literature available on the discourse analysis of Imran Khan interview special focus on Afghan war and corruption. Therefore, this research study will focus on the discourse analysis of Pakistani Prime Minister Imran Khan interview at the United States Institute of Peace in 2019.

1.2. Research Questions

The goal of this research study is to address the following questions:

1. What kind of speech acts Prime Minister Imran Khan used in his interview at the United States institute of peace while discussing Afghan war and corruption?
2. Which speech act has been used the most and why?

1.3. Research Objectives

1. To find out kinds of speech act used in the interview while Pakistani Prime Minister Imran Khan at the United States Institute of Peace while discussing about Afghan war and corruption.

2. To explain what kinds of speech acts are used mostly in the interview and why they are used.

1.4 Significance of the Study

The result of this study is anticipated to give a clear and distinct explanation about the hidden meanings when the speaker and addressee talk. This study will give a good point of view to common people about their leader.

1.5 Limitation of the Study

Imran Khan has delivered many speeches and interviews at the United States but this research study is confined to an interview of Pakistani Prime Minister Imran Khan at the United States Institute of Peace in 2019. This research study is further limited to Afghan war and corruption related text of the interview.

2. Literature Review

According to Yule (1996), Speech acts are "actions committed through utterances" and can be categorized as apology, complaint, complement, invitation, promise, or request. When a speaker says something, then he or she anticipates that what he or she says will have an impact on the listener. When a speaker complains to the listener, he or she not only wants the compliance to hear the statement, but also from the compliance to correct the mistake made because of the compliance. According to Searle (1969), Speech acts are the basic or simplest units of linguistic communication. The speaker, the listener or writer, the reader, and the issue under discussion are involved in the speech act. Thomas argued that People not only make grammatical words in their attempts to express themselves, but also conduct actions through those utterances. He believed that individuals use language not only to express things (create claims), but also to do things (perform actions) (Thomas, 1995).

3. Methodology

The proposed research study is both qualitative and quantitative in design. Therefore, this research study adopted a mixed research approach. The data from Imran Khan's interview at the United States Institute of Peace on 13 July 2019 was analyzed carefully. The speech was delivered entirely in English language. This research study focused on specific utterances from Prime Minister Imran Khan's interview to investigate his hidden meaning, intentions, and mental states. The researchers chose 30 specific utterances from the speech because Imran Khan has presented almost all possible reasons for the concept of corruption and Afghan war in front of audience in

those utterances. The researchers applied relatively simple and basic percentage method to show the data statistically in the form of tables.

3.1 Qualitative Analysis of the Data

The data has been selected from Imran Khan's interview for the analysis. The researchers analyzed the particular utterances of the interview in order to show how the speaker performs certain actions via language in front of audience and what is meant by these utterances. The researchers explained those utterances in the data analysis according to the different types of speech acts. Speech act theory covers five types of illocutionary acts, as defined by Searle (1969) and categorized according to the roles performed in the utterances. The qualitative interpretation of illocutionary speech acts data are presented in this section.

3.1.1 Declarative Speech Acts

Declarations are a type of speech acts that, when spoken, has the ability to transform the world. “Approving, betting, blessing, christening, confirming, cursing, declaring, disapproving, dismissing, naming, and resigning are all declarative activities.” For example;

1. Finally, I can say right now, after 10 months, we have finally stabilized the economy. (Declarative, confirming).
2. We believe that real development is human development. (Declarative, approving)
3. So, we are going to, all our money, all the each, we've decided that all the money which we retrieve from the criminal mafia, we've started a massive accountability campaign. (Declarative, betting).
4. Nancy, I always felt that the relationship between Pakistan and the United States was never multi-pronged. (Declarative, naming).
5. The moment that jihad, the Afghan jihad ended, the U.S. packed up and left. And, not only did they leave, Pakistan was slapped with sanctions. (Declarative, disapproving).
6. So, in 2004, under pressure from the United States, Pakistan Army went into the tribal areas to flush out Al Qaeda. (Declarative, declaring).

The speaker also performs declarative actions in these utterances in front of audience. These Highlighted utterances in the speech of speaker show Declarative acts. These utterances represent Declaration because the speaker (Imran khan) approves and confirm various reasonable arguments about the economy of the country in front of audience in the united states institute of peace such as “Finally, I can say right now.....”. The speaker confirms the fact that the economy of the country is now gradually improving and gains stability rather than downfall and the speaker proves the stabilization of own country economy very well through language in the form of declarative speech acts. The speaker strongly expresses

disapproving about the U.S actions in Afghanistan because of so many consequences of this action in the speaker own country such as, “The moment that jihad, the Afghan jihad ended, the U.S. packed up and left. This jihad created a lot problems in the speaker own country. That's why the speaker disapproves this act of the U.S. Government. The speaker also declares the act of Pakistani army against al-Qaeda.

3.1.2 Representative Speech Acts

Representatives are speech acts that state whether the speaker believes something to be true or not. “Arguing, asserting, boasting, claiming, complaining, criticizing, denying, describing, informing, insisting, reporting, recommending, and swearing are all examples of this type of communication.”

7. “So, Pakistan then was left with 4 million of foreign refugees, a number of militant groups, which had been created to fight the Soviets, all dressed up and nowhere to go.” (Representative, reporting).

8. “We had heroin, drugs that were used to, at some point, to pay for the fighting in Afghanistan.” (Representative, complaining).

9. So, my main, when I formed my party in 1996, it was on an anti-corruption platform. (Representative, claiming).

10. My parents reminded me always how awful it was to live in a colonial, in a country where you were not, you didn't have your freedom. (Representative, criticizing).

Here, the speaker performs certain actions which represent representative acts via utterances such as, “So, Pakistan then was left with 4 million of foreign refugees”. The speaker informs and criticizes the U.S. government because the U.S. government cannot provide any help about various consequences after the war in the speaker own country. The speaker claims that Pakistan participates in the war for the sake of U.S. interest but when they succeed in the war. Then they left Pakistan alone with so many problems of the war. The speaker also describes his main mission in the interview. His main aim was to make the country free from the corruption. The speaker also describes the colonial time situation of the country, when the country have not got freedom from the colonial and they were slaves of colonial masters in every aspect of life

3.1.3 Expressive Speech Acts

Expressive speech acts are those in which the speaker expresses his or her feelings. “Apologizing, applauding, condoling, applauding, deploring, praising, regretting, and thanking are some examples of these acts.”

11. Thank you very much, Nancy. The United State Institute of Peace, I want to thank you for inviting me here listening to my views about Pakistan, Pakistan’s policy. (Expressive, Thanking).

12. We grew up feeling that this is a country with a destiny. (Expressive, condoling).
13. We took great pride when Pakistan started growing rapidly. (Expressive, complimenting).
14. We grew up feeling that this is a country with a destiny, and then things started going wrong from 70s onwards. (Expressive, regretting).
15. If you look at Africa, you look at the independence movements in Africa, and then the leaders who came from the independence movement, once they assumed government, a similar pattern took place. The moment they got power, they use power for benefiting themselves. (Expressive, deploring).
16. We feel now that we are, now after stabilizing the economy, we feel that we can now move ahead and start our reforms. (Expressive, congratulating)

The speaker performs the acts of congratulation, thanking, praising and regret through various utterances in an English language in front of Nancy and audience in the United States institute of peace. These actions are clearly highlighted in the interview of the speaker such as speaker thanks Nancy for his invitation to the United States institute of peace. The speaker also shows his regret for the country downfall of political situation after the 1970s. He expresses the miserable story of the country politics after 1970. He also expresses his feeling about Africa that they also go for power just when they got freedom and their country also became miserable due to that power. The speaker also expresses his congratulation for his country people because of the gradual improvement and stability of the economy.

3.1.4 Directive Speech Acts

Directives are spoken acts that are used to persuade someone else to do something. "Ordering, commanding, requesting, and suggesting are some of the acts." For example;

17. Change only comes through when you had a government and bring about a change. (Directives, suggesting).
18. Where did the money come from? (Directives, ordering).
19. "I reached out to my counterpart in India, the Indian prime minister, assured him that you know, you come one step towards us we will go two steps towards you because the biggest problem India and Pakistan face is poverty. And, the best way we can reduce poverty is if we start trading with each other." (Directives, suggesting).
20. So, we are all now working on getting the Taliban to talk to the foreign government, they're already talking to the U.S. And, we hope that this will eventually lead to a settlement. (Directives, requesting).
21. "And we believe that we should not ever interfere in the internal affairs of Afghanistan." (Directives, suggesting).

22. “So what I'm saying, I feel very strongly that we will strengthen the...the media watchdog, it is not censorship, we will strengthen the media watchdog.”(Directives, suggesting).

The speaker performs the acts of suggestion, request and order in his interview. The speaker wants to encourage the Nancy and his audience and he expresses that change comes when you have a strong government at hand and you bring reforms in the laws, legislation, institutions of the country. The Speaker suggests that it is one of the best possible way of change in the country for the sake of people lives. He also expresses his suggestions to U.S. and Taliban to talk with each other for the sake of peace in Afghanistan and Pakistan. And he also suggests that our country will never interfere in the internal affairs of Afghanistan. He also suggests that we should strengthen our media so they can avoid any wrong doings.

3.1.5 Commissive Speech Acts

Commissives are speech acts in which the speaker expresses a desire to commit to some future action. “Committing, guaranteeing, offering, promising, refusing, threatening, volunteering, vowing, are examples of these acts.” For example:

23. We will then direct it towards human development. (Commissive, promising). 24. We've started one of the biggest poverty alleviation programs in Pakistan's history, despite having financial constraints. (Commissive, promising).

25. But, we believe that a country cannot rise if there's a small lot of rich people and a mass of poor ones. (Commissives, offering).

27. But, we feel that we will be able to overcome them. (Commissives, promising).

28. So, I spent six, seven years of my life after cricket building and then running the hospital. (Commissives, volunteering).

The speaker shows how the country was threatened because of the poorness and the rise of poorness of the country was threatened. He also conveys his message that he agrees himself for social works. The speaker suggests that one of the possible illegal ways of corruption is to take money out of the country. Unluckily, the speaker expresses his views about the elite class people who take money out of the country. Therefore, the speaker wants to understand the things in which he is not sure about it and wants to confirm it from the foreign experts.

3.2 Quantitative Analysis of Data

Imran Khan's interview in this portion, in which he discusses the Afghan war and corruption, has 30 illocutionary acts. This section presents the findings of a quantitative analysis of the data in the form of tables and graphs.

Acts	Frequency	%
Commissive Acts	8	26.66
Expressive Acts	6	20.0
Directives Acts	6	20.0
Declarative Acts	6	20.0
Representative Acts	4	13.33
Total	30	100.00

According to the table above, Imran Khan performed 6 are declaratives speech acts, 4 are representative, 6 are directive, and 8 are commissives speech acts out of a total of 30 illocutionary speech acts in his selected part of the speech. Therefore, he used 20% declarative speech acts, 13.33% representative speech acts, 20% expressive speech acts, 20% directive speech acts and 26.66% commissive speech acts out of a total of 100% speech acts in his particular portion of speech.

4. Findings and Conclusion

According to the data, Commissives speech acts were performed more than any other class of speech actions in Imran Khan's interview in this specific section. The findings also revealed that while discussing the Afghan war and corruption, Imran Khan threw questions at the audience before explaining anything about their concept, indicating that he did so with the intent of challenging or negating the responses to his questions, which he assumed were already in their minds. The researchers selected 30 illocutionary acts and analyzed it. The results concluded that Imran Khan interview often comprises the use of Commissives speech act. From the results, it can be assumed that Prime Minister's interview primarily consists of promises, guarantee and offering information and facts to express the speaker some future actions while discussing Afghan war and corruption. Researchers in the future can do a critical discourse analysis (CDA) of this interview in connection to the other topics discussed. The researchers have chosen 30 utterances from Imran Khan's interview, and other researchers might look into the remaining utterances; For their investigation, the researchers focused on one political discourse. On the other hand, other researchers might do a comparison analysis by selecting two political discourses.

References

- Searle, J. R. (1969). *Speech acts: an essay in philosophy of language*. London: CUP.
- Norquist, R. (2019). *Speech Act in linguistics*. Retrieved December 7, 2020 from
- Yule, G. (1996). *Pragmatics*, oxford university press.

Education Banking for Sustainable Education in Bangladesh

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Abstract

The study investigated the potential of investment in education as 'Education Banking'. The objective of the study was to frame out a banking tool for education service delivery. It also includes assessing the impact of Education banking on education sector of Bangladesh. To carry out the study, qualitative research methodology was applied. It used homogenous sampling method based on purposeful sampling to select financial and educational institutions. For data accumulation, it used both primary and secondary sources. It followed Interview Research Method to get the experts' opinion, and also used Content Analysis Research Method to observe the circumstances serving the present condition. The findings were then put under the themes of the research objectives. The study concluded that the financial institutions have a plenty scope to invest in education. It has been proved that education needs investment. In spite of some limitations, this study hoped to penetrate the scope of further research on banking in education sector.

Keyword: Education banking, Sustainable Education, Education Financing, Need-based banking

1. Introduction

Education is universally recognized as a right, not a privilege. Unfortunately, this right is often interrupted due to fund unavailability of the education providers and the learners too. The Right to Education is guaranteed by many legal tools of the global bodies as well as by the constitutions and laws of the state parties. But in many developing and least developed countries like Bangladesh, this right cannot be fully implemented, as there has been a shortage of investment in education. Though 'investment in education' is considered the most effective and trustworthy investment by all the stakeholders, but fund is still not ensured by the parties. In Bangladesh, the public investment in education is only 2 percent of the total

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GDP. Education experts often opine for the need of better allocating the national resources. To make the defence against low investment in education, they suggest for counting educational expenditures of all government agencies and household expenses. But no argument can deny the fact that the public investment in education in Bangladesh is low in comparison to similar direct public education budgets of other countries (Al-Samarrai, 2007). Hopefully, the government pledged to substantially raise it upto 4 percent to fullfil its ‘commitment for education’ in line with the SDG4. On the other, the scenario of private investment in education in Bangladesh shows no real picture at all (Rahman and others, 2016). Educationists all over the world believe that education is a concern for all, including the governments, societies, communities, students, parents and employers. Therefore, the banking sector must not ignore its responsibility in providing services for education. As a significant stakeholder of the education, the role of the banks or financial institutions (FIs) is not clearly mentioned either in banking norms or in any other guidelines. In this context, the Financial Institutions should have operations in the education sector by pursuing new and innovative models of education service delivery and financing. Besides, under Public-private partnerships (PPPs), the banks can contribute a lot for improving the quality and relevance of education, especially to raise the cost efficiency of education delivery, counting also the disadvantaged marginalized groups (ADB, 2014).

The general objective of this study is to frame out a tool for education service delivery by the Financial Institutions (FIs) dubbed here as ‘Education Banking’. Other objectives include describing four other segments of this service delivery i.e. education savings, education financing, education loan including institution or student loan, and grant or scholarship for needy and meritorious learners. The motto of such banking is to facilitate the total education system, and therefore, it will not be confined in individual or personal banking, but should be based on educational institution. An institution shall be the consumer of the service and identify the need of the products from these four segments as per need and necessity. Profit margin is not the consideration while providing the service, but necessity of the institutions or students is the prime concern. Hence, this ‘Education Banking’ must be considered as ‘need-based’ service of the financial institutions.

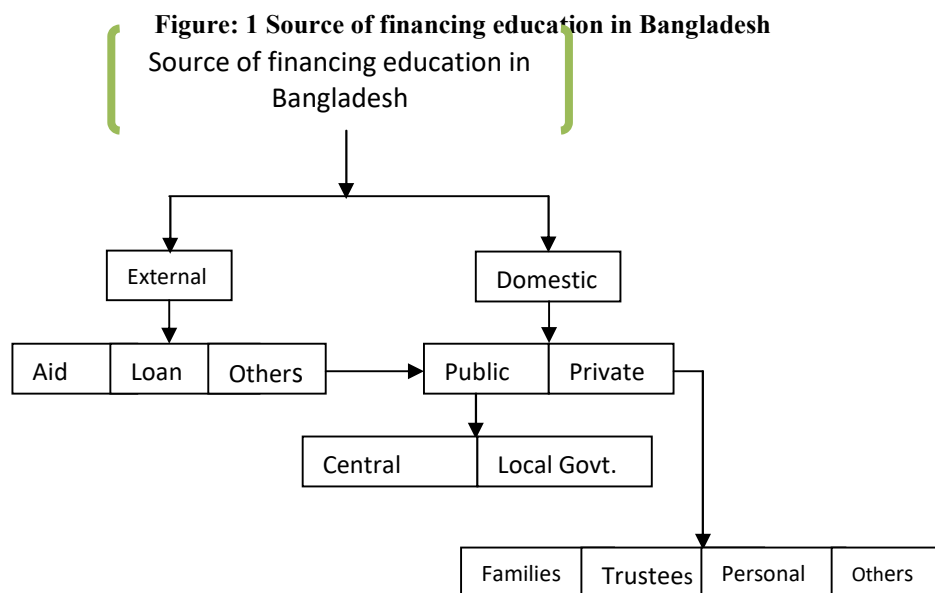
1.1 Conceptual Framework

Funding necessity of the education makes the concept of ‘Education Banking’. Though banks are serving the education with some of its existing products i.e. school banking as a savings tool for students, granting individual loan for education, providing scholarship under or out of corporate social responsibility (CSR) and so on, but these are too scanty as per need of the total education funding. Besides, these products are

scattered, and not under an integrated service. Moreover, these products are based on individual needs where educational institutions are mostly ignored. Scholarships or grants provided by the banks are allocated as per merit of the students or on the basis of their results where needs of the students are not evaluated to sustain their education. Education Banking shall serve the total education including both the institutions and the students under an integrated approach. It will be an example of the ‘need-based’ banking where needs of both the educational institutions and students will get the top priority. An education institution will be the agent (as well as client) of ‘Education Banking’ like traditional Agent Banking system of the banks. But it will provide only four services namely students’ savings, financing the institutions, granting loans to the students, and providing grants or scholarship as per needs of the students. The whole service will depend only on institution to grow up or to provide services in consultation with respective banks’ authority.

1.2 Nature of Educational Institutions in Bangladesh

According to funding of the education institutions, there are four categories of educational institutions in Bangladesh. They are (i) fully funded by the government; (ii) semi government (MPO guaranteed by the government); (iii) Trust or society funded and (iv) private initiatives. The three segments of education system in Bangladesh i.e. primary education, secondary and higher secondary education and tertiary or higher education are covered with this funding method (Boye and Mannan 2014).



There are ample scopes for the financial institutions to engage in these funding systems. They can work with the government and semi

government educational institutions under PPP whereas Trust or private initiatives can be more encouraged with banking involvement in education. Besides, every government and government affiliated educational institutions have to maintain two types of fund as obligation to run up their outlets. They are general funds and emergency funds. Emergency funds are maintained as fixed deposits in banks which cannot be used for general purposes whereas the general funds are used for daily expenditure of the institutions. Banks have the opportunity to use these funds and there should be guideline for the banks to invest these funds as per necessity of the respected educational institutions. Banks can consider the funds as security of their investment in addition to other movable or immovable assets of the institutions. Institutions as collaborator of the education banking, guide the financial institutions where to invest, how to recovery or who will be nominated for loans from teachers and students, or which students are eligible to get scholarships or grant in aid.

However, funding is prerequisite to implement the right to education. Institution requires funding in order to build schools, pay teachers' salaries and training, provide teaching materials, etc. Obligated to the international law, states should use the maximum of their available resources to realise the right to education. Even though resources are very limited, state is obliged to make up certain immediate obligations including free primary education and education for all without discrimination. As per SDG4, the vision 2030 prescribed to gradually provide free secondary and higher education and to continuously improve the quality of education. It means that state must take immediate and progressive steps to fully realise the right to education and there should not be any retrogressive measures. International Declarations, such as the 2011 Jomtien Statement, recognise that states should spend at least 6% of their GDP and /or at least 20% of their national budgets on education in order to achieve quality education for all. States, therefore, should ensure that a sufficient proportion of the national budget is allocated to education financing. Education is mainly financed with domestic revenues raised through national taxation. But in most cases, the macroeconomic policies of the state often obstruct investment in education. However whatever the reality is, state has to bear the responsibility to monitor the money that is used effectively and equitably to guarantee education for all, and also redress inequalities to implement the right to education effectively.

In the context of developing countries like Bangladesh, international community are providing aid contribution as domestic revenues are not enough. Even though there is a shared responsibility for the implementation of the right to education worldwide, but at present there is a trend amongst donors of reducing their aid support for basic education. Consequently in response to the education financial crisis, some stakeholders have called for more business investment in education markets. However, enhancing public

investment in education is important as education is regarded as public good, but private investment cannot be ignored taking the private responsibility aside. As education bears the most social interest and therefore, it cannot be sacrificed for the sake of private profit.

1.3 Research Questions

The study set up the following research questions:

- i) Research Question 1: What are the impacts of Education Banking on sustainable education?
- ii) Research Question 2: What is the real status of Education Banking?
- iii) Research Question 3: What are the future prospects of Education Banking?
- iv) Research Question 4: What are the possible areas of Education Banking?

2. Literature Review

As a whole-approach, literature on Education Banking is so far not relative to any banking service. And therefore, it can be said that literature on this perspective is not available. But estimating to other banking products like Agent Banking, School Banking, education financing, education loan or grant and scholarship under CSR, literatures are available. In this part of Review the Literature, various segments of banking products are discussed to formulate the idea of Education Banking. Kelsey Dalrymple (2016) for Save the Children and the Education Equity Research Initiative in FAIR FINANCING: Education Finance Policy for Equity narrated, education is mostly supported by government funds in higher-income countries raised through domestic revenue. Such supports come largely from taxation – property, income, and sales taxes. In low-income countries, domestic revenue sources are often insufficient and inconsistent. Besides, public resources for education are limited in crisis or post-crisis contexts where state capacity is restricted. Then the systems mostly rely on additional funding sources such as international donors or the private sector.

Florence M. Itegi (2016) in Financing Secondary Education in Kenya: Exploring Strategic Management Approach for Improving Quality of Education assessing the education scenario of many developing countries said the rich is more able to access expensive schools that produce best students who then dominate university education which is highly subsidized in public sector. As a result, expenditures by the poor have been observed to be proportionately high as majority dominates the self-sponsored sector of higher education. This raises the need for accountability in the management of funds in the public sector and especially education which is a driver for social economic development of any nation. Asian Development Bank (ADB) in its Technical Assistance Consultant's Report (2014) under the title of Bangladesh: Public-Private Partnership in Higher Education explained

that the PPP project is sustainable and ‘bankable’ to attract private bidders and private financing in education. It also said that public expenditure on higher education has been steadily declining in Bangladesh in the recent years. The amount of funds allocated for higher education in Bangladesh’s national budget makes it uncertain whether quality can be enhanced under the present financial conditions. This calls for new approaches and ways of closing the higher education financing gap and making higher education the development driver it has the potential to be.

Dr Manzoor Ahmed in a newspaper article titled Education 2030 Goals: Looking beyond one's own turf (The Daily Star, April 12, 2019) accomplished the SDG4 as an occasion to take a broad view of the education situation with a longer time horizon. He categorized it something that happens far too rarely. He underscored the development of learning outcomes of students, more effective governance and management, improving pedagogy and teachers' performance, and promoting market responsive vocational and technical skills. Afsana Rahman Khan and Josh Woodard in Tipsheet (2016) said that Agent Banking aims to provide formal banking services to the unbanked, including populations that have traditionally been more inaccessible. Although officially sanctioned by Bangladesh Bank in late 2013, agent banking has only recently started to take off in Bangladesh in the past year and a half. It has the potential to both contribute to increased financial inclusion in Bangladesh, as well as to serve as a payment channel for development organizations. As such, it is a channel worth exploring by any development organization that makes bulk disbursements or promotes financial inclusion.

The current trend of school banking in Bangladesh is spreading up very rapidly, observed a study done by Dr. Sahin Akter Sarker and T. M Yousuf Foysal dubbed as Contemporary Financial Services in Bangladesh: Case Study on School Banking (April 2018). The study narrated that school banking is not only for helping students and parents with a minuscule amount of savings after a certain period, it is also for instilling the habit of savings from an early age. Low service cost, free from excise duty, free from tax—these special benefits have eased the way of acceptance of the school banking service. It also benefitted the banks to accumulate deposits. Banks have many products to serve the students and the institutions. But they are not aligned with the need of the students or academic organizations, rather too scanty to reach the unbanked students. Therefore, a banking product should be developed aiming only to serve the education as an integrated approach where not only savings, but also financing, granting loan to students and teachers, and providing grants or scholarships have to be ensured under one banking service that include all other facilities provided to students and institutions by banks. Therefore, more options here lie to be involved with more orientation of research in this regard.

3. Methodology

It is an exploratory type of study. Data has collected from both primary and secondary sources. Secondary data has collected by studying and reviewing the different journals and articles, textbooks, newspapers and websites. Primary source includes Formal survey through questionnaire, Informal conversation with experts who understand the pros and cons of the industry. For this purpose, it uses observation of the banking products and evaluates the need of the education institutions. To select financial and educational institutions, the study used homogenous sampling method based on purposeful sampling.

Homogenous sampling method is used to empirically describe some instruments of a large sample (Suri, 2011). To accumulate data, it uses both primary and secondary sources. Data from primary sources have been achieved through interviews, observation, and content analysis. For the interview, it sets questionnaire based on the banking tools that can best serve the education and funding necessity of the institutions. Twenty experts from the banks and education institutions (ten of each) have been interviewed with this process. The interviews and the observation notes were transcribed. For giving more input to the study, some secondary data have also been derived from UN SGD4 Agenda that describes education as a lifelong process and National Education Policy 2010. Finally, the transcribed data were coded and categorized based on objectives of the study. Through reading and re-reading the transcribed data, the findings of the study emerged. Then the findings were put under the themes of the research objectives.

4. Findings

The findings of the study have emerged while processing the data collected through interviews, observations, and content analysis (Banking tools). As the questionnaire was set based on the model of Education Banking, the major findings included necessity of funding education by banks, financing the educational institutions, granting loans to teachers and students and providing scholarship on the basis of the students' need:

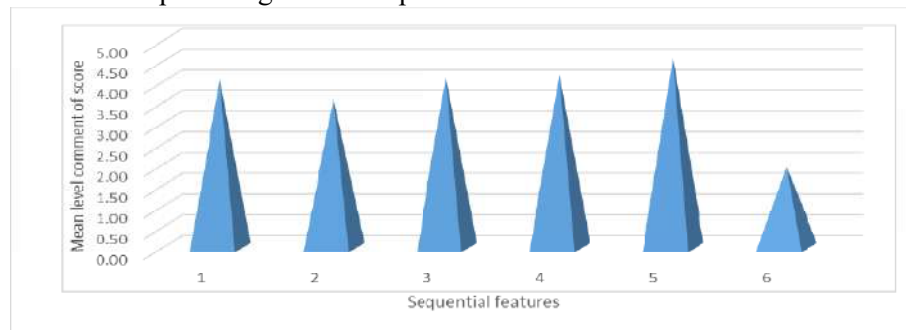


Figure -2: Features of Education banking

Statistical analysis demonstrates the diagram of mean level of comment score on every satisfaction feature of education banking influence. Respondents think banks or financial organizations are the one of significant stakeholders of Education. But many of them said Education can be run under Public-Private Projects (PPPs) with the help of Banks.

Hazards in managing funds for education

Respondents think Bank or Financial Institution help the education system with finance. The following diagram exposes the mean level of comment score on every satisfaction features of Education Banking. In an ordinary conversation with a principal of an institution, it is revealed that his institution has two funds deposited in two separate banks; one as general fund and another is emergency fund. Two deposits account nearly half a crore taka. But the principal could not manage the cash to buy land needed to build new academic building. Even he could not smoothly run the construction work of the third floor of existing building. He claimed more money.

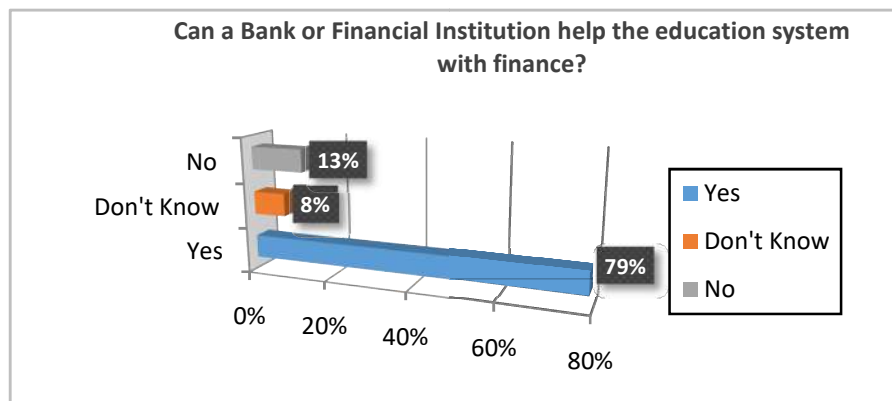


Figure -3: Financing opportunity

He also said, he had to wait for approval of the governing body to cash the deposits because the committee sits for once in a month. Moreover, banking procedure takes more time to cash the money. In addition to this, maintaining two accounts in two different banks is also a hazard for him. So students are suffering from the lack of classrooms. While asking the present financing by banks in Education institutes, 79% respondents answered positive. Chairman of the governing body of another institution said, he donated land for college and built a one-storied building about five years ago. Now the number of the students has been doubled. It needs another floor to accommodate the students. But unfortunately, he could not manage enough funds. The value of the land owned by the institution is over twenty crore taka. But it has not sufficient cash for further development. Only 8% respondents replied in From the cases mentioned above, it is quite clear that

education needs financing, and bank can extend hands to meet the both ends' need as banks in Bangladesh have a vast amount of idle money to invest. Education, thereof, can be a potential sector to invest for the banks.

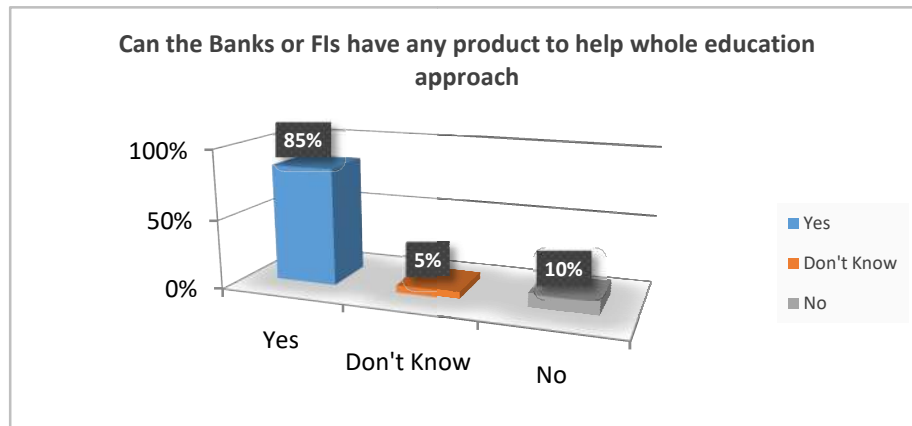


Figure – 4: Educational approach

Funding in education should be institution based. It should not be grown as an individual entity, opined an education expert. While asked about the criteria of agent banking, another banker said, an institution can perform as the agent of a bank as it has teachers and students as ready-made clients. Tuition and other fees can easily be deposited in the agent account through the institution performing as agent of the bank.

Beyond school banking for savings

School Banking is a savings tool for students. It is totally an individual entity. This tool can be used under Education Banking service where every student can deposit an amount monthly in addition to their tuition fees and other education costs from one account under the respective institution as agent of the bank. In this way, students can make the habit of savings in addition to practice handling money through banks from their childhood, said a bank official:

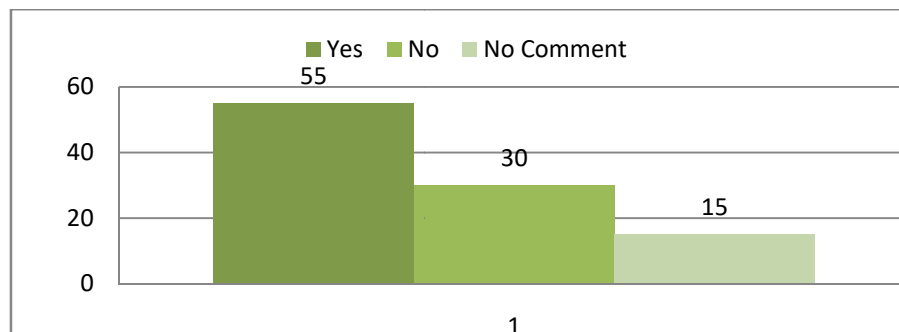


Figure – 5: School banking

Every educational institution in Bangladesh from primary to higher education has at least twenty teachers on an average, and more than six hundred students. Therefore to maintain a monthly handsome deposit is possible for the institutions. Moreover, teachers can draw their salaries from the respective institution and also take benefits from different deposit scheme of the banks through their accounts attached with the institutions.

Loan facilities for the teachers and students

There is almost no culture of providing education loan to students in Bangladesh. Bankers doubted on recovery. However, it is possible To provide loans to students to sustain their education if their respective institution and guardians jointly take the guarantee. Under education banking service, students can avail loans through their accounts under the institution as bank's agent.

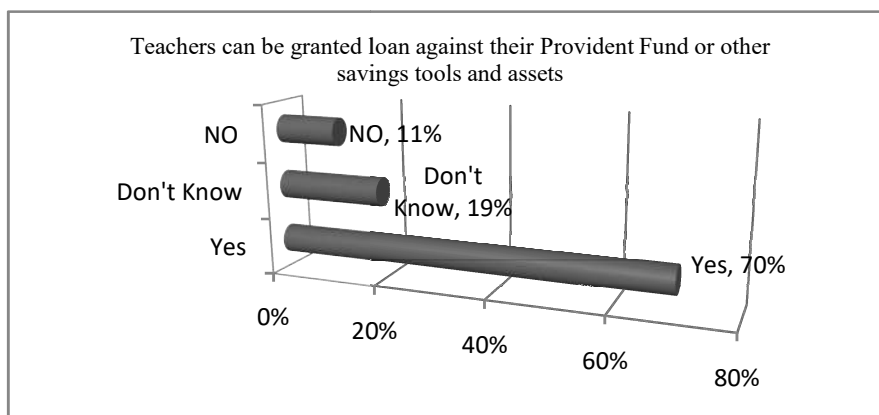


Figure – 6: Teachers' loans

'Need' is almost ignored in sponsorship

Banks have some benevolent programs of providing scholarship or fellowship for students in Bangladesh. They are mostly done under Corporate Social Responsibility (CSR) initiatives of the Banks. Almost all banks have such programs and grants in any form are distributed as per the public results of the students. However, it is true that the evaluation system of education in Bangladesh is result-oriented, not knowledge-oriented. Therefore in many cases, actual merit often lacks the due respect, said an education researcher. A guardian of a student anxiously said, his daughter could not achieve good result in the public exams, because she had been sick then. But her class performance was good enough. Moreover, due to economic inability, she had no private tuition. But if she had got the proper care, she could have made a brilliant success. The financial institutions here have ample opportunities to sponsor the education of meritorious and also needy students:

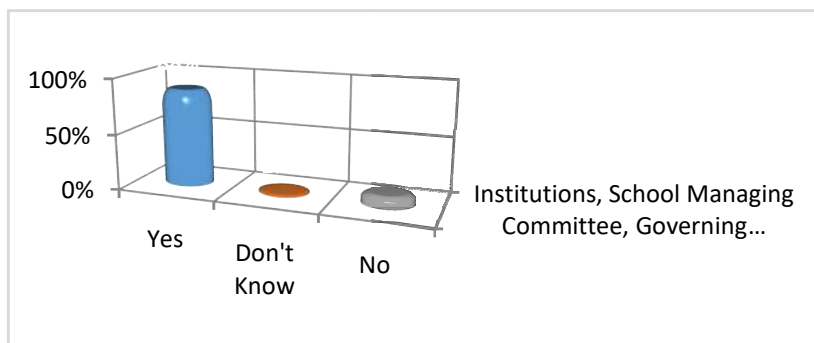


Figure -7: Scholarship intervention

To identify the really meritorious and needy students, banks can rely on the respective institution of the student. Only a teacher can really evaluate the students who are under his/her direct care, acknowledged a teacher. Only giving marks based on the answer scripts of a student who is absolutely unknown to the teachers hardly evaluates the real merit. Therefore, to provide scholarship, or fellowship, or a grant, banks can jointly work with the institutions, because, only an educational institution can identify 'Who needs what' as a student, opined an educationist. In fine, need-based grant is essential for education. Banks should consider it while providing financial helps to the students.

5. Conclusion

Bangladesh is a rapidly growing economy. This economy needs real talents. Besides, the country is now enjoying the benefit of demographic dividend. Banking sector is the significant actor for development of a country. As education is the yardstick to gauge the development of a country, therefore banks should not overlook the education sector. Banks have a plenty scope to invest in education and it should not ignore it. The findings of the study prove that education needs investment, and the banks are looking for trustworthy sector to invest in. Education can meet up the banks' thrust if it is handled with proper consideration. Banks, therefore, can develop a tool to serve the education. In this study, how will be the nature of the aforesaid product to serve education is somewhat discussed. It has to be acknowledged that the study has limitations. It has been done in a limited scope due to resource and financial constraints. In fact, such study needs a huge volume of research. Timely discussion through research in this field is a dire necessity as Bangladesh is committed to fulfill its SDG obligation for education by 2030. Hence, this study will pivot on a future-ready educated generation for sustainable development. It is hoped that the study will certainly contribute for further research in this sector.

References

- Al-Samarrai. Samer. (2007). *Financing Basic Education in Bangladesh*. UK. Centre for International Education, Sussex School of Education, University of Sussex
- Asian Development Bank. (ADB) (2014). *Good Practice in Cost Sharing and Financing in Higher Education*. Philippines. Mandaluyong City
- Baker. Bruce D. Farrie. Danielle. and Sciarra. David. (2018). *Is School Funding Fair? A National Report Card*. Education Law Center, Newark, N.J.
- Boye. Elizabeth and Mannan MA. (2014). Bangladesh: Public-Private Partnership in Higher Education. Asian Development Bank.
- Dalrymple Kelsey. (2016). *Fair Financing: Education Finance Policy for Equity: A Literature Review*. Save the Children and the Education Equity Research Initiative. Washington, D.C.
- Florence M. (2016). *Financing Secondary Education in Kenya: Exploring Strategic Management Approach for Improving Quality of Education*. School of Education, Kenyatta University Kenya, Nairobi
- Rahman, Mustafizur., Khan. Towfiqul Islam and Sabbih. Mostafa Amir. (2016). *Budget for Education in Bangladesh: An Analysis of Trends, Gaps and Priorities*. Center for Policy Dialogue (CPD). Dhaka
- Suri, Harsh (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, vol. 11, no. 2, pp. 63-75.
- Varghese. N . V . and Jandhyala B . G . Tilak. (1991). *Financing Education in India*. International Institute for Educational Planning. UNESCO.

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Though academic disciplines vary on the exact format and style of journal articles in their field, most articles contain similar contents and are divided in parts that typically follow the logical flow. The EDRC Journal of Learning and Teaching highlights the essential sections that a research paper should include:

1. Title of the Paper

The title should be specific that indicates the problem the research project addresses using keywords that will be helpful in literature reviews in the future. The title of your paper may be 10- 12 words long.

2. Abstract

The abstract should provide a complete synopsis of the research paper and should introduce the topic and the specific research question(s), provide a statement regarding methodology and should provide a general statement about the results and the findings. *Because it is really a summary of the entire research paper, it is often written last.* The abstracts must not cross 225 words.

3. Introduction

The introduction begins by introducing the broad overall topic and providing basic background information of the study. It then narrows down to the specific research question(s) relating to this topic. Every section may have subsections. It provides the purpose and focus for the rest of the paper and sets up the justification for the research.

4. Literature Review

The purpose of the literature review is to describe past important research and it relates specifically to the research problem. It should be a synthesis of the previous

literature and the new idea being researched. The review should examine the major theories related to the topic to date and their contributors. The researchers are required to know the research that has already been done in their field. The Literature Reviews examine previous related research. It should include all relevant findings from credible sources, such as academic books, and peer-reviewed journal articles.

5. Research Design/ Methodology

The section will describe the research design and methods used to complete the study. The instruments used (e.g., questionnaire, interview protocol, observation, focus group discussion, think aloud protocol, etc.), the participants, and data analysis procedures should be clearly mentioned in this section. The section may comprise subsections for every item. The general rule of thumb is that readers should be provided with enough details of the study.

6. Findings and Discussion / Results

In this section, the results are presented. This section should focus only on results that are directly related to the research or the problem. Graphs and tables should only be used when there is too much data to efficiently include it within the text. This section should also discuss the results and the implications on the field, as well as other fields. In this section, the hypothesis is tested or the research questions are answered and validated by the interpretation of the results.

7. Recommendations (Optional)

In this section, the author/researcher may put forward some recommendations based on findings of the study.

8. Conclusion

This section should also discuss how the results relate to previous research mentioned in the literature review, any cautions about the findings, limitation of the study, and potential for future research.

9. References

In this section, the author should give a listing of works cited in the paper. References should be an alphabetized list of all the academic sources used.

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Executive Editor
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