

## WAYS TO IMPROVE THE QUALITY OF BLENDED EDUCATION

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### Abstract

The main aim of this study was to establish ways in which the quality of blended education can be improved. This research utilized a random sampling method, where 20 participants were chosen from each country (Bangladesh and Japan). The qualitative research design was implemented using a questionnaire. The results affirmed that people were not satisfied with the quality of blended education, lack of computer knowledge, blaming it on lack of funding, poor infrastructure, lack of electricity supply, poverty and lack of teacher training in Bangladesh as opposes to Japan where people are not satisfied by blended education due to lack of collaboration, disagreement between parents, government, teachers and demands students leisure activities. Respondents further suggested that the governments need to be fully engaged to ensure the above challenges are eradicated. The study concluded that blended education is beneficial to students, teachers, and the community at large. However, the governments need to play a paramount role in ensuring that all obstacles are eradicated and blended education is improved in all schools.

**Keywords :** Blended Education, Virtual Classroom, Traditional Classroom.

### 1.0 Introduction

#### 1.1 Background

Education began long before the introduction of writing materials during the evolution of man. Since then, learning has continued to develop, with many schools, from the primary to the tertiary levels, now adopting blended education. The term "blended education" refers to the combination of virtual classroom and traditional classroom in the implementation of classes.

This research paper focuses on assuring and enhancing the quality of blended education in Bangladesh and Japan. Moreover, it will explore the way government needs to adopt to enhance blended learning.

#### 1.2 Statement of the Problem

What needs to be implemented to improve the quality of blended education in both Bangladesh and Japan?

Blended education, also known as flipped learning, gained its fame in the early 20th century. It led to mixed reaction between teachers, governments, students, parents and other stakeholders in the education sector in both Bangladesh and Japan. This has led to the study of the impacts and effects of blended education. For example, Rivera (2015), Trail & Hadley, (2010) and Wilson (2010) studied the impact of blended education in different subjects, but failed to provide ways to improve it so that it can be beneficial to every student. Since little or no research has been conducted on the ways to improve blended education, this study intends to focus on that topic.

### 1.3 Research Questions

1. What led to the diversity of education from traditional classroom to blended education?
2. What are the benefits of blended education in Bangladesh compared to Japan?
3. What are the disadvantages associated with blended education?
4. What limits the quality of blended education in Bangladesh compare to Japan?
5. What ways can be used to enhance blended education in both countries?

### 2.0 Literature Review/ Theoretical Framework

Blended learning pedagogy is well explained by cognitive load theory and constructivist learning theory. These two are well connected to blended education as they utilize two of its aspects: namely pre-work, which involves the use of videos and reading online, and exercise completion in class through an active interaction between teachers and students.

Constructivist learning theory explains how human beings learn and understand things around them. According to this theory, learning is prompted by the problems we face each day in different situations, hence we learn from experience. Educators use constructivist pedagogy to guide students in solving problems by asking them questions and challenging them using real-life examples. This allows learners to draw conclusions regarding the matter at hand (Gomboc-Turyan, 2012).

The ability of an active class to solve problems, provide better ways of reasoning, where students have a chance to reflect on their learning in class, combining it with the information they gained on their own. Therefore, the combination of these two aspects is expected to improve the performance of students in class work and in real-life reasoning and problem-solving.

Cognitive load theory, on the other hand, holds that learning depends on the amount of information processed. Mainly, short-term memory does not include many things overlapping at the same time. It focuses on a small amount of information in order for learning to take place effectively (Musallam, 2010). Long-term memory is infinite; it can store a huge amount of information. Therefore, long-term memory is preferred over short-term memory with regards to learning (Pass, Renkl, and Sweller, 2004). However, in reality, both memories work together; one needs to store information in short-term memory before it is moved to long-term memory. Therefore, this theory supports the use of blended education, because pre-learning (virtual classroom) is followed by classroom discussion and exercises to evaluate the subject material (traditional classroom).

### 2.2 Diversity of Education From the Traditional Classroom to Blended Education

Blended learning can be dated to the development of technology and the adoption of the internet, which led to the availability of affordable and efficient laptops and tablets. The term "blended education" has triggered many researchers to define it; most of them disagree about the proportion of online studies versus traditional classroom studies (Bonk & Graham, 2006). However, there is a need to make this term more understandable to students and education stakeholders in order to make it comparable to other pedagogies.

In 2012, blended education was given the term "flipped learning" by the Woodland Park High School chemistry teachers, Jonathan Bergman, and Aaron Sams. This term was used by Baker (2000) in a conference paper, where he advised that students should attend classes to enable teachers to be their guides in the learning process. Additionally, an article by King (1993) used the term "flipped" where he argued that classes should not be used to transmit information but to construct meaning. Hence, the term "blended learning" changed to "flipped education," and should be understood in term of students attending classes to create meaning from the information they have gained from online videos and exercises.

### **2.3 Benefits of Flipped Learning in Bangladesh and Japan**

Recent research argues that flipped education is more effective compared to the traditional classroom. This conclusion came from research which demonstrated that students using flipped learning performed better compared to students attending traditional classes. The assessment involved the same reading material (O'Flaherty & Phillips, 2015).

Further, blended education has assisted teachers in identifying slow learners in a class. As a result, they are able to spend personal time together to improve the student's performance (Fleck, 2012). These students can also review what was taught in their own time. Hence, blended education has contributed to improving the outcomes for slow learners in a class. Moreover, in Japan, flipped learning has contributed to the study of foreign languages, which has expanded job opportunities for students at international levels (Agosto et al, 2013).

### **2.4 Disadvantages of Blended Education in Bangladesh and Japan**

Blended or flipped learning is also associated with some negative aspects, such as plagiarism. Some students do not make any effort to discover new ideas or explore their creativity. Rather, they depend on the available knowledge (Mridha, et al. 2013). Therefore, this reduces the fairness of grading among students because their grades do not reflect their true academic capability. Moreover, it leads to a lack of creativity as students always get information on the internet without adding their own thoughts. As a result, flipped education may lead to a lazy generation.

Additionally, blended education has created extra work for teachers, hence leading to overwork. The teacher has to keep track of many students during the flipped learning and be ready for live class time. They need to answer every student question online to ensure students understand every lesson presented to them (Mahmud, 2010). Chatting and emailing is tedious and requires a teacher to be online for long periods of time every day. In most cases, teachers will not be able to deliver information adequately during the class period.

Further, giving students the freedom to manage their learning time and attend online classes may cause problems for both students and teachers. For example, students may decide not to watch the videos at the stated time, wait for them to pile up and watch all of them at one time.

Lastly, blended education can only be beneficial to students with technological knowledge. Notably, in Bangladesh, only a small percentage of students have access to the internet due to poverty and ignorance (Roknuzzaman, 2006).

### **2.5 Factors that Limit the Quality of Blended Education in Bangladesh**

- Political instability
- Lack of computer skills among teachers
- Lack of infrastructure
- Electricity
- Lack of funding

### **2.6 Factors that Limit the Quality of Blended Education in Japan**

Japan has well embraced flipped learning, in the sciences and arts discipline. The language sector is the most popular, where students who learn foreign languages are well identified to utilize flipped learning. However, there seem to be challenges, where many people have mixed reactions (Watanabe, 2014). Watanabe recorded Japanese twitters regarding the flipped education. One comment indicated that people are afraid that manufacturers would use this opportunity to increase the price of gadgets used, hence, it will only be beneficial to a particular sector. Therefore, they strongly discourage development of flipped education. Additionally, another comment stated that flipped education will lose the culture of traditional class. As a result, in Japan, the biggest limit of flipped education is acceptance and adaptability by citizens.

### 3.0 Methodology

The primary aim of this study was to determine the ways needed to improve the quality of blended education in both Bangladesh and Japan. The problem statement is stated as follows: “What needs to be implemented to improve the quality of blended education in both Bangladesh and Japan?” The study used random sampling to ensure that each person has an equal chance of being chosen to represent the whole community. The respondents for this study were from the secondary and tertiary education levels. Ten educational institute from Bangladesh and Japan were sampled, 5 from each country, with a total of 20 teachers and students chosen as respondents. The research design was qualitative, using a questionnaire as the form of data collection. Each respondent was supposed to answer in respect of their residential country.

The questionnaire asked:

- What do you think has limited the improvement of blended education in both Japan/Bangladesh?
- What factors do you believe will lead to improved quality of flipped education in Bangladesh/Japan?

### 4.0 Results of the Research

In Bangladesh, 75% of the teachers affirm that lack teachers’ training in computer technology has contributed to the lack of improvement of flipped education. Moreover, 25% of teachers blamed it to lack of electricity in many parts of Bangladesh. On the other hand, 80% of Japanese teachers argued that parents and guardian are not ready to accept flipped education. The other 20% speculated that students do not want to be involved in this kind of education because they think it’s tiresome. On the other hand, 95% of students in Bangladesh stated that lack of facilities such as computers and electricity are the main factor that contributes to slow growth of flipped education in the region. The 5% of students attributed the lack of growth of flapped education to lack of technology knowledge among students and teachers. In contrast, 99% of Japanese students affirm that they are not ready to embrace the new system because it denies them enough free time for co-curriculum activities; hence their resistance has contributed to the slow development of flipped education in Japan. The other 1% stated that lack of agreement between teachers, students, parents and government is the main factor that has limited flipped education to improve in Japan.

For the second question, 85% Bangladesh teachers suggested that the government should support blended education by funding the project. The other 15% suggested the eradication of poverty will ensure growth in the education sector, hence the improvement of blended education. In comparison, 100% of Japan teacher suggested parents should be informed on the importance of flipped learning. The 86% of Bangladesh students suggested that government should be at a position to provide computers to each student either in the rural or urban centre. The remaining 14% of Bangladesh students suggest that government should first change school curriculum where students are given an opportunity to study computer from nursery schools for the good adoption of flipped learning. In contrast, 80% of Japanese students suggested that flipped education should specify when it should be conducted to give them enough free time, whereas 20% of urged students, teachers, parents, and government to work together to realize the importance of flipped education, hence its development.

### 5.0 Ways that Can Be Used to Enhance Blended Education in Both Bangladesh and Japan

#### 5.1 Funding

Sufficient funds will guarantee better computers and employment of experts to assist in the implementation of blended education. Principally, it is the role of the government to uphold a policy to ensure the project is supported (Betts & Heaston, 2014).

## **5.2 Teacher Training**

Hence, education stakeholders should develop an education forum where teachers will be taught all that is required to make blended education a success. For example, how to use a computer to upload videos and how to live chat, send and receive emails.

## **5.3 Infrastructure and Electrical Supply**

Generally, the presence of electricity will trigger the development of infrastructure in schools, where flipped learning will take less time to be implemented (Betts & Heaston, 2014).

## **5.4 Definition of Leisure Time to Students and Agreement Between All Academic Stakeholders**

All academic stakeholders in Japan need to work together in order to identify when students should have their flipped learning. This will assist in identify when they have leisure time to develop their hobbies and talents.

## **6.0 Conclusion and Recommendations**

Blended education has proved to be beneficial to students, regardless of a few negative factors. The positive factors include student motivation, time-saving as students spend less time in live classroom, proper understanding of concepts, improvement of communication skills and reduction in school dropouts.

### **Recommendations**

I would recommend that the governments of both Japan and Bangladesh fully support quality blended education by adopting the following policies;

1. The government should ensure that all areas are well supplied with electricity.
2. The government of Bangladesh should organize teacher training forums, where teachers will be trained to use the required gadgets and learn the methods to deliver effective blended education; on the other hand Japan government should increase the teacher's salary to ensure flip education is not agitated by lack of funds, but the passion for students to perform well.
3. The government should monitor the management of these funds in the schools to reduce money fraud which may delay the development of infrastructure in schools.
4. The Japan education stakeholders should work together to realize significant of flipped education in the region.



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