

## University Teachers' Training on Online Teaching-Learning using Online Platform during COVID-19: A Case Study

Hasan Al Zubayer Rony\*  
Sheikh Tahmina Awal\*\*

### Abstract

*Online teaching-learning training for the teachers of higher education is a timely demand in this new challenging situation of COVID-19 pandemic lockdown. This study is conducted to explore the changes of perception of the faculty members of university after the online teaching learning training using online platform and challenges of teaching learning training using online platform. The approach of the study is qualitative in nature. This was conducted with 60 teachers from a private university who has participated an online teaching learning training using an online platform selected by convenience sampling and considered as a case. Data has been collected through pre test, post test and semi-structured interviews. Collected data were analyzed thematically. The findings of the study show effective change of mindset and perception in the faculty members for online teaching learning training, class conduction and assessment. Online teachers' training is possible in this pandemic situation and it can produce a significant outcome on the change of mindset of the faculty members. They have also accepted the change in class conduction platform (CCP) and learning management system (LMS). Technological barriers, poor internet connectivity and lacking of quality trainers were found as challenges. Findings of this study may have implication for training organizers and policy makers of public and private universities to take decision about online teaching learning training using online platform and overcome the challenges regarding training.*

**Key Words:** *Online teacher training, Google classroom, ZOOM platform, Faculty development*

### 1. Introduction

The world education is facing a paradigm shift due to COVID-19 pandemic. It has confined the education system and pushed it to the limit. Online teaching learning has become the way out from the challenging situation. But this new dimension demands training for the faculty members. The process of online teaching learning in this pandemic situation is a daunting task for them. The higher education teaching learning demands more concrete approach towards the transition and acquisition of online teaching learning approach (Shenoy, 2020).

The main challenge for the faculty member is to use and adapt with technology. Google classroom can be a very good platform for online teaching learning management (Ventayen, 2018). Moreover, class conduction platform in online needs to be cost effective and easy to use. There are plenty of resources which can be used as CCP. But "Zoom" application is providing the better facility to all the educators.

---

\* Lecturer, Green University Center of Excellence for Teaching and Learning (GUCETL), Green University of Bangladesh

\*\* Assistant Professor, Institute of Education and Research (IER), University of Dhaka.

Whether our faculty members are ready for conducting teaching learning through online platform or not is a big question. This question needs answer and if this question has a negative answer, then to train faculty members using online platform is another obstacle for the continuation of higher education. This study tries to explore perception change of the teachers after online training and the challenges of the training in higher education through online platform. Center of Excellence for Teaching Learning is working in private and public universities to develop the teaching learning practices of universities.

The online Teaching learning has various dimensions. Use of various methods and practices makes it possible to achieve the learning outcome. But increasing the acceptance of the faculty members through proper exposure of online teaching learning is a difficult task in the challenging situation of COVID-19. This study aims to explore the online teaching learning training in higher education using online platform.

## **2. Problem Statement with Justification**

Using online as a platform of teachers' training through online teaching learning is a new practice in our country. Online teaching learning itself is a challenge for us. To train teachers in this context requires exploration. As the online teaching learning training concept is uncommon in our country this study helps to explore the context and challenges of the training issue. The policy makers of private and public university will be able to find better way from this study to plan and run effective training program using online platform.

Some research works related to online teaching-learning have been conducted in Bangladesh addressing the COVID-19 pandemic situation. Those are "Preparedness of online classes in developing countries amid COVID-19 outbreak: A Bangladesh perspective ( Ramij & Sultana, 2020)", "Education during a pandemic: A feasibility study of Bangladesh to counteract potential study gaps caused by COVID-19 related lockdowns( Shama & Ikbal, 2020).", "Challenges and possibilities of online education during COVID-19 (Alam, 2020) etc. As per our knowledge there is no research study on exploring online teaching-learning training of university teachers using online platform.

## **3. Research Questions**

The purpose of the study is to explore the perception change of the faculty members of university level about online teaching learning training and the challenges of online teaching learning using an online platform. To address the purpose, this study sets the following research questions-

1. What are the changes of perception of the faculty members of university after the online teaching learning training using online platform?
2. What are the challenges of teaching learning training using online platform?

## **4. Methodology**

This study aims at exploring the changes of perception of the teachers after the online training and challenges of the online teaching learning training. Gay et al. (2012) noted that the nature of the question or problem to be investigated determines whether the study is qualitative or quantitative. The research questions in this study are explorative. A qualitative approach was selected for this study as Creswell (2012) asserts that qualitative research is the most suitable for exploring and developing a detailed understanding of a

central phenomenon. Within this qualitative framework, a case study design was chosen for this research. 60 teachers among 130 of a private university who have participated an online teaching learning training using an online platform selected by convenience sampling and considered as a case of the study (Yin, 1994). One of the private universities of Dhaka city where Center of Excellence for Teaching Learning has been working for developing the teaching learning practices of the faculty members through semester long training has been chosen as unit of analysis because the public universities are yet to start the faculty training. There were 6 interviews from the faculty members using convenient sampling. Two of them were professors, two assistant professors and two lectures. The faculty members of the university were trained using online ZOOM platform. The training program had seven modules. These are

1. Module- 1 (Foundation of Online Teaching Learning)
2. Module-2 (Introducing Classroom conduction platform)
3. Module-3 (Introducing Learning Management System)
4. Module-4 (Assessment in Online Classroom)
5. Module-5 (Content preparation and Sharing with the students)
6. Module-6 (Administrative class work)
7. Module-7 (Content Development and Management)

Data collection has been done as pretest and posttest using questionnaire by Google forms. Pretest posttest with the same group provides best outcome on measuring the effectiveness of a program (Little, 2020). Through comparison between pretest and posttest, allow the researcher to make claims that the events described at one site are not necessarily idiosyncratic to that site and thus contribute to the researcher's understanding about contextual variations (Gay, Mills & Airasian, 2012).

After session individual interviews has been taken to get deeper perspective about the change of perception through the training. It was a semi-structured interview because a semi structured format was followed for unanticipated issues (Draper & Swift, 2011). At the time of interview probing questions were asked to understand the hidden phenomena. Collected data was considered by careful observation and analyzed thematically.

## **5. Results and Discussion**

According to the research questions, the findings of the study have been categorized into two major themes and all the findings of these themes are discussed here with justification. The major themes are -

Theme-1: Change of perception about online teaching and learning

Theme-2: Challenges of online teaching-learning training using online platforms

### **Theme-1: Change of perception about online teaching and learning**

This theme is analyzed under the following six sub-themes and discussed at the end of the first theme.

#### **• Learning Management System (LMS) became known**

Most of the participants did not have a clear knowledge about the LMS. The participants were asked to know about what LMS is. There was a varied reply in the pretest. Most of them were confused and the specific definition or understanding of the LMS was not there.

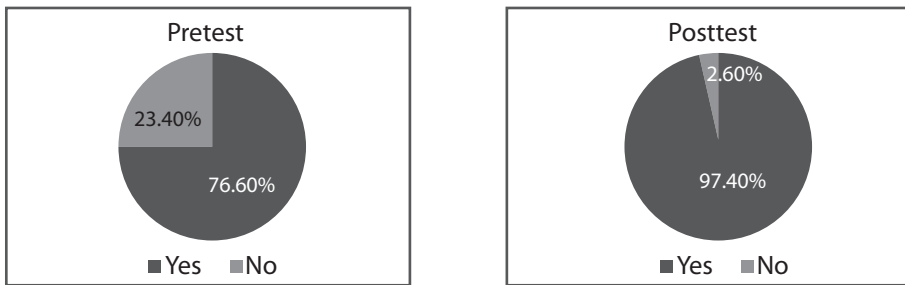


Figure-1: Changing of view of the participants from pretest to posttest about using LMS (shows 20.8 % positive change)

When the participants were asked whether they have used LMS or not, 76.6% of the respondent told that they have used it and 23.4% did not (Fig-1) in the pretest. In the follow up questions the participants were also asked about the name of a LMS but 43% of them replied with a wrong answer. After the training in the posttest the number of LMS user have been increased into 97.4% percent (Fig-1) which is a positive outcome of the training session. In the posttest one of the participants answered, “Class Conduction Platform is a place in where teaching learning process is advanced. In the perspective of online teaching, it gives a large free space for engaging participants and also for sharing knowledge and views”

#### • Perception is clear about CCP and LMS

The participants of the training were asked whether they know about class conduction platform (CCP). Most of them were in the gray area but significant portion of them understood that it is related to online teaching learning. They were confused about the difference between LMS and CCP. 59 percent participants were mixing up CCP and LMS as same concept in the pretest. But in the posttest this result has changed significantly as most of the participants responded with correct answer and the number was 98.6 percent. The participants were able to identify “Zoom” as CCP and “Google Classroom” as LMS. They have also identified Zoom as an easier application and Google Classroom as a cost effective open source for free application. Faculty members also informed that they have enjoyed the demonstration of the facilitators during the training session.

#### • Online assessment system became clearer

At the beginning the participants were confused about the assessment system for online teaching learning. Their pretest answers were viva, quiz, assignments but they couldn't provide any specific answer how these processes can be conducted. In the posttest it was found that they were clear about the concept and could mention some specific methods for assessing the students through Google forms, open book exams and other processes.

#### • Perception changed about keeping student's attendance

The participants were confused about the attendance keeping of the students. Through the interview it has been revealed that, most of the participants kept attendance manually. Later on after the training they have realized that they can keep the attendance with the duration of participants' participation through using zoom reports. Mr. Y mentioned in the interview :

We used to waste our valuable class time by keeping attendance manually, which was time consuming. Sometimes students also miss the attendance due to poor

connectivity at the time of giving attendance but now we know that ZOOM reports can be used for this purpose perfectly.

**• Perception changed about online training using online platforms**

It was tried to know about the view of teachers about training using online platform. The participants have positive response about the training in the interview. They have praised highly on the content of the training. They have also enjoyed in the online class conduction platform. One of the participant Prof. Mr. X mentioned in the interview that :

This is an utter surprise for us. The technology is a must component for facing the challenges of 21st Century Teaching Learning and a pandemic situation like COVID-19. Zoom platform for class conduction and Google classroom as class management is a very good combination for the faculty member to conduct the class online.



Figure-2 : Change of perception about online teaching learning ( shows 9.9 % positive change)

The response from the faculty members on the ease of teaching learning by using online platform has provided a significant deviance from pretest to posttest. Before the training 71.4% of the participant agreed that knowledge transmission is easier on online platform than offline (Fig-2) but this number has increased to 81.3% after the training which can be considered as a positive change achieved by the training. This 9.9% percent change of mindset due to this online training is a significant achievement.

**• Perception change about suitability of online training**

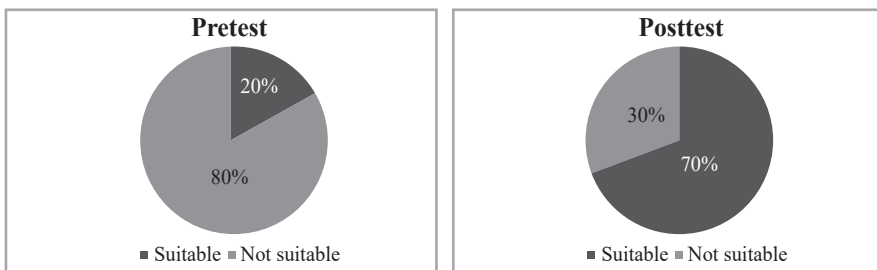


Figure-3 : Change of perception about suitability of online training through online platform (shows 50 % positive change)

It was tried to explore whether online training is more suitable using online platform. In the pretest it was found that around 80% of the faculty members were in favor of face to face system but in the posttest their concept changed dramatically and it was about 50% percent. This huge percentage of concept change is another positive achievement of the training session using online platform.

Perception changes were evident in this research study. This study reveals that online teacher training is possible and effective for the faculty members of higher education. They can be trained for online teaching learning by providing training using online platform. Online teaching learning is a need of time, on the other hand online teacher training is mandatory for the continuation of education (Setiwan, 2019). This program has shown the acceptance of the Google classroom as platform of teaching and learning. The participants of this study accepted the effectiveness of the platform. According to Azhar & Iqbal (2018) Google classroom has significant impact for higher education teaching learning but there are some limitations. The study also put forward a new dimension in teacher training or faculty development program. This finding is a positive perception acquired by training completion of the trainee.

Moreover, this study reveals the perception change of the trainee that Zoom is not a LMS rather it is a CCP. It also shows that Zoom is easier for the aged faculty members as it has a very user friendly interface which can be operated by both previous and new generations. This finding is consistent with Tonsmann (2014) that Zoom has some unique features and user friendliness which have made it very useful. Google classroom is very cost effective as it's a free application for all. The content of the Google classroom got very good response and the faculty members agreed that Google classroom is an effective LMS. They also have enjoyed the demonstration of the facilitators. Google classroom is an open source free application which can be adapted to conduct and manage class (Ramdhani, Umam, Abdurrahman & Syazali, 2019). Furthermore, the faculty members develop clear perception about CCP and LMS with examples, attendance of the participants can be kept by using CCP rather LMS and Zoom reports are better platform for collecting attendance information with report. This is also justified by Ahmed et al. (2020) that online class records are well preserved through the CCP than LMS. This study also finds out similar evidence. So the perceptions of teachers in the training were able to develop clear perception about CCP and LMS with their application which is a positive outcome of the training.

## **Theme-2: Challenges of online teaching-learning training using online platforms**

This second theme is discussed under following three sub-themes and discussed at the end of the second theme.

### **• Challenge of technological barriers**

The participants were asked about the major challenges of online teaching learning. Majority of the participants expressed that they can practice the online teaching learning but they face lots of unwanted difficulties due to their knowledge lacking, device issue and electrical failures. One of the senior faculty members expressed his concern of adaptability with the technology-

We are aged person, we cannot use the technology properly, it's difficult for us to use the touch phone properly or operate computer. Conducting online classes or training using various devices is a very big challenge for us. It would take us longer to be habituated with the system.

### **• Challenge of proper internet connectivity**

Another major challenge of the online teaching-learning and training using online platform was identified as the internet connectivity. The participants mentioned that sometimes their

internet connectivity got lost and they had to face difficulty in keeping up with the pace. Trouble shooting of their various devices (e.g. desktop, laptop, mobile) was a big challenge.

#### • **Challenge of insufficient expert trainers**

One of the major challenges for arranging the training was the availability of quality trainers who are both expert in pedagogy, andragogy and teaching technology. Most of the participants demanded to have training from trainers with strong academic background in online teaching practices.

This study also tried to explore challenges of online training. The senior faculty members face bigger challenges of adapting with the rapid change of technology. Single platform of technology is easier for them to use and operate but when two or more things are used for conducting higher education teaching learning it becomes a complex situation and most of the cases they face the difficulties. Laborda (2009) also identifies the technology training of senior teachers is complex attribute which needs more time than younger teachers.

Poor internet connectivity is a common issue of our country and has not been updated sensing the mass use of internet even in this pandemic situation. So the poor internet connectivity is one of the major challenges of online teaching learning as well as for training using online platform. This study also finds out trouble shooting of various devices (eg. desktop, laptop, mobile) is another challenge at the time of online teaching learning. This needs continuous adaptation and problem solving with multiple device or alternative plan. Lastly, the lack of expert online trainer with strong academic background was identified as a big challenge after conducting the study. The participants always expect to be trained by a trainer with strong academic background. This finding is similar to the findings of Guskey (2003) that teachers with prior experience at any educational level are required to remain well-informed concerning the growth in knowledge in various domains.

### **6. Implications and Conclusion**

The findings of the study reveal the perception change and challenges of online training on online teaching-learning. These findings have implications for training organizers policy makers of public and private universities to take decision about online teaching learning training using online platform and overcome the challenges regarding training. Also teachers are going to know about the platform of online training on online teaching-learning, challenges and other teachers' perception change connected with the professional development. This study may benefit them for their individual improvement.

This study is limited to only one organization and their training practices which puts a significant amount of confusion that this is a general picture for all higher education teacher training institute or not. This study has also a limitation of responses received through online communication. Further study on different set up might provide a better understanding regarding this study.

Online teacher training is a need of time. This COVID19 situation has again challenged the educators on lagging behind with the technology. A teacher can be trained through online teacher training session but we need to set a bigger goal for the whole education system.

This kind of online teaching learning program will significantly improve the adaptation and teaching learning quality of the faculty members practicing in higher education. The challenges also need to be dealt with multi-dimensional approaches.

### Reference

- Ahmed, A., &Ikram Khan, A. (2020). Report on Online Teaching and Learning Amid COVID-19. Available at SSRN 3646414.
- Alam, A. (2020). Challenges and Possibilities of Online Education during Covid-19. <https://www.preprints.org/manuscript/202006.0013/v1>
- Azhar, K. A., & Iqbal, N. (2018). Effectiveness of Google Classroom: Teachers' Perceptions. *PRIZREN SOCIAL SCIENCE JOURNAL*, 2(2), 52-66. Retrieved from <http://www.prizrenjournal.com/index.php/PSSJ/article/view/39>
- Creswell, J. W. (2012). *Qualitative inquiry and research design Choosing among five approaches*. Sage.
- Draper, A., & Swift, J. A. (2011). Qualitative research in nutrition and dietetics: data collection issues. *Journal of Human Nutrition and Dietetics*, 24(1), 3-12.
- Gay, L., Mills, G., & Airasian, P. (2012). *Overview of qualitative research. Educational Research: Competencies for Analysis and Applications*.
- Guskey, T. (2003). What makes professional development effective. *Phi Delta Kappan*, 84(10), 748- 750.
- Laborda, J. G., & Royo, T. M. (2009). Training senior teachers in compulsory computer based language tests. *Procedia-Social and Behavioral Sciences*, 1(1), 141-144.
- Little, T. D., Chang, R., Gorrall, B. K., Waggenspack, L., Fukuda, E., Allen, P. J., & Noam, G. G. (2020). The retrospective pretest–posttest design redux: On its validity as an alternative to traditional pretest–posttest measurement. *International Journal of Behavioral Development*, 44(2), 175-183.
- Ramadhani, R., Umam, R., Abdurrahman, A., & Syazali, M. (2019). The effect of flipped-problem based learning model integrated with LMS-google classroom for senior high school students. *Journal for the Education of Gifted Young Scientists*, 7(2), 137-158.
- Ramij, M., & Sultana, A. (2020). Preparedness of Online Classes in Developing Countries amid COVID-19 Outbreak: A Perspective from Bangladesh. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3638718](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3638718)
- Shama, S., & Iqbal, J. (2020). EDUCATION DURING A PANDEMIC: A feasibility study of online classes in Bangladesh to counteract potential study gaps caused by COVID-19 related lockdowns. <https://www.researchgate.net/publication/342641129>
- Shenoy, M. V., Mahendra, M. S., & Vijay, M. N. (2020). COVID 19–Lockdown: Technology Adaption, Teaching, Learning, Students Engagement and Faculty Experience. *MuktShabd Journal*, 9.
- Tonmann, G. (2014). A Study of the Effectiveness of Blackboard Collaborate for Conducting Synchronous Courses at Multiple Locations. *InSight: A Journal of Scholarly Teaching*, 9, 54-63.
- Yin, R. K. (1994). *Case study research Design and methods* (2nd ed.). Newbury Park, CA Sage Publications
- Ventayen, R. J. M., Estira, K. L. A., De Guzman, M. J., Cabaluna, C. M., & Espinosa, N. N. (2018). Usability evaluation of google classroom: Basis for the adaptation of gsuite e-learning platform. *Asia Pacific Journal of Education, Arts and Sciences*, 5(1), 47-51.