

Investigating the Role of Google Classroom as an LMS in Tertiary Level EAP Classes

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Abstract

Using an online platform, such as Google Classroom to engage learners, is a recent practice in the field of Computer Assisted Language Learning (CALL). It can be used to engage learners to learn academic English skills at the tertiary level in Bangladesh. This paper examines adoption of Google Classroom through the lens of Rogers' (2003) *diffusion of innovations* to investigate learners' experiences, attitudes, and perceptions towards Google Classroom as a Learning Management System (LMS) to engage students to learn the four skills of English. The researchers have undertaken a mixed methods approach to collect data from 105 tertiary level students who are taking EAP courses in a private university. The findings suggest that the participants have strong positive attitude towards the use of different features of Google Classroom due to the availability of training and technological tools. This study is crucial for understanding the importance of using instructional technology (IT) in reshaping English teaching practices in Bangladesh.

Keywords: CALL; Google Classroom; Instructional Technology; LMS; Tertiary level education

Introduction

A profound transformation in the traditional approaches for second language education can be observed due to the use of Web 2.0 tools and different types of online immersive tools (Sykes & Thorne, 2008). As a result, the use of a Learning Management System (henceforth, LMS) is often identified as useful to support learning in academic institutions to manage digital classrooms. In instructed language learning, the web presence of a course is within an LMS that includes an easy-to-use template system to manage course-related tasks; e.g. scheduling, giving assignments, providing documents, taking online quizzes, and tracking grades (Godwin-Jones, 2016). Google Classroom, which will be mostly referred to as “GC” in this paper, was launched on August 12, 2014 as a part of Google Apps for Education (GAPE) (Sukmawati & Nensia, 2019). It is connected with Gmail, Google Drive, Hangout, YouTube, and Google Calendar. The application can be used in multiple platforms; both in computer and smartphone devices. The use of GC as a learning/course management system in the universities of Bangladesh is growing in recent times (Iftakhar, 2016; Islam, 2019). In recent times, a few studies have been conducted in the context of Bangladesh to investigate the issues related to GC, such as the factors related to adopting GC; how it can be used by the teachers; what works best in this platform; its effectiveness and limitations (Iftakhar, 2016) and the prospects and the challenges identified by students (Islam, 2019). Researchers have also investigated the use of GC to develop a discrete language skill (such as, listening skill) in tertiary level ESL classroom and its impacts on students (Rabbi et al., 2017). However, most of these studies were conducted in blended classrooms where GC was only partially used as a learning management system (LMS). With the continued evolution and wide acceptance of LMSs, further study and analysis are crucial to support the adopters to identify the most efficient paths in the usage of these systems for the enhancement of educational process (Abazi-Bexheti et al., 2018). Besides, it is important to analyse the experiences and attitudes of the learners under the theoretical framework of Rogers’ (2003) *diffusion of innovations* to understand the factors that influence the adoption of GC in tertiary level EAP online classes in Bangladeshi context. The study presents that learners, as the adopters of Google Classroom innovation, have highlighted the factors that are important for adoption of this innovation. The ideas from their experiences and perceptions that are highlighted in this study can be used to outline strategies for possible future re-invention. This research, thus, investigates the experiences of the learners in tertiary level EAP online classes conducted through the LMS named GC in relation to Rogers’ (2003) diffusion of innovations. It tries to understand its adoption among learners as well as investigates learners’ attitudes and perceptions towards the platform.

Research Questions

1. How does Rogers’ (2003) diffusion of innovations explain the adoption of Google Classroom in tertiary level EAP online classes in relation to learners’ experiences?
2. What are the attitudes of the learners towards the usage of Google Classroom as an LMS?

Literature Review

Learning Management System (LMS)

Google classroom is an important Learning Management System (LMS) which is offered by Google for the educators to provide a central location to communicate with students, ask questions, and give assignments (Sudarsana et al., 2019). The term “Learning Management System” or “LMS” is broadly used to specify the technological tools that help the distribution of courses over long distances (Turnbull et al., 2019). These systems may be defined as web-based software platforms which provide an interactive online learning environment and automate the administration, organization, delivery, and reporting of educational content and learner outcomes. It also provides an online folder for the management of a

course and allows the instructor to post teaching materials and assignments where the students can access the learning content, submit the assignments, and take part in various online learning activities (Abazi-Bexheti et al., 2018). Turnbull et al. (2019) further add that LMSs are useful not only to provide content to learners, but also to facilitate timely and accurate communication between learners, course facilitators, and other institutional stakeholders. Therefore, an effective and high-quality LMS is one of the crucial elements for the success of any online course.

Features of Google Classroom for Language Teaching

Iftakhar (2016) believes that “Google Classroom is very simple to create and to use” (p. 13). In a new course in GC, there are three main menus (stream, classwork, and people). *Stream* can be used to make announcements, discuss ideas or see the flow of tasks, material, quizzes on topics taught by the teacher. *Classwork* can be used to take tests, pre-tests or quizzes; upload materials and do reflections. Through the *People* menu, the teacher can invite, add or remove students; invite others for collaboration; mail all the students and teachers and so on (Sukmawati & Nensia, 2019). Englishtina (2019) further explains that in GC, both teachers and students can share materials, assignments, questions etc. All sorts of file types (doc, pdf, ppt, xl, jpeg, mp3 or mp4) can be shared or submitted. Teachers can give audio and visual materials as well. It can be used with an app in smartphone. Teachers can create announcements and students can post comments or make posts themselves. The calendar system in the application is useful to keep track of class activities. Teachers can get notification and keep track whether students submit on time, late, or miss the assignment. Teachers can reuse posts from other classes without retyping it.

Google Classroom in Tertiary Level Education

Iftakhar’s (2016) study investigates the potentials of GC in a blended classroom. Teachers in his study asserted that it has the potential to promote collaborative learning through group work and assignment. The students highlighted the effectiveness and user-friendliness of GC especially for its uploading and storage features. They felt that conducting activities in GC is useful to build and develop presentation skills. Rabbi et al. (2017) also report some positive aspects of GC to increase the listening skills of the learners. Their study looked at the results (total gaps filled in the first attempt, partial answers written in the first attempt, total times the audio clip played to fill all the gaps, time taken to complete assignments) of four gap-filling assignments on listening skill taken on four consecutive weeks. In the final week, students’ responses suggest that significant individual development has occurred during four weeks in these areas.

Elsewhere, Bakar and Noordin (2018) explore learners’ engagement and responses for using activities in GC for a blended communicative English course. This study shows that the user-friendly features of GC are useful for engaging learners with low English proficiencies as it allows students to save snapshots of digital resources, receive teacher’s feedback prompts, have discussions, and complete tasks electronically without paper. It confirms that management of the classes can become easier allowing the teachers to keep track of students’ progress easily as well as giving them flexibility to take classes anywhere and anytime.

In a recent study by Islam (2019), learners admitted that using GC is practically beneficial for them. They can use it anytime and anywhere to participate in open discussions regarding any topic. They can also keep themselves updated about the makeup classes, exam dates, and important announcements. Most of the students believed that their skills had increased due to different types of materials (such as YouTube videos, songs, conversational audios etc.) posted in the streams. They can easily find their results which helps them to correct their mistakes. The study shows that the introvert learners have done noticeably better in the video speaking tests compared to their classroom performances. Islam (2019)

notes that these students can start speaking in front of the class after gradually overcoming their shyness by doing these activities.

Challenges of Google Classroom

Islam's (2019) study informs about some challenges faced by the learners while using GC in a blended classroom. There is no option to communicate with each other or with the teacher using private message option, except for the private comment made to the teacher under the submitted assignments only. Students complained that without interactions, materials given in the stream are not enough to explore the full scope of learning English.

There are some technological issues as the platform requires stable internet connection and the files cannot be viewed or read offline. Due to the demands for high internet speed, students sometimes failed to upload assignments and their parents felt that the internet data were getting wasted. The stream cannot get auto refreshed or updated and the users need to reload the stream continuously to get the most recent post. A few learners even reported that this platform gives scope to the learners to cheat during the examinations. In Iftakhar's (2016) study, students reported to have felt scared and pressured to use GC as not all of them had technological literacy and some came from rural areas where technology use is not prevalent. Both teachers and students shared their views that limited internet connection is the main reason that keeps students away from using GC. Bakar and Noordin's (2018) study also report that poor internet connection and workload with high number of activities in GC cause inconvenience and lack of interest to the students.

Islam et al. (2020) conducted a survey with 2038 students from 42 public and private universities and affiliated colleges in Bangladesh. The students show strong opposition towards conducting classes online using digital platforms as only 55.3% participants had technological tools to attend online classes and 55% participants lacked proper internet connections. Besides, 82% of the learners viewed online classroom to be not as effective as a real classroom. Milon and Iqbal (2017) in a study with higher secondary level students in Bangladesh, examined students' attitudes towards technology use in classroom to learn English. The findings show that most of the students exhibit demotivation, lack of interest and unwillingness due to the lack of proper guidance and motivation from teachers as well as high cost to buy technological items and internet packages. In addition, personal beliefs that technology is a barrier to learning also influenced their positions. Kapasia et al. (2020) report that online learning process is quite discriminatory as a significant number of learners fail to attend online classes due to various challenges in e-learning. Due to the lack of electricity, poor internet connection, socio-economic condition, many students, particularly from remote areas and marginalised societies, have no access to online learning.

Theoretical Framework

In order to grasp the integration of GC in pedagogy, it is important to understand Rogers' (2003) notion of diffusion of innovations. According to him diffusion is "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 10). He explains that introducing a recent technology can create uncertainty among individuals about its usage and end result; and at the same time can solve the needs or perceived problems which acts as a motivation to learn about the innovation. Innovations that possess five important qualities will be adopted more rapidly than other innovations. According to Rogers (2003), these five qualities are:

1. Relative advantage: It is the degree to which an innovation is perceived as better than the idea it replaces;

2. Compatibility: It is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and possible adopters' needs;
3. Complexity: It is the degree to which an innovation is viewed as difficult to understand and use;
4. Trialability: It is the degree to which an innovation can be experimented with on a limited basis;
5. Observable results: It is the degree to which the results of an innovation are visible to everyone.

Adoption of GC in this study is the result of “a decentralized diffusion system” (Rogers, 2003, p. 7), where decisions are shared by clients and potential adopters (there may not be a change agency), and potential adopters are responsible for the self-management of the diffusion of innovations. Instead of coming from formal research or survey, new ideas can come from non-experts in the client system. Here, the degree to which an innovation is changed or modified is known as “re-invention” (Rogers, 2003, p. 17). Users or adopters in the process of adoption and implementation may often feel that they possess relevant information regarding their local situation which the external change agent cannot know or understand.

Methodology

This research design follows “explanatory sequential mixed methods” (Creswell, 2005, p. 220) where quantitative data collection and analysis is followed up with qualitative data collection and analysis. The participants are students in a private university located in Dhaka, Bangladesh. One of the researchers of this study teaches EAP courses in this institution and took the permission to conduct this study. The participants are diploma-holders and are studying in the Department of Textile and Engineering. They are freshers and need to take four EAP courses in order to graduate. Due to the COVID-19 outbreak, the participants are continuing their study online using GC as an LMS. In the first stage, 105 participants participated. Table 1 provides the background information of these 105 survey participants.

Table 1
Background information of survey participants

Items	Responses	Frequency (f)
Gender	Male	101
	Female	4
Age (Year)	20-22	67
	23-25	29
	26-28	9
I have my personal computer/laptop:	Yes	53
	No	52
I have my personal smartphone:	Yes	105
	No	0
I check our Google Classroom:	Daily	55
	Every other day	10
	Two to three times a week	38
	Not at all	2

At the first stage, the researchers used quantitative questionnaire to collect data from the participants. Questionnaires are more effective than other modes of data collection method in case of a large-scale survey (Brown, 1995). Here, four-point Likert (1932) scale has been used to investigate learners' perceptions on GC and the teacher's role. The participants must tick one from the four options (*strongly disagree, disagree, agree, strongly agree*).

In the second stage, the researchers collected data through open-ended interview sessions for more in-depth information from the participants. For the qualitative interview, 20 participants were selected through “purposeful sampling” (Creswell, 2005, p. 144) from the previous sample. Creswell (2005) states that open-ended interviews allow an interviewer to ask questions and record comments of the participants without giving them any response options. They give the researcher freedom to ask questions and record comments going beyond the initial questions. The set of open-ended questions for the interview sessions was created by the researcher who took the interviews based on her personal judgement and experience with the participants. Besides, the research questions and existing literature in the field also guided the interviews. To ensure that the premeditated questions do not restrict the flow of the interview, the researcher took the freedom to make alterations, ask follow-up questions and skip questions whenever necessary.

The analysis followed back and forth comparison with quantitative statistical results and discussion of the qualitative findings (interview data). During the analysis, the responses from Section 2 and 3 in the quantitative survey were converted into mathematical figures as follows.

Strongly Disagree= 1
Disagree= 2
Agree= 3
Strongly Agree= 4

The data then were analysed in terms of the mean score. The interpretation key is given below.

Strongly Disagree= 1.00-1.75
Disagree= 1.76-2.50
Agree= 2.51-3.25
Strongly Agree= 3.26-4.00

Findings and Results

Findings from the Quantitative Survey

Table 2 provides information found from the survey about learners’ attitudes towards the use of GC as an LMS. In this table, 17 statements have been included. These statements focus on learners’ preference for GC due to ease of use, ease of communication, usefulness, time management and so on.

Table 2
Learners’ attitude towards Google Classroom

Statements	Interpreted result (Mean Score)
I enjoy using Google classroom	Strongly Agree (3.50)
I can access Google classroom easily	Strongly Agree (3.59)
Google classroom is easy to use	Strongly Agree (3.70)
I like to post on my Google classroom	Strongly Agree (3.27)
I like to comment on posts on my Google classroom	Agree (3.23)

I find Google classroom to be very helpful for my studies	Strongly Agree (3.47)
I like Google classroom as a tool to communicate with my teacher	Strongly Agree (3.30)
I like Google classroom as a tool to communicate with my classmates	Agree (2.94)
I like it when my teacher posts materials in my Google classroom	Strongly Agree (3.48)
I like it when my teacher posts notices in my Google classroom	Strongly Agree (3.58)
I think that Google classroom is useful for my English course	Strongly Agree (3.30)
I think that Google classroom saves time for my English course	Agree (3.20)
I can practise English in Google classroom	Agree (3.08)
I think teachers should use Google classroom for communicating with students in English courses	Strongly Agree (3.26)
I think teachers should use Google classroom for explaining classroom materials to students in English courses	Strongly Agree (3.37)
Google classroom serves as an online community to the students of my English class	Strongly Agree (3.37)
I will recommend my classmates to use Google classroom	Strongly Agree (3.42)

As seen above, the learners have ‘strongly agreed’ with most of the statements in Table 2. Only in case of four instances (*I like to comment on posts on my Google classroom, I like Google classroom as a tool to communicate with my classmates, I think that Google classroom saves time for my English course, I can practise my English in Google classroom*), they have ‘agreed’ with the statements.

Table 3 provides information found from the survey about learners’ attitudes towards the role of teacher in Google Classroom. In this table, eight statements have been included. These statements focus on teacher’s role to demonstrate the use of GC, provide class materials, circulate course information, conduct classes and tests etc.

Table 3
Learners’ attitude towards the role of teacher in Google Classroom

Statements	Interpreted result (Mean Score)
I think my teacher should demonstrate how to use Google classroom to everyone in the class	Strongly Agree (3.42)
My English teacher should give us all the classroom materials in our Google classroom	Strongly Agree (3.63)
My English teacher should post the important notices on Google classroom	Strongly Agree (3.70)
My English teacher should post English language practice activities on our Google classroom	Strongly Agree (3.54)
My English teacher should monitor and check our comments and posts on Google classroom	Strongly Agree (3.61)
My English teacher should take tests using Google classroom	Strongly Agree

	(3.55)
My English teacher can take classes using Google classroom	Strongly Agree (3.46)
My English teacher should not use Google classroom for our English course at all	Disagree (2.25)

As seen above in Table 3, the learners have ‘strongly agreed’ to all the statements except one (*My English teacher should not use Google classroom for our English course at all*). Here, learners have demonstrated negative attitude towards the teacher not using GC at all for the course.

Findings from the Open-Ended Interview

The 20 participants for this second stage have stated that their virtual classes have been conducted through Google Meet. The learners can join the class either through the meet link generated for their particular GC or through the individual link of each class posted in GC stream by the teacher 5 or 10 minutes before the class. The meet link generated for their classroom is displayed in the GC stream header and it remains the same for the entire course period. The participants have not faced any problem to use this feature and they have found it helpful as their virtual meet class is integrated in the GC and can be used repeatedly.

It has been found that few (four in total) learners in the interview session have attended all the classes in the course. Most of them have missed classes due to poor internet connection, sickness, and other reasons. Class recordings were posted in GC after every class, which allowed the students to have the option to watch the lectures in their free time, allowing them to make up for missed classes. The recordings, therefore, were useful for the learners and gave them the opportunity to revise the course contents before examination. However, one learner (Participant no. 8) expressed that they had the highest level of attention during the class time and classes gave them the opportunity to interact and have meaningful discussions. Another learner (Participant no. 16) stated that the recordings were lengthy and boring. S/he therefore skipped watching them entirely.

Sub-skills of English

All the learners agreed that writing, reading, and grammatical items had received the highest importance in the course. Speaking and listening skills were somewhat ignored during the course. The students felt that speaking and listening skills should receive more importance as most of the learners are jobholders and need to communicate using English. Although they received the exposure of English communication in their virtual Meet classes with the teacher, there were no graded speaking and listening tasks. In their usual curriculum, 25% marks (listening 15% and speaking 10%) are allocated for these two skills. However, the teacher had to shift classes to online mode due to COVID-19 outbreak at short notice and make changes to the curriculum. They suggested that the teacher should share or screencast interesting videos and conduct discussions with the learners. They also urged that the teacher should make giving presentations mandatory for all the learners. All the learners mentioned that they had received the materials (documents, slides, eBooks) from the teacher in GC, which were posted before or after the class. They were not required to buy the coursebook from the university. Sometimes, the teacher posted additional pictures and videos. The students reported that there were some cases when the teacher faced internet problem due to load shedding, and s/he could not conduct the virtual Meet classes. In those cases, the teacher recorded the class lectures and posted them on GC, which was helpful.

Assessment in Google Classroom

Quizzes and assignments were conducted using Google Form which were posted in the classwork menu in GC. The quizzes included different types of questions, such as MCQs, fill in the blanks, reading comprehension, writing summary, paragraphs, essays, letters, reports etc. The time given to them to submit these quizzes and assignments were limited and they felt the pressure to submit on time as GC has the feature to record late submissions. It is true that students had plenty of scope to cheat during the examination although the teacher shuffled the question order in the Google Form. One student (Participant no. 1) suggested that the learners should keep their camera on during the examinations to minimise cheating. One of the participants felt that GC can introduce a feature which would take random screenshots of the learner's device during the examination so that they cannot cheat or use internet during the exams. The participants also suggested that the questions should be creative which would give the learners opportunity to think critically and not rely on resources to directly copy from or cheat. They felt that teacher should rigorously check the scripts and penalise strictly for any sort of plagiarism. According to another participant (Participant no. 14), strong plagiarism checking features need to be introduced in GC.

Learners' Experiences

Google Meet is the feature most widely used by the learners in this course. Whole class discussions, one-on-one responses, individual tasks, group work are the common activities that were conducted using the Meet. The learners reported that they found these classes interactive. Some of the participants reported that, in real life classrooms, sometimes they feel shy to interact or ask for clarification. However, in digital classes using Meet, they did not feel shy as they were not feeling that everyone was looking at them when they engaged in conversations or asked questions in the class. However, some students reported that they had negative experience with group work as it was difficult to reach other group members which would have not been an issue if they could meet in face-to-face classes.

Classwork menu is another feature of this platform. Here, the learners can submit their classwork and assignments. Also, they can keep track of their coursework and view feedback from the teacher in this menu. One of the participants (Participant no. 7) said that the feedback given to them by the course teacher is private as GC allows them to post comments and have replies in private mode in this section. Stream is also a widely used feature among the participants. However, most of the learners shared that they cannot easily download any file or material posted here because it is difficult to view them without the internet connection. All the participants agreed that they have enjoyed using this platform. They expressed that GC has its merits and convenience to assist their online classes. The learners can connect it from anywhere anytime provided that they have internet connection which saves many hours spent to commute to the university. As many participants are jobholders, they were positive regarding the use of GC as it helps them continue work and studies simultaneously without the pressure of physically being present in every class.

Teacher's roles

Participants in this interview agreed that the course teacher has an important role to encourage and motivate the learners. One learner (Participant no. 5) stated that she felt motivated to use the platform upon receiving training from the teacher. Most of the students did not use the features of GC before. As the initial classes focused on giving them an orientation on how to use GC, they felt confident to use this throughout the course. All the learners agreed that the teacher should address the problems of the learners in terms of using GC. Not all the learners are technophile. Hence, training and assistance should be given

to those learners, and teachers should be ready to guide the learners in case of any troubleshooting amidst class.

Suggestions from the Learners

The participants provided some suggestions to utilise the features of GC to assist online language courses. First, the teacher can give different types of activities in GC. For instance, discussion board can be introduced where learners can give comments and replies to engage in meaningful conversations. Also, the ecosystem within GC allows different types of files, audio-visual clips, and pictures; and learners can be encouraged to respond in these diverse types of ways instead of only written responses. In addition, many external applications and websites can be integrated within GC, which would be useful to make the course interactive focusing on all the four skills of English. Meanwhile, certain aspects of GC need to be upgraded, such as allowing learners to download files and materials, including a notification button so that they do not miss any update, including offline download and storage option, making the application faster for mobile phone using low internet data, introducing a separate menu for course materials, keeping stream solely for discussions and notices and so on.

Discussion and Conclusion

This study looked at tertiary level learners' attitude towards the use of GC as an LMS and explored their perspectives on features of GC used to conduct their EAP courses online to understand its adoption under the framework of Rogers' (2003) diffusion of innovations. The researchers conducted a survey among 105 participants, and then took in-depth interviews with 20 learners from the survey participants. The survey results suggested that the participants have strong positive attitude towards the use of GC in their courses. Also, they demonstrated strong positive attitude towards the course teacher using different features of GC in order to conduct and manage their courses online. Even, most of the students disagreed (mean score=2.25) that the course teacher should not use GC for the English course at all (see Table 3). These findings were explored in the interview session. Although the learners did not use GC before, the teacher helped them get over their initial inhibition towards this platform by providing support and training whenever necessary. In Milon and Iqbal's (2017) study, learners were younger; and in the study by Islam et al. (2020), learners lacked technological items and internet packages needed for technology integration in physical classroom. On the contrary, the participants of this study are young adults with age range from 20 to 28. Also, they have access to different technological items (100% owns a smartphone, around 50% owns computer/laptop) which are important and extremely necessary tools needed to use any online platform. Also, class recordings provided in GC increased students' convenience of using this platform in case of lack of electricity and poor internet connection as mentioned by Kapasia et al. (2020) and Bakar and Noordin (2018).

Integration of Google Meet in GC is useful to conduct interactive classes, and unlike Islam's (2019) study, the teacher and learners do not need to rely solely on written comments. Meanwhile, timing of introduction, according to Dearing and Cox (2018), is an important variable of diffusion of innovations (. Unlike Iftakhar's (2016) study where GC was used irregularly without exploring its features to promote the platform, learners in this study had no choice but to use this platform as all educational institutions in Bangladesh have been closed since March 17, 2020 due to the COVID-19 outbreak (Islam et al., 2020). Considering this unique situation, students might have showed extremely positive attitude towards the use of GC, which has motivated them to a great extent to continue their studies in this critical situation. GC's 'adoption' (Rogers, 2003) among the participants in this study can be explained by the understanding of the following five factors.

1. Relative advantage: The rate of adoption of an innovation will likely be quicker if the realised relative merit of an innovation is greater. The participants highlighted the various advantages of GC, such

as built-in Google Meet option for face-to-face online discussion, Classwork Menu to keep track of course work, option to use GC both in computer and smartphones, ease of access to class materials and notices and so on.

2. **Compatibility:** It refers to the perception of the innovation to be compatible with the values, needs, and experiences of the adopters. GC has been quite useful to conduct classes during the global pandemic and has saved time and effort of the learners and teachers. The students' positive attitude towards it suggest that they have positive values/beliefs toward the use of GC as an LMS.

3. **Complexity:** New ideas that are simpler to understand are adopted more rapidly than innovations that require the adopter to develop new skills and understandings. GC is not an extremely complicated platform to use. Also, the teacher gave proper instructions on how to use the different features of it. Therefore, learners easily learned to use the different features of GC.

4. **Trialability:** It is the degree to which an innovation can be experimented with on a limited basis. GC is trailable and there is less uncertainty among the learners in this study of adopting it in their future EAP courses.

5. **Observable results:** The easier it is for individuals to see the results of an innovation, the more likely they are to adopt it. The use of GC is highly visible among the teacher and students in this study. Almost half of the learners use it daily. This visibility stimulates peer discussion and accelerates rate of adoption. Besides, learners' strong positive outlook towards GC in this study demonstrates that this platform can eventually be adopted by all 145 universities (Islam et al., 2020) in Bangladesh to provide online education to their large number of students.

This study collected data from learners from the same department in one private university. Thus, further studies involving more participants from different departments of multiple universities will provide more in-depth pictures of learners' adoption and attitude towards GC. Future studies can collect data from the teachers as well which will add important insights about the platform. Overall, this study observes that learners have shown strong positive attitude towards the use of Google Classroom as an LMS. It points out that with proper training and availability of technological tools, it is possible to motivate learners to adopt technological innovation for the purpose of education.

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Ethics Statement

We, hereby, state that we have conducted the research and prepared the manuscript following the protocol of research and publications ethics. We are solely responsible if any deviation or mistake (in content and language) is identified in the manuscript.

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