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Virtual Collaborative Learning Platform in Developing Countries: The Practices of Google Classroom in the Universities of Bangladesh and Nigeria

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We hereby recommend that the thesis prepared by **Musa Kallah Saidu (Student No. 161031401)** entitled **"Virtual Collaboration Learning Platform in Developing Countries : The Practices of Google Classroom in the Universities of Bangladesh and Nigeria ."** be accepted as fulfilling the part of requirement for the degree of Master of Science in Technical Education (M. Sc.T.E.) with specialization in **CSE**

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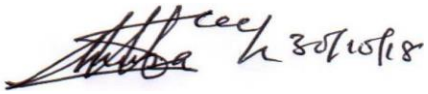

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Abstract

Surveying teachers' practice of google classroom in developing countries with the aims to supporting online learning remain worthy of study. The purpose of this study is to investigate the association between Teachers' practices of Google Classroom based on the followings paired hypothesized constructs: *awareness, technology challenges, perceived ease of use, operational ability* and *behavioral intention* to use. Using spearman's correlation analysis, this study analyzed the association between the constructs of interest. Teachers from Nigeria and Bangladesh were the subjects of the study. The respondents were 54, with 27 each coming from Bangladesh and Nigeria. The results indicated that, the association between the correlated constructs was strong with only moderate association from Bangladesh regarding *awareness* and *perceived ease of use*. In contrast, no association found between *technology challenges* and the *perceived ease of use* through the entire response. The study definitively answers the questions regarding the correlated constructs. Further studies are required to establish causal relationship if any so as to intensify measures for proper practice. This study also made some recommendations for effective online learning practice in developing countries.

Contents

List of Figures

List of Tables

Chapter 1
Introduction

1.1 Background of the study

Recently there is an emerging trend by developing countries to use online learning platforms for their educational institutions (Sife, Lwoga, & Sanga, 2007). The emergent trend by the developing nations venturing into online learning education is a clear manifestation of steps to coping with the developed nations that have been practicing online learning since its emergence in 1989(Miller et al., 2013). This is because, the developed nations have widely accepted the concept and practice of online learning in their countries (Pathan, Khan, & Hassan, 2005) and the phenomena for education in the area changes its approach from *brick to click* which referred to e-Learning (Raihan & Han, 2013). Challenges like internet connectivity, cost of internet subscription, reliable infrastructures, ICT skills for optimal practices, sustenance and maintenance of the eLearning platform etc. remain bottleneck to most of the developing nations. Where developed nations were competing on tracking and fixing the multitudes factors in ICT for smooth human interaction in a right proportional volume and values, developing nations are still struggling with basic ICT indicators such as computers and Mobile subscribers per inhabitants, mobile network coverage, internet access etc.(Chiemeke .S.C., 2007; Core, 2005). Therefore, the rate at which the gap between the developed and the developing nations is moving requires serious attention.

Despite the lack of basic ICT indicators and proper infrastructure, several institutions and organisations are trying to adopt the latest technology, specifically the use collaborative virtual learning environment for teaching-learning purposes such as Google Classroom, Moodle, Edmodo and other available learning management platforms. The organisations attempts to provide collaborative platforms to enable instructors to create online learning environment (Beldarrain, 2006). Among these collaborative learning environments google classroom found to be the most popular. The study reported that even internet users those are novice in using technology find google services simple and attractive (Buzhardt & Heitzman-Powell, 2005). This study attempts to investigate the teacher's current practice of Google Classroom focusing

some constructs regarding their awareness about it, perceived usefulness of this technology, attitude towards using it and their intention to use it in the teaching learning context.

1.2 **Statement of the Problem**

The current status of Bangladesh and Nigeria with respect to online education is not comparable with that of other developed countries. While online learning has been ongoing as the agenda of the day globally, the growth rate in Bangladesh and Nigeria varies and these variations were attributed to some influential factors such as financial, economic, geographical advantages and above all infrastructures which affect the learners, instructors and the academic institutions at large (Konetes, 2011). Among these factors, acquisition for an appropriate technologies and infrastructures such as learning management system (LMS), internet connectivity platform etc. that are feasible for smooth provision and practicing of online learning remains paramount. At this point, it is clear that where Bangladesh is faced with some problems such as integrating online learning, poor economy and high cost for internet connectivity platform; Nigeria is being faced with poor infrastructures, poor connectivity backbone and high cost of internet subscription; and improper integration of online learning.

Out of the several findings recorded such as: a study recorded by Iftakhar (2016), which presented overall view of google classroom adaptation in different classes, usability and usefulness ranked by students due to its affordances as learning technology tool (Brown & Hocutt, 2015) . Likewise, in another study, perceived usefulness and perceived ease of use were confirmed influencing user's attitude then behavioral intention to using technology (Masrom, 2007). More so, among the studies conducted in this area is the one aimed at determining the effects of Google Classroom in increasing knowledge of contents and vocabulary as in (DiCicco, 2016). Another similar finding was recorded too by Madhavi, Mohan, and Nalla (2018). However, as the aforementioned studies related with google classroom from their point of view, none of them view it from the angle of investigating the teacher's practice of Google Classroom based on some different constructs of interest (awareness, technology challenges and operational ability) and how they directly or indirectly related to the actual usage. This is worthy of investigation because, understanding the relationship of the constructs will facilitate the practice of Google Classroom in the study areaand also inform the stakeholders of their expected roles to successful implementation and smooth running of the technology. It is therefore important to

currently study the practice of Google Classroom with respects to the constructs has been practiced by the teachers of higher institutions of learning in Bangladesh and Nigeria. Know how these constructs influencing one another is of great value and the overall result cumulatively plays a vital role in promoting online teaching-learning process.

1.3 **Research Objectives**

The general objective of this research is to investigate the teacher's practice of Google Classroom. In order to achieve the general objective, the following specific objectives were used to investigate the relationship between-

i. Awareness and perceived ease of use

ii. Technology challenges and perceived ease of use

iii. Operational ability and the behavioral intention to use.

1.4 **Research Hypothesis**

The following hypothesis will be used to test the significance of the relationship between the constructs:

H0: There is no relationship between the constructs under study
H1: Awareness of google classroom has a significant effect on perceived ease of use
H2: Technology challenges have significant effect on perceived ease of use
H3: operation ability has significant effect on Behavioral intention to use

1.5 **Significance of the Study**

The findings of this study will also help administrator, from educational institutions, to bring awareness of the ease in adopting to online learning with the help of free tool offered by Google; clarify the need for teachers to utilize Google Classroom in teaching and learning process; clarify as to whether the constructs have a relationship beyond mere assumption; and bring awareness of the utilization of Google classroom in terms of it being user friendly, light and free cost (Buzhardt & Heitzman-Powell, 2005).

1.6 **Research Limitation**

The limitations of this study include the fact that only questionnaires were used to collect the data with and no interview (Triangulating) or group discussion has been taken. More so, only two institutions were used in this study.

1.7 **Definition of Terms**

1.7.1 Distance education

By distance education, it means a distance learning which involves granting an access to educational stakeholders across their geographical location i.e. distance and/or time (Yacci, 2000)

1.7.2 E-Learning

This according to Farah and Ahmed (2014), is the type of learning that occurs anytime, anyplace, and anywhere which is equally referred to as: "Web-Based Learning (WBL), Web-Based Instruction (WBI), Web-Based Training (WBT), Internet-Based Training (IBT), Distributed Learning (DL), Advanced Distributed Learning (ADL), Distance Learning, Online Learning (OL), Virtual Learning, Mobile Learning (or m-Learning) or Nomadic Learning, Remote Learning, Off-site Learning. It encompasses the process of offering courses to the learners halfway or completely online (Sife, Lwoga, & Sanga, 2007).

1.7.3 Blended Learning

This involves the process where physical sessions existing between the learners and the teacher by the help of technologies to facilitate the collaborative applications in a synchronous and /or asynchronous manner(Mortera-Gutiérrez, 2006) just as recorded by (Littlejohn & Pegler, 2007)

Synchronous and Asynchronous Learning

By Synchronous learning we mean learning that requires interaction between teachers and students to live irrespective of their location. While in asynchronous learning teachers - students' interaction occurs in different time interval despite geographical differences should there be (Chen, Ko, & Lin, 2004).

1.7.4 Video conferencing

This involves the use of multimedia to provide one to one or multipoint real time conversation where people that are located differently communicate with one another with the help of internet. It is achieved by point-to-point i.e one to one or multipoint which links three or more locations using multimedia (Sife et al., 2007)

1.7.5 Virtual Collaborative Learning (VCL)

This is the type of learning whereby two or more people together attempt to or learn something online. This practice enables teaching- and -learning practices existing between students to be in real time (Martin & Parker, 2014).

1.7.6 Virtual platform

The Virtual platform sometimes referred to us "Second Life" whereby as many people use the cyberspace for buying and selling services, the eminent educational professionals today hold distance -education classes on it (cyber space) and found more livelier (Foster, 2008).

Chapter 2

Review of the literature

2.1 Introduction

The goal of this chapter is to relate the study to the practices of Google classroom by teachers in the study areas with related literatures so as to identify the existing gap based on the several related studies and device a means of filling the identified gap.

2.2 Online learning

The term online learning which is sometime referred to as eLearning emanating from the fact that a mediating channel is used for collaboration between the facilitators and students, which is done physically with or completely media based (Valentine, 2002). It entails achieving teaching and learning using ICTs (Oye, Salleh, & Iahad, 2011). The technology is used to impact knowledge to the learners in asynchronous and /or synchronous mode i.e., using a course management system (CMS) or web pages to post syllabus, learning contents and assignments (Web Facilitated) , or a course that blends online and face-to-face delivery with substantial proportion of the content delivered online, typically uses online discussions, and also has a reduced number of face-to-face meetings (Blended/Hybrid) and/or a course where most or all of the content is delivered online and typically have no face-to-face meetings (Completely online) (Allen & Seaman, 2008). In this case, the whole learning is tailored to fit the stakeholders' needs anytime, anywhere across the world (Christensen, Johnson, & Horn, 2010). In fact, the powerful tool for qualitative teaching and learning brings about great changes in school practices and preparation for feature capable students is Information and communication technology (Yusuf, 2005).

2.3 The Practice of online learning

The most prominent adaptation of online education is the virtual collaborative learning environment where many courses are offered online and the faculties are going for live virtual teaching-learning process enabling them interact with their students in real time (Martin & Parker, 2014). Study shows that Google Classroom as a google services stands out among the entire collaborative learning environment in recent times. Several studies have been reported the

different dimensions of using google services in educational context. Among the findings recorded, some were aimed at exploring the impact of message quality and digital literacy in terms of technological dimensions toward intention to use of Google Drive (Prasertsith, Kanthawongs, & Limpachote, 2016), some study investigate the usability and usefulness of its affordances as learning technology tool (Brown & Hocutt, 2015) whereas others were recorded to have presented overall view of google classroom adaptation in different classes (Iftakhar, 2016).

However, many of these benefits are not practiced in the developing countries, specifically in Bangladesh and Nigeria. Being a developing nation, it was reported that due to the deregulation of laws and policies by the government, ICTs usage expanded rapidly in the country; likewise its introduction of eLearning using radio broadcasting program immensely recorded a tremendous expansion in 1992 with the establishment of Bangladesh Open University (BOU) (Farah & Ahmed, 2014). Just as recorded by Pathan et al. (2005), ICT policy has brought the hosting of advanced technologies in the sectors of education in the country. The result of the initiatives ensured basic ICT knowledge and ICT based education for both students and teachers with improved capacity on the side of teachers (Farah & Ahmed, 2014).So, the apparent issues are not the availability of the resources or lack of infrastructures alone, but the lack of proper integration in the teaching-learning process. Very few literatures have reported about. In a study of google classroom at Bangladesh, it was recorded to have presented overall view of google classroom adaptation in different classes (Iftakhar, 2016). Just as recorded in another finding that, all the Daffodil International University (DIU) faculties maintain google classroom as their LMS with the paper interested in arguing whether peer-assessment in google classroom motivate learners and satisfaction (Zafrin, 2018). Likewise, in another study on cloud computing in Education of Bangladesh, being a developing country just like others, applying this technology on education sector remains a huge challenge for the nation (MA Islam, FBA Kasem, & Khan, 2017). It was recorded also in paper that does the analysis and discussion on testing how effective virtual classroom is (Rion & Hasan, 2015) .Finally, in another survey on Digitalization and Education System in Bangladesh, where the authors conducted a survey on various students so as to understand how digitalization effect the educational purpose and also application of Machine learning was made so as to determine and classify the happy and unhappy student with respect to

digitalization and recorded 95.4% student happy while the teachers use digitization tools during instructional delivery (Islam & Jahan, 2018)

Just like Bangladesh, Nigeria was recorded to have assimilated ICTs lately with its 2001 adoption of Nigerian National Policy for Information Technology that marked a great step in its application of ICTs to every aspect of life of its citizens by which it means the designed policy provides recognition to ICT in the national development (Yusuf, 2005). Even though, instantly after the establishment of National Information Technology Policy, Federal Executive Council (FEC) approved its implementation but yet, Nigeria is not among the 12 Countries in Africa that completed their NICI plans development in 1999 which till date, there is no evidence of its completion (Ajayi, 2002). Today in Nigeria, the universities that are recorded to have conducted their academic activities in any form of ICT are negligible (Ajadi, Salawu, & Adeoye, 2008). This as noted by Ajayi (2002) citing (Yusuf, 2005), was due to the fact that access to basic equipment, internet connections, participation in ICT development and involvement in software were recorded to below in Africa. For instance, internet connectivity in New York City along is higher than the whole of Africa. More so, like other developing countries, conservative nature of most educational stakeholders, poor governance and minimum deployment of the efficient technologies appropriate for distance education in Nigeria compelled it to remain in its embryonic phase till date (Ojokheta, 2010). This may be due to the fact that Nigeria doesn't have proper infrastructure, internet facilities and connectivity platforms that enables for smooth running of online learning in the country (Yusuf, 2005), just as confirmed that, today in Nigeria, the universities offering their academic activities in any form of ICT are negligible (Ajadi et al., 2008). Among the studies established in eLearning in Nigeria, findings on usage and accessibility technology in education have previously investigated from the angle of technology usefulness. The usage of technology in teaching and learning was recorded low and poor integration which was attributed to inadequate infrastructures; poor internet connectivity etc. then included the need for motivation to use new technology and optimal training (OT Faboya, 2017). It was also recorded in other related findings regarding social media with emphasis on Facebook reveals that the most commonly used are proportion of adolescents and the academic side was less taken for granted (M Habes, 2018).

At this point, it is clearly depicted from the related literatures reviewed that, where Bangladesh is faced with some problems such as integrating online learning, poor economy and high cost for internet connectivity platform; Nigeria is being faced with poor infrastructures, poor connectivity backbone and high cost of internet subscription and improper integration of online learning. Therefore, this study attempts to investigate the teachers' practice and their ability to use the google classroom effectively as a viable solution for online learning in Bangladesh and Nigeria.

2.4 **Google classroom and its practices**

Google classroom was reported to have being introduced in May, 2014 and subsequently released in August, 2014 as a tool for teachers which functions as an interface layered on top of the Google Application for Education (GAFE) that establishes collaborative environment for students –teachers interaction (Brown & Hocutt, 2015). The system encompasses of several tools that when optimized efficiently, learning environment is observed which lead to proper teaching and learning process. Google Classroom being a universal tool for teaching and learning, it allows teachers across several disciplines to customize their classroom for effective online collaboration. It is a suit for education that comes along with other associated tools such as Google Drive, Google Docs, Google Sheets and Slides, sign up through the use of Gmail account altogether to establish a conducive learning platform called classroom existing in a virtual space (Madhavi et al., 2018). Since the emergence of this great tool for blended and complete online teaching, multitude number of teachers were recorded finding their way to it (Madhavi et al., 2018) just as recorded in a similar study by Iftakhar (2016)noted that, in Daffodil International University around September 2014 More than 30 teachers were recorded to have started using Google Classroom. Just in line with the statement of Xanthoula (2015) that many organisations have recently embraced live class mode of e-Learning so as to produced up to the task students besides cutting transportations time and cost; likewise associated cost engaged in face-face tutoring.

2.5 **Use of Technology Acceptance Model (TAM) framework**

The study considers using a well-established framework called Technology Acceptance Model (TAM) by (Davis, 1985). This is to help the researcher measure the current teachers' practice of using the Google Classroom by knowing their relationship if any and attitude towards the use of

the technology. Davis (1993), noted that lack of user acceptance of a system remains impediment to its success. TAM proposes that perceived ease of use and perceived usefulness of technology can predict the attitude of users towards using technology then after, follows the behavioral intentions and then the actual usage of that technology as noted by (Masrom, 2007). The Original Technology Acceptance Model framework appears diagrammatically bellow as thus

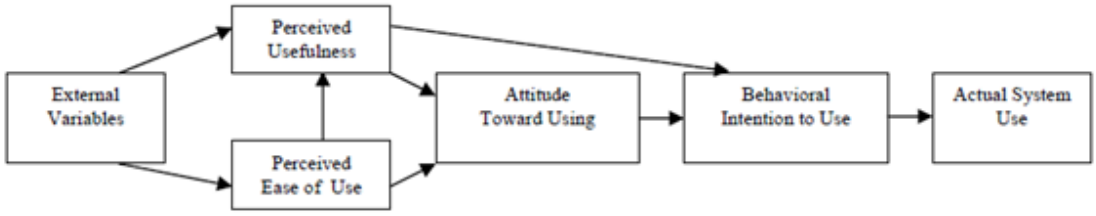

Figure 1: Original Technology Acceptance Model, adopted from (Masrom, 2007)

Going by figure1 above, where perceived Ease of use (PEOU) and usefulness (PU) referred to the degree to how effortless the using technology appears to user and the degree to which user believes technology influences his/her working performance respectively in TAM, it can be inferred to have both influence the Attitudes towards Using the technology under study. More so, Perceived Usefulness specifically found influencing the Behavioral Intention to Using the technology. Subsequently, the attitudes towards using technology also, determine the behavioral intention to using technology, which resulted in the actual system usage prestige (Masrom, 2007).

Where other similar studies that use TAM concentrated on things like what is recorded in a study conducted by Shroff, Deneen, and Ng (2011) where Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Attitude Toward Usage (ATU), Intention to Use (ITU), were represented and found that, causal relationship exist between the constructs as thus: PEOU–PU, PEOU-ATU, PU-ATU and ATU –BIU and were equally used as a point of departure in the study. Likewise, it was recorded in another study by Koufaris (2002)related with online consumer as those making shopping through the use of computers where Consumer behavior, psychology were tested and specifically the emotional and cognitive responses were examined while visiting web-based stores so as to determine how first visit influences online consumers to return and to test the likelihood of them making unscheduled purchases. Another study tries to investigates the preconceived notions and earlier experience with technology by specifically testing whether the

perception of teachers possibly affects the implementation effectiveness of the google classroom (Ballew, 2017).Likewise, in another study, perceived usefulness and perceived ease of use were confirmed influencing user's attitude then behavioral intention to using technology(Masrom, 2007).If you carefully go through the aforementioned views, one can finally agree that they all joined the journey from diverse points of view.

Therefore going by the first study using TAM which was found establishing the relationship between PEOU and PU, PEOU and ATU, PU and ATU and ATU and the BIU which all together were geared towards influencing the Actual Usage of the system under study(Masrom, 2007); it deems equally necessary to flash to other external factors that may or may not relate to these established constructs. This study therefore specifically concentrated on constructs such as Awareness, Technology challenges, Operational ability and how they relate if any with the PEOU, BIU and Actual Usage (AU). It is quite clear that, this framework has maximally qualified to be used for this study so as to ascertain the point of interest with respect to the constructs under study.

2.6 **Conclusion**

Conclusively, google classroom is a service by Google Company which is known to have provided popular search engine and email provider, many people are aware and easily synchronize with it than other learning management systems. Likewise, today Bangladesh and Nigeria were recorded to have face challenges such as: Lack of proper facilities, poor governance, and poor economy, high completion in admission intake besides traffic congestion, security issues and less IT skills and support of technology teaching and learning. Due to the predicament that the two countries were in, studying the status of google classroom usage by teachers needs attention. Also, considering the chosen framework, being that the original TAM schema was tested and found that causal relationship exist between the basic constructs in the framework (Shroff et al., 2011), just as other constructs reported related as in (Masrom, 2007); this clearly implies that if the external factors (Awareness and Technology challenges) and Operational ability as a facilitating construct are to be found associating with either of the established constructs in the original framework, this finally resulted in in the actual usage whereby depicting from it that a relation exists between the hypothesized constructs.

Chapter 3
Methodology

3.1 Introduction

This chapter describes the methodological approach and philosophy adopted in setting the nature of the study. The researcher considers quantitative research approach for the study with a view to collect data about the constructs under study.

3.2 Theoretical framework of the study

The following figure represents the derived view of the TAM where it clearly depicts the constructs of interest in the study and particularly shows much emphasis as to whether the Awareness, Technology challenges and Teachers' mastery of google classroom directly or indirectly affect the Actual Usage by the teachers. Likewise, how the operational ability of a teacher in google classroom as a facilitating variable affects the actual usage.

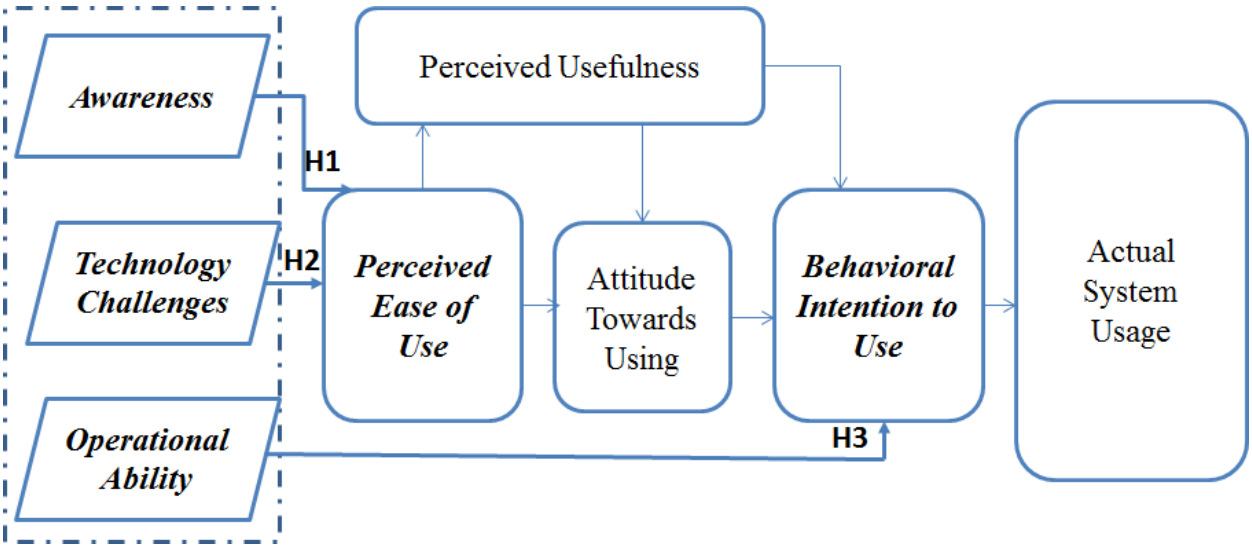

Figure 2: External constructs in relation with the original Technology Acceptance Model (TAM)

The thick arrows from the framework above (H1 through H4) signify the constructs under investigation with Awareness linked to Perceived ease of use, Technology Challenges linked to Perceived ease of use and Operational ability linked to Behavioral Intention to use and the Actual usage all of which represents the constructs of interest in the study.

3.3 **Design of the study**

For testing whether or not the constructs under study relate with one another, the design adopted a correlational research so as to depict the relationship if any among the constructs of interest in the study. This being the point encompassing the strategic outlined plan by which data required for attaining the objectives of the research is collected **(Fraenkel, Wallen, & Hyun, 1993)**. The researcher considers quantitative research approach for the study with a view to collect data about the constructs under study. The use of quantitative approach deemed fit using, because the tool for data gathering being questionnaire, which will seek to confirm the hypothesis in the study with the use of numeric data and the results will be statistically analysed and presented where the researcher remains outside so as to ensure objectivity of the findings (Trochim & Donnelly, 2001).Although summarizing and analyzing works through narration is also important way , research synthesis using quantitative approach currently by many disciplines remains the practice (Cooper & Hedges, 1994). The respondents will be issued questionnaire necessary for gathering the required data for the study. The questionnaire will include the number of items to measure the constructs under investigation in the proposed model just as clearly stated in the hypotheses; with all items having seven-point Likert-style responses ranging from strongly disagree to strongly agree represented as 1 through 7 respectively. Finally, it will be analyzed using spearman's correlation.

3.4 **Population of the Study**

The population of the study are teachers from Computer Science Engineering (CSE), Electrical and Electronics Engineering, Technical and Vocational Education (TVE), Mechanical and Civil Engineering, Business Technology Management; and Chemical and Environmental Engineering departments of Islamic University of Technology (IUT) Bangladesh (Asia); and Bachelor of Technology (B-Tech) teachers from Agricultural Science and Vocational Education, Computer Science, Educational Technology, Electrical and Electronics Engineering; and Business Education departments of Federal College of Education [Tech] (FCET) Potiskum, running Degree of Bachelor of Technical Education Affiliated to Abubakar Tafawa Balewa University (ATBU) Bauchi Nigeria (Africa) are used. All the teachers were those considered with basic information and Communication Technology skills.

3.5 **Sampling Techniques**

The study purposively selected the institutions, and information technologies (IT) experienced teachers with basic information and Communication Technology skills. Thereafter, the subjects were randomly selected from their departments. Whereby, anyone after reading the letter guiding the questionnaire and the consent form found responding to the survey is considered a participant partaking in the findings. This is because; the subjects needed to response to the questionnaire are IT literates for an utmost importance just as revealed in purposive sampling techniques by (Tongco, 2007). Likewise, among the IT inclined teachers, a random selection was made. This is due to the fact that its nature is a typical case sampling as noted by (Wiersma & Jurs, 2005).

3.6 **Data Instrument**

The correlational study was based on data the survey formulated using Likert items where teachers as the subjects in the study were presented with a questionnaire fetching their responses with some demographic data. Seven (7) point Likert scale was used to collect the required data which was created and administered to the respondents via google forms. The use of google form questionnaire method for the data collection was primarily employed with a hard copy of the questionnaire serving as a supportive alternative incase the need arises for effective time and cost management(Ballew, 2017; Wright, 2005). This follows after the reading and accepting the statement of consent by the subjects. The respondents were asked to select their opinion on both statements with each statement section, representing a variable with total of five (5) blocks of statements or the constructs of interest in the study. For more clarity, each construct is meant to have its peculiar statement. Just as earlier on mentioned, seven point Likert terms was adopted for it was recorded suitable in measuring attitudes and opinion (Bowling, 1997), which makes it easier to detect the relationship if any; left asides its ability to providing neutral response. While designing the questionnaire, the following Likert rating scales of 1-7 where: [1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Undecided, 5= Somewhat Agree, 6= Agree and 7= Strongly Agree] was employed. For more effectiveness, a pilot test study was conducted for testing and revealing the weakness of the questionnaire (Kothari, 2004) and then after, all the corrections observed were effected.

3.7 **Data collection**

The survey having demanding IT skilled respondents, a Google form was used to collect the responses of the participants specifically by sending an email request to each of the respondents. Attached to which is the introduction letter, the consents form and the main questionnaire based on the constructs of interest. A soft copy of the questionnaire was equally sent to the research assistance as backup where due to one reason or the other necessary to be used.

3.8 **Data Analysis**

The fact that, analysis in social sciences research is based on three major steps which include: data preparation, description and testing the hypotheses with the help of inferential statistics (Trochim & Donnelly, 2001). The steps to be followed in this phase will consist of reporting, discussing the employed data methods and identification for the procedure of the statistical calculation using spearman's correlation being an ordinal data on the seven Likert scale questionnaire meant to be used then finally, identifying the appropriate computer application program , where SPSS is used for the data analysis and interpretation just as in (Mkongwa, 2015). Therefore, after collecting the required data with the help of survey questionnaire, the result will then be analysed using suitable statistical tools SPSS and it will equally allow the researcher to depict what it means or does from the result using the samples required (Neuman & Robson, 2007).

Considering the constructs under investigation; the awareness, the technology, attitudes, behavioral intention ,operational ability and the Actual Usage; and looking at their relationships, the researcher employed Correlation Technique just as it was used in a similar study by (Farahat, 2012)

3.9 **Validity and Reliability**

In addition to the questionnaire piloting on sample of five teachers just as required in Likert assuming scale of attitude (Clason & Dormody, 1994), the validity of the content was ensured based on suggestions of three experts of google classroom. On receiving the questionnaire feedback from the experts, the appropriate updates were done. In the case of the reliability, the questionnaire containing the items was tested using Cronbach's alpha and found to be 0.822which implies high reliability.

3.10 **Ethics and safety**

The study will be done by strictly adhering to all the necessary ethics involved in conducting research so as to ensure that, all the subjects in the study are related with accordingly left aside keeping their identity under key and lock. Just as the tradition, incursion research ethics violation makes majority of the participants and particularly on safety based to remain anonymous (Coomber, 2002). Likewise, all the participants are to voluntarily participate with their consents and be given consent form to sign. The input from the participants need to be objective as such, no one will interfere or persuade the participant to do otherwise as the chosen approach remains objective and always put the researcher aside for thorough objectivity.

Chapter 4
Data Analysis and Results

4.1 Introduction

This chapter presents the results of the statistical test and reported the outcome of the tested hypothesis with respect to the null hypothesis using tables that are summarized and interpreted in relation to the constructs under study. The strength of the association was attained using a rating key (see Table1).

4.2 Correlation between the constructs

Identifying the effect existing between the investigated paired constructs or specifically knowing the association between the a*wareness* and *perceived ease of use*; *technology challenges* and *perceived ease of use*; and *operational ability* and *behavioral intention to use* google classroom by teachers remain vital.

About 54 teachers were used as the subjects responded to the findings in which, each of the 5 constructs is containing five 5 sub items that were used in the formulation of the 7 Likert items. The collected response data being ordinal, the responses were analysed using spearman's correlation. The following key (Table1) was used to define the strength of the associations among the correlated constructs if exist.

Table 1: Rating key for the correlation coefficient

Correlation Coefficient's sign	Strong	Moderate	Weak	Very weak/ None
+ve Relationship	0.5 to 1.0	0.3 to 0.49	0.1 to 0.29	0 to 0.09
-ve Relationship	-1.0 to -0.5	-0.49 to -0.3	-0.29 to -0.1	-0.09 to 0

The results of the findings based on all the paired constructs were determined using Null Hypothesis thus; (H0: There is no relationship between the constructs under study) *and* the data responses being ordinal, spearman's correlation was used and the results of the relationship if

any association between the constructs based on the alternate hypothesis was determined, presented using tables, and summarized below with the help of the rating key in (see table1).

4.3 **Overall results of the respondents**

Looking at the responses for the 54 subjects across Bangladesh and Nigeria the following results were observed and presented with respect to the hypothesis stated under the objectives of this study:

4.3.1 **H1: Awareness of google classroom has a significant effect on perceived ease of use**

For the analysis of the data collected to test for the association between the above statements, a Spearman's correlation analysis technique is employed

Table 2: Awareness and Perceived Ease of Use

			Awareness	**Perceived Ease of Use**
Spearman's rho	Awareness	Correlation Coefficient	1.000	.645**
		Sig. (2-tailed)	.	.000
		N	54	54
	Perceived Ease of Use	Correlation Coefficient	.645**	1.000
		Sig. (2-tailed)	.000	.
		N	54	54

**. Correlation is significant at the 0.01 level (2-tailed).

The association between Awareness and Perceived ease of use was tested and the result as in table2mentioned above indicated a significant association between the constructs at 0.01 significant level with Correlation Coefficient of 0.645 and P value as 0.00 i.e. $p < \alpha$. For the Correlation Coefficient to be 0.645 and considering table1 above, this signifies a strong positive association. Therefore, the result clearly reveals that the H0 is rejected as there is a strong relationship between these two constructs.

4.3.2 H2: Technology challenges have significant effect on perceived ease of use

Table 3: Technology challenges and Perceived Ease of Use

			Technology Challenges	**Perceived Ease of Use**
Spearman's rho	Technology Challenges	Correlation Coefficient	1.000	-.219
		Sig. (2-tailed)	.	.111
		N	54	54
	Perceived Ease of Use	Correlation Coefficient	-.219	1.000
		Sig. (2-tailed)	.111	.
		N	54	54

The association between Technology challenges and Perceived ease of use was tested and the result as in table3 above indicating no association between the constructs at both .01 and .05 significant level with Correlation Coefficient of -0.219 and P value as 0.111.i.e. $p > \alpha$. For the p-value to be greater than the Correlation Coefficient, this signifies that there is no association between the constructs. Therefore, the result clearly reveals that the H0 is failed to reject as there is no relationship between these two constructs.

4.3.3 H3: Operational ability has significant effect on Behavioral intention to use

Table 4: Operational Ability and Behavioral Intention to Use

			Operational Ability	**Behavioral Intention to Use**
Spearman's rho	Operational Ability	Correlation Coefficient	1.000	.646**
		Sig. (2-tailed)	.	.000
		N	54	54
	Behavioral Intention to Use	Correlation Coefficient	.646**	1.000

	Sig. (2-tailed)	.000	.
	N	54	54

**. Correlation is significant at the 0.01 level (2-tailed).

The association between Operational ability and Behavioral intention to use was tested and the result as in table4above indicated significant at 0.01 level, with Correlation Coefficient of 0.646 and P value as 0.000 indicating that there exist an association i.e. $p < \alpha$. For the Correlation Coefficient to be 0.646 and considering table1 above, this signifies a strong positive association Going by the results of the findings of the 54 respondents from Bangladesh and Nigeria, it's observed that the report of the results will be as thus: out of the three pair of correlated constructs, Awareness and Perceived ease of use; and Operational ability and Behavioral intention to use indicated a perfectly positive association with P-value and Correlation Coefficient as 0.00, 0.645 and 0.00, 0.646 respectively whereas, the association between Technology challenges and Perceived ease of use at both 0 .01 and 0 .05 significant level were recorded to have P-value = 0.111 and Correlation Coefficient = -0.219 implying that, there is no enough evidence to reject the null hypothesis as such, No association observed between the constructs.

4.4 **Results of the responses country wise**

Looking at the responses Country wise with each country Bangladesh and Nigeria under the study having 27 respondents, the following results were observed and presented using tables as thus:

4.4.1 Responses from Bangladesh

4.4.2 **H1: Awareness of google classroom has a significant effect on perceived ease of** use

Table 5: Awareness and Perceived Ease of Use

		Awareness	**Perceived Ease of Use**
Spearman's rho Awareness	Correlation Coefficient	1.000	.438*
	Sig. (2-tailed)	.	.022

	Perceived Ease of Use	N	27	27
		Correlation Coefficient	.438*	1.000
		Sig. (2-tailed)	.022	.
		N	27	27

*. Correlation is significant at the 0.05 level (2-tailed).

The association between Awareness and Perceived ease of use was tested and the result as in table5above indicated the result was significant at 0.05 level, with Correlation Coefficient of 0.438and P value as 0.022 indicating that there exist an association i.e. $p<\alpha$. For the Correlation Coefficient to be 0.438 and considering table1 above, this signifies a moderately positive association. Therefore, the result clearly reveals that the H0 is rejected as there is a strong relationship between these two constructs.

4.4.3 H2: Technology challenges have significant effect on perceived ease of use

Table 6: Technology challenges and Perceived Ease of Use

			Technology Challenges	**Perceived Ease of Use**
Spearman's rho	Technology Challenges	Correlation Coefficient	1.000	.018
		Sig. (2-tailed)	.	.929
		N	27	27
	Perceived Ease of Use	Correlation Coefficient	.018	1.000
		Sig. (2-tailed)	.929	.
		N	27	27

The association between Technology challenges and Perceived ease of use was tested and the result as in table6 above indicating no association between the constructs at both .01 and .05 significant level with Correlation Coefficient = 0.018 and P-value = 0.929.i.e. $p>\alpha$. For the p-value to be greater than the Correlation Coefficient, this signifies that there is no association

between the constructs. Therefore, the result showed that the H0 is failed to reject as there is no relationship between these two constructs.

4.4.4 H1: Operational ability has significant effect on the Behavioral intention

Table 7: Operational ability and Behavioral intention to use

			Operational Ability	**Behavioral Intention to Use**
Spearman's rho	Operational ability	Correlation Coefficient	1.000	.592**
		Sig. (2-tailed)	.	.001
		N	27	27
	Behavioral Intention to Use	Correlation Coefficient	.592**	1.000
		Sig. (2-tailed)	.001	.
		N	27	27

**. Correlation is significant at the 0.01 level (2-tailed).

The association between Operational ability and Behavioral intention to use was tested and the result as in table7above indicated significant at 0.01 level, with Correlation Coefficient of 0.592 and P value as 0.01 indicating that there exist an association i.e. $p<\alpha$. For the Correlation Coefficient to be 0.592 and considering table1 above, this signifies a strong positive association. Therefore, the result clearly reveals that the H0 is rejected as there is a strong relationship between these two constructs.

Going by the results of the findings by the 27 respondents in Bangladesh it's observed that the report of the results will be as thus: out of the three pairs of correlated constructs, Awareness and Perceived ease of use; and Operational ability and Behavioral intention to use indicated a moderately and a strong positive association with P-value and Correlation Coefficient as 0.022, 0.438 at 0.05 and 0.001, 0.592 at 0.01respectively. The association between Technology challenges and Perceived ease of use at both 0 .01 significant level were recorded to have P-

value = 0.929and Correlation Coefficient = -0.018 implying that, there is no enough evidence to reject the null hypothesis as such, no association observed between the constructs.

4.5 **Responses from Nigeria**

4.5.1 H1: Awareness of google classroom has a significant effect on perceived ease of use

Table 8: Awareness and Perceived Ease of Use

			Awareness	**Perceived Ease of Use**
Spearman's rho	Awareness	Correlation Coefficient	1.000	.759**
		Sig. (2-tailed)	.	.000
		N	27	27
	Perceived Ease of Use	Correlation Coefficient	.759**	1.000
		Sig. (2-tailed)	.000	.
		N	27	27

**. Correlation is significant at the 0.01 level (2-tailed).

The association between Awareness and Perceived ease of use was tested and the result as in table8above indicated the result was significant at 0.05 level, with Correlation Coefficient of 0.759and P value as 0.000 indicating that there exist an association i.e. $p < \alpha$. For the Correlation Coefficient to be 0.759 and considering table1 above, this signifies a strong positive association. Therefore, the result clearly reveals that the H0 is rejected as there is a strong relationship between these two constructs.

4.5.2 H2: Technology challenges have significant effect on perceived ease of use

Table 9: Technology challenges and Perceived Ease of Use

			Technology Challenges	**Perceived Ease of Use**
Spearman's rho	Technology Challenges	Correlation Coefficient	1.000	-.072

		Sig. (2-tailed)	.	.720
		N	27	27
	Perceived Ease of Use	Correlation Coefficient	-.072	1.000
		Sig. (2-tailed)	.720	.
		N	27	27

The association between Technology challenges and Perceived ease of use was tested and the result as in table9 above indicating no association between the constructs at both .01 and .05 significant level with Correlation Coefficient = -0.072 and P-value = 0.720.i.e. $p>\alpha$. For the p-value to be greater than the Correlation Coefficient, this signifies that there is no association between the constructs. Therefore, the result evident that the H0 is failed to reject as there is no relationship between these two constructs.

4.5.3 H3: Operational ability has significant effect on the Behavioral intention

Table 10: Operational ability and Behavioral intention to use

			Operational Ability	**Behavioral Intention to Use**
Spearman's rho	Operational Ability	Correlation Coefficient	1.000	.674**
		Sig. (2-tailed)	.	.000
		N	27	27
	Behavioral Intention to Use	Correlation Coefficient	.674**	1.000
		Sig. (2-tailed)	.000	.
		N	27	27

**. Correlation is significant at the 0.01 level (2-tailed).

The association between Operational ability and Behavioral intention to use was tested and the result as in table7above indicated significant at 0.01 level, with Correlation Coefficient of 0.674

and P value as 0.00 indicating that there exist an association i.e. $p<\alpha$. For the Correlation Coefficient to be 0.674 and considering table1 above, this signifies a strong positive association. Therefore, the result clearly reveals that the H0 is rejected as there is a strong relationship between these two constructs.

Going by the results of the findings from the 27 respondents in Bangladesh it's observed that the report of the results will be as thus: out of the three pairs of correlated constructs, Awareness and Perceived ease of use; and Operational ability and Behavioral intention to use indicated a perfectly positive association with P-value and Correlation Coefficient as 0.01, 0.759 at 0.01 Sig level and 0.000, 0.674 at 0.01respectively. Whereas the association between Technology challenges and Perceived ease of use at both 0 .01 significant level were recorded to have P-value = 0.720and Correlation Coefficient = -0.072implying that, there is no enough evidence to reject the null hypothesis for $p>\alpha$.

4.6 **Conclusion**

Looking at the paired constructs data from the 54 respondents collectively and 27 respondents from the countries (Bangladesh and Nigeria) with respect to the correlated constructs; *awareness* and *perceive ease of use*, *operational ability* and *behavioral intention* to use Google Classroom resulted in a strong and significant association. However, the *awareness* and *perceived ease of use* was recorded to have moderate association only in the case of responses from Bangladesh. Likewise, in both the correlations on the responses from Bangladesh and Nigeria combined and country wise, it was revealed that *technology challenges* resulted not to have association with *perceived ease of use* of Google Classroom throughout.

Chapter 5
Discussions and Conclusions

5.1 Introduction

This chapter discusses the findings as it relates to literatures regarding the study. It also reported the results of the responses on the constructs of interest by the subjects collectively and country wise. This chapter also relays the implication of the findings to practice and recommendation to the stakeholders as individual and organization were equally passed.

5.2 Discussion of Findings on Google classroom practice in Bangladesh

The practice of google classroom in Bangladesh, based on the three pair of the correlated constructs of interest, reveals that in **H1,** awareness has a moderately positive relationship with the way teachers perceive the practice of google classroom. This is also reflected in the findings from Daffodil International University by Iftakhar (2016) where he stated that more than 30 teachers were recorded to have started using google classroom. This is equally in line with the TAM model proposed by (Davis, 1985), which in the original TAM schema was tested and found that causal relationship exist between the basic constructs in the framework as mentioned by (Shroff et al., 2011). Therefore, this clearly indicates that teachers' awareness of google classroom will increase the actual usage of google classroom just as recorded in Masrom (2007) stating in a proposition which showed that perceived ease of use relates to the actual usage of Technology, we can then conclude that awareness also influences the actual usage of google classroom.

In the case of **H3**, the Operational ability of google classroom by teachers has a perfect positive effect on the teacher's behavioral intention to use google classroom in teaching and learning such that, the better teachers are worthy of operating GC, the higher their behavioral intention to use it. This is equally in line with the TAM by (Davis, 1985), which in the original TAM schema was tested and found that causal relationship exist between the basic constructs in the framework as mentioned by (Shroff et al., 2011). Therefore, this clearly indicates that teachers' awareness of GC will increase the actual usage of GC just as recorded in Masrom (2007) stating in a proposition which shows that behavioral intention to use relates to the actual usage of

Technology, we can then conclude that operational ability equally relates to the actual usage of GC.

But **H2**in the other hand indicates that Technology challenges did not reveal any effect on the perceived ease of use of GC. This implies that challenges in technology provided the service is available will not be a reason for teachers not imbibe perceive ease of use of GC. This is equally in line with the TAM by (Davis, 1985) which in the original TAM schema was tested and found that causal relationship exist between the basic constructs in the framework as mentioned by(Shroff et al., 2011). Therefore, teachers' awareness of GC will increase the actual usage of GC just as recorded in Masrom (2007)the propositions showing that perceived ease of use relates to the actual usage of Technology, we can then conclude that awareness also influences the actual usage of GC. However, the result of the findings diverges from the view ofBallew (2017) which indicated that, integration of technology and its uses in classrooms which were found to have relations with the teachers' perceptions

5.3 **Discussion of Findings on Google classroom Practice in Nigeria**

Going by the results of the responses in Nigeria, it's observed that, the practice of google classroom in Nigeria based on the way teachers responded to the three pair of the correlated constructs of interest reveals that in **H1,** awareness has a strong positive relationship with the way teachers perceive the practice of GC. This was also recorded by This is also reflected in the findings of Iftakhar (2016) where he stated that more than 30 teachers were recorded to have started using GC. This is equally in line with the TAM by (Davis, 1985), which in the original TAM schema was tested and found that causal relationship exist between the basic constructs in the framework as mentioned by (Shroff et al., 2011). Therefore, this clearly indicates that teachers' awareness of GC will increase the actual usage of GC just as recorded in Masrom (2007) stating in a proposition which showed that perceived ease of use relates to the actual usage of Technology, we can then conclude that awareness also influences the actual usage of GC

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equally in line with the TAM by (Davis, 1985), which in the original TAM schema was tested and found that causal relationship exist between the basic constructs in the framework as mentioned by (Shroff et al., 2011). Therefore, this clearly indicates that teachers' awareness of GC will increase the actual usage of GC just as recorded in Masrom (2007) stating in a proposition which shows that behavioral intention to use relates to the actual usage of Technology, we can then conclude that operational ability equally relates to the actual usage of GC.

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5.4 **Comparing findings between Bangladesh and Nigeria**

In relating the results of the findings from Bangladesh and Nigeria, the association of the three paired external constructs will be depicted from the table below as thus:

Table 11: Comparison between Bangladesh and Nigeria

Country	Spearman's rho	Hypothesis		
		H1: Awareness of google classroom has a significant effect on perceived ease of use	**H2:** Technology challenges have significant effect on perceived ease of use	**H3:** Operational ability has significant effect on the Behavioral intention
Bangladesh	Correlation coefficient	**0.438***	**0.018**	**0.592****
	P-value	**0.022**	**0.929**	**0.001**
	Significant level	**0.05**	**both**	**0.01**
	Remarks	**Associated**	**Non-associated**	**Associated**
	Strength	**Moderate**	**Null**	**Strong**
Nigeria	Correlation coefficient	**0.759****	**- 0.072**	**0.674****
	P-value	**0.000**	**0.720**	**0.000**
	Significant level	**0.01**	**both**	**0.01**
	Remarks	**Associated**	**Non-associated**	**Associated**
	Strength	**Strong**	**Null**	**Strong**

Comparing the results from the two Countries (Nigeria and Bangladesh), the above table, the findings reveal that: the results from **H1** and **H3** were found associated strongly with only moderate association recorded from Bangladesh indicating that; *awareness* and *perceived ease of use were associated moderately. Otherwise, awareness* and *perceived ease of use*, *operational ability* and *perceived ease of use* were found strongly associated in both countries. The moderate relationship is one of the evidences that, at times teachers are found aware of the google classroom yet not practicing.

In **H2,** on the other hand, both the results reveal that there is no evidence of association between teachers' *technology challenges* and the *perceived ease of use*. This implies that, the technology challenges in Bangladesh and Nigeria is not reported to be denying the fact that teachers are using the google classroom. This could be due to the fact that both countries have greatly accepted to the use of smart technologies that promote ease access to google tool.

5.5 **Implication for practice**

The implications of this study for practice made it clear that, the stakeholders and/or organisations undergoing or planning to venture into online learning using google classroom or equivalents need to consider while planning online learning that *awareness* and *operational ability* strongly influence the practice of Google Classroom.

From the findings, it was also observed that at time many teachers may be aware, but they do not practice google classroom despite its needs. Their refusal to practice Google Classroom may be attributed to other factors such as high work load, Time management, laziness etc. which may be required further investigations.

Likewise, once stakeholders (individuals and organisations) are aware and/or operationally fit can count a lot in shaping online learning specifically in the area of Google Classroom.

5.6 **Recommendation**

While educational organisations provide teachers with online learning skills and periodic updates, teachers should equally imbibe the culture of practicing online learning through the use of Google Classroom. This is to enable them promote the practices of online learning and as well prepare themselves fit best as teachers for the 21st century as in (Dockstader, 1999).

5.7 **Conclusion**

Conclusively, going by the results of this study from both Bangladesh and Nigeria as an entity and/or combine, the findings revealed that *awareness* has association with *perceived ease of use*; and *operational ability* has strong association with the *behavioral intention* for teachers to use the google classroom. These reveal the investigation for objective 1 and 3 respectively. However,

the association between *technology challenges* and *perceived ease of use* of google classroom was recorded non-associated. This equally reveals the investigation of objective 2.

Likewise, with respect to the strength of the findings, the responses from Bangladesh teachers show moderate association between *awareness* and *perceived ease of use*. This signifies that, a teacher may be aware but yet not practicing the google classroom. This could be due to other external factors that are open for future research.

Finally, the findings clearly indicate that, as an individual stakeholder or an organisation, there is a need to consider these results of the findings while designing online learning and/or specifically offering google classroom for the teachers to use.

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Appendix A

Statement of Consent

I was made to clearly understand after describing the study to me that, my participation is voluntary and that should there be need, I may quit at any time without penalty. Likewise, my responses will be treated confidentially and be used for research that includes conference presentations and/or academic publications.

I understand also that if I have question, I may pose them to Musa KallahSaidu the principal investigator. I have read and made clear understanding of the statements written above where collecting and filling this survey affirms that I am providing my consents to participate and attesting that I am due for the responses.

Request letter for the responses to the questionnaire

Dear Sir/Ma,

To gather the relevant data for the purpose of my research thesis titled "Virtual Collaborative Learning Platform at Universities in Developing Countries: The Practices of Google Classroom in Bangladesh and Nigeria", your objective opinion in filling the following questionnaire based on your status with respect to the constructs under investigation is greatly valuable.

Please read the statement of consent that follows based on which you are to rate the following statements on google classroom (GC) Awareness, Technology challenges and Operational ability regarding how you, your institution and students relate with GC using the following Likert rating scales of 1-7 where: [1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Undecided, 5= Somewhat Agree, 6= Agree and 7= Strongly Agree]. Select your stand appropriately by ticking the statements objectively based on the section headers as truthfully as possible.

Thank you for taking time to assist us in conducting this survey.

Yours Sincerely,
Musa Kallah Saidu

Appendix B

Questionnaire

The rating scales of the seven (7) Likert scale goes thus:
1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Undecided,
5= Somewhat Agree, 6= Agree, 7= Strongly Agree

S/No	Statement	1= Strongly Disagree	2= Disagree	3= Somewhat Disagree	4=Undecided	5= Somewhat Agree	6= Agree	7= Strongly Agree
SECTION A: Awareness								
1	I learn that GC is easy to use for teaching-learning							
2	I am aware due to collaboration; GC students get to know their classmates							
3	I am aware that GC makes Co-educators /teachers to collaborate in undertaking a course							
4	Our students are not motivated to use GC							
5	I know that we can use GC for a blended learning and /or real time online class							
SECTION B: Technology challenges								
1.	GC doesn't run smoothly due to poor internet connection in my institution							
2.	Our institution doesn't provide sufficient computer access point to students to use GC in their teaching and learning process							
3.	Learning contents'							

	preparation and delivery using GC takes much time							
4.	Your school do not keep up with the rapidly changing technology for better learning							
5.	Collaborative learning using GCin our institution fails due to unstable power supply							
SECTION C: Operational ability								
1.	I know how to set up and enroll students in my class using GC							
2.	I know how to make post, upload, edit and monitor students' work							
3.	I know how to assess/grade my students whenever they are issued a task							
4.	I felt very confident in using GC with my students							
5.	I needed to acquire a lot of skills before I could get going in using GC							
SECTION D: Perceived ease of use								
1.	I used to find Google Classroom easy to use							
2.	Using Google Classroom would be easy for me.							
3.	Interaction with Google Classroom would be easy for me.							
4.	Finding information relating to Google Classroom would be easy for me.							
5.	Collaboration with my students in Google Classroom would be easy.							
SECTION E: Behavioral intention to use								
1.	I intend to use Google Classroom during Summer Semester.							
2.	I will return to using Google Classroom regularly.							

3.	I intend to be a great user of Google Classroom.							
4.	I intend to be given collaborative task to my students on Google Classroom.							
5.	I intend to suggest to my colleagues to be using Google Classroom.							