GRADUATE AND UNDERGRADUATE STUDENTS' LEVEL OF SATISFACTION WITH THE COLLEGE'S USE OF THE COLLEGE FOR COMMUNITY AND ORGANIZATIONAL DEVELOPMENT BLENDED LEARNING (CBL) AT ALL MOBILIZATION CENTRES IN SUNYANI, GHANA

ABSTRACT

Schools are working hard to meet the needs of today's information society and student generation. Students not only carry their cell phones everywhere but also get acquainted with various online environments, including social software. This can be seen as both a challenge and an opportunity for schools, as mobile technology and social software can be used as tools to create flexible learning environments that promote learning. Student cooperation. In this article, we explore the potential of mobile technology and social software in the context of associative learning theory and cooperative learning. We also give two examples of how these opportunities can be realized in higher education, particularly in teacher training. Provides ideas on how to use mobile technology and social software in teaching and learning. Recent trends in teaching and learning have become very interesting thanks to innovative teaching methods that use a variety of technologies and practical tools. In this research, we look at new trends in educational institutions that can make you a modern job creator or teacher. Students like the modern teacher's way of teaching because they can actively participate in the learning process. Electronic content, video courses, online teaching and many other tools are used to teach subjects in innovative and effective classrooms. The latest teaching technique used in modern classrooms to enhance students' learning experience is the blended classroom. Researchers on the staff of the College of Perspectives (CCOD). Their study concluded that the blended class had a positive impact on the academic development of College Theodolite (CCOD) students in their thesis writing and their access to electronic library services.

Keywords :

Efficacy , Classroom, pedagogical style of education, online teaching , Educational Content, CBL

INTRODUCTION

This article provides a background overview and two examples of development work currently being carried out at UDS (University of Development Studies, University of Eastern Finland), Tamale (School of Educational Sciences). Application, teacher training). The survey tools used in this study were taken from the study conducted by Ibrahim, A.K., et al., (2020). Much of this research was ultimately made possible by previous research work

done at UDS (UDS, Tamale). The goal of the development work is to develop and test new methods of teaching and learning using mobile technology to promote collaborative learning. It offers a number of opportunities to develop more collaborative teaching and learning. The information society poses new challenges for schools and teachers. Schools adapt to new technologies and changing practices relatively slowly, demonstrating the need for effective pedagogy and technology.

Schools also face the challenge of combining blended learning with everyday technologies to facilitate student collaborative learning. Students are considered "next generation" and "digital natives" because they have lived their lives in a variety of technologies. Based on this concept, students must be interested, able and willing to use different technologies. Students should also be familiar with social software tools, according to Hartman et al., 2007. Students are increasingly using mobile technologies such as cell phones to engage in collaborative learning. In 2004, Naismith (2004) noticed that more and more students brought cell phones to class. This raises questions for schools:

How can schools take advantage of students' hypothetical skills? How should teachers react when students bring mobile devices to class? Are student mobile devices a threat to teaching or an asset, providing new ways of learning? In this article, we'll explore two different ways to use mobile technology and social software:

The aim is to emphasize the possibility of developing flexible and collaborative learning spaces using IT where appropriate, rather than traditional computer labs. Here are two examples of what schools can do to better meet the challenges posed by the knowledge society and the Internet generation. They also offer ideas on how schools can develop teaching and learning methods that leverage everyday technologies, such as mobile technology and social software, to support students. study together.

LITERATURE REVIEW

Theoretical Background

The purpose of combining traditional teaching and learning situations with technology is to support the interpretation of unique content by students and student groups and to use them as a resource for learning and discussion. Deeper. In this study, combining face-to-face teaching and learning with various technologies (especially social software) mainly involved capturing the unique interpretations of students and groups to use them as learning and discussion resources. We will then discuss the role of cooperative learning, social software, and blended learning and continue with two blended learning cases where face-to-face teaching and learning are combined with everyday technology (mini laptop) and social software.

Collaborative learning

Theories of cooperative learning are central to the educational context of this evolving work. The theoretical significance of cooperative learning is mainly based on sociocultural and socially competitive approaches to learning. Both emphasize students collaborating with peers and actively participating in the learning process.

In sociocultural theory, learning involves the use of psychological tools such as language, ideas, concepts, theories, software, etc. Learning is defined as participation in the community and the use of these tools. Acquisition is a culturally mediated practical interaction between students and teachers in which students actively participate in the construction of a learning environment using the knowledge and ideas available to them. instead of passively memorizing the facts presented by the teacher. In the process of acquisition, students learn to do things without any explicit help from others (Dillon (2004) and Rogoff (1995)). Social constructivism also emphasizes cooperation but focuses more on a person's knowledge structure in order to guide their perception and understanding of new situations and information. One of the most important parts of learning involves cognitive conflicts, which are situations in which the previous structure of knowledge is incomplete or incompatible with the new situation, in which the knowledge needs to be updated, seek new knowledge or interpretation in order to adjust or adapt to new situations. new situation to respond and act in the new situation. Collaborative situations, with different opinions and interpretations of the information to be learned, constitute a situation that causes cognitive conflict, as does the search for cognitive gaps that need to be addressed. (Dillenbourg (1999) and Weinerberg (2003) mikko vesisenaho teemu valtonen jari kukkonen sari hausu-nuutinen anu hartikainen sari hamarrkkinen.

SOCIAL SOFTWARE

From a sociocultural and social construction perspective, mobile technology and especially social software offer exciting opportunities to develop more collaborative teaching and learning. For example, Shirky (2003) broadly defines social software as all software that supports group interaction. Other definitions are more specific. For example, according to Boyd (2003), social software supports social chats and networks as well as social comments. Dron (2007) defines social software as software that enables the construction of social meaning and a new way of collaborating. As Alexander (2006) points out, social software allows users to use websites more actively, as opposed to traditional passive methods. Instead of just providing ready-made content and websites, social software allows users to create and publish new content. Users are not just consumers; on the contrary, they are creative and engaged, acting as both readers and writers (Sinclair (2007) and Maged (2007). As pointed out by Owen et al. (2006), the publication of documents also facilitates communication between many people. Cooperative learning theories focus on engagement and the creation of materials that promote the emergence and sharing of students' particular knowledge structures and gaps. Social software provides the environment and tools to trigger cognitive conflict by promoting the exchange of ideas and interpretations among students. Social software that allows students to actively participate.

BLENDED LEARNING

Since social software offers exciting opportunities to create collaborative learning spaces, wireless networking offers the flexibility to configure learning spaces as needed. Linking face-to-face teaching and learning with information and communication technology (ICT) is known as blended learning, which refers to different ways of combining face-to-face teaching with online tools. Different. According to a 2004 study by Garrison and Kanuka, "the most basic model of blended learning" is the careful integration of face-to-face learning opportunities with online learning opportunities, with the aim of Synchronized live learning situations. with asynchronous text Internet. Typically, this involves traditional teaching or face-to-face lectures with supplemental materials and online assignments using various learning management systems, such as Moodle. However, K.se (2010) offers a more advanced approach by combining the potential of face-to-face and online learning in many ways, simultaneously

and in parallel. K.se also uses a variety of social software as tools that give students the opportunity to create documents, present knowledge, and communicate. Students of the Internet Generation are already familiar with social software. Thus, from an associative learning perspective, social software offers exciting possibilities for promoting collaborative learning. In addition, social software can be used and accessed online without installing any software. The purpose of setting up an online environment is not to provide additional materials or separate assignments but to add a new layer to the face-to-face teaching and learning experience. The goal is to actively use different online environments and tools (social software) during face-to-face meetings to capture student thinking and work. In the case of social software, materials created by students and teachers are also available after school. Based on collaborative learning theories, students' unique interpretations and ideas, their understanding, and the resources generated by student groups are at the heart of learning. They cause cognitive conflicts, identify knowledge gaps, and provide opportunities for students to master. With the help of social software, we can better capture these unique ideas and use them for learning and discussion. This advanced approach is what we call Blended Learning (2.0). Overall, blended learning (4.1) offers interesting opportunities when considering the different ways that mobile technology can be used to support learning. From simple exercises and hands-on activities to cooperative learning activities. Thanks to mobile technology (i.e. wireless connectivity and wearables), we can access different online environments outside of the traditional computer lab and contextualize learning experiences. Powered by real-world technology (see Vesisenaho (2009) This is even more interesting when we think about today's students and today's technology.

THEORETICAL FRAMEWORK

The research method is based on the Technology Acceptance Model (TAM). TAM is a theoretical framework developed by Davis (1986, see Lee et al., 2003). TAM explains why people accept or reject a technology. Technology adoption often depends on its usefulness and user-friendliness. The more people realize the benefits of using technology, the more likely they are to adopt it. The more user-friendly the technology, the more likely it is to be adopted. Again, the more user-friendly the technology is, the more people use it. On the other hand, TAM is based on the principle that users' experience with technology is influenced by their perceptions of usefulness, ease of use, and attitudes towards technology. Users' perception of usefulness can be described as their unsubstantiated opinion about how using technology will improve their job performance. This is also the opinion of potential users.

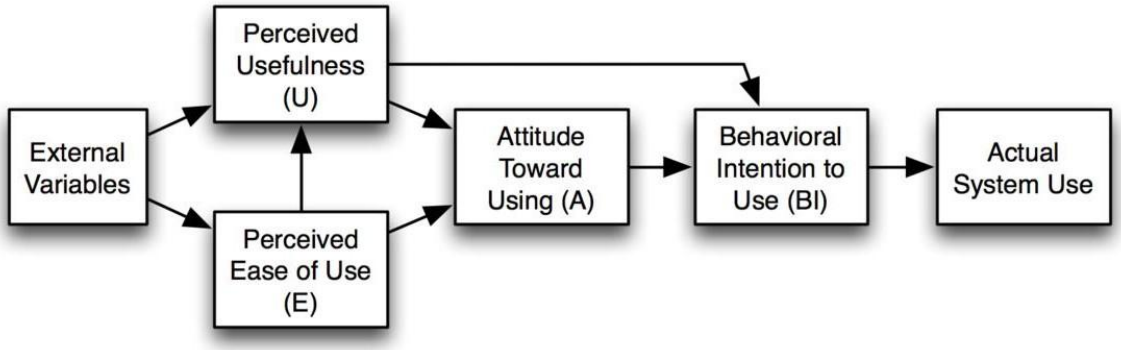

Figure 1: Technology Acceptance Model (TAM) (Davis et al.1989).

This theory is considered relevant for research because students' use of institutional repositories is significantly influenced by the services they choose from the Institutional Resources (IR) institute and their perception of the easy-to-use technology. If students have a positive perception or even a good experience of Institutional Resource Institute, they will be more likely to use it effectively and vice versa. If students feel that using the facility's inventory will enhance their study and learning, they are likely to appreciate it and use it more.

Since people must know an agency repository (IR) before using it, the level of knowledge about it is often considered the determining factor for its use. A study of institutional repositories and perceptions of open access among researchers at the University of Calicut (2018) found that most researchers at this university were familiar with the concept of repositories. Institutions and see it as an opportunity to improve their scientific activities. This theory was chosen for the study because students' use of the facility's repositories is highly dependent on the services they leave from IR and their perception that the technology is easy to use. If students have a good or even positive experience with IR, they are more likely to use the technology more effectively. On the other hand, if students feel that using IR will enhance their own research and learning, they will be more interested in and using it.

Since the user must be familiar with IR before being able to use IR, this level of knowledge is often considered the determining factor in IR use. According to a study of open-access cognitive and fundamental repositories by researchers at the University of Calicut (2018), the majority of researchers in the study were familiar with the concept of IR and saw it as an opportunity. to improve the activities of scientists. This theory was chosen for study because students' use of the facility's repositories strongly depends on the services they leave IR and on their perception of the ease of use of the technology. If they have a good or even excellent experience with IR then they are more likely to use the technology effectively. Conversely, if they believe that IR will enhance their research and learning abilities, they will be more likely to value and use technology.

Since everyone must know IR before using it, this level of knowledge is often considered a key factor in the decision-making process regarding the use of IR. The link between outreach and faculty contributions is also supported by a study on research archives in universities in Kenya conducted by Moseti in 2016. Moseti found that university professors engaged in archiving their work electronically on a personal level, but rarely through institutional repositories.

This lack of awareness is also confirmed by another study by Moseti, which looked at how research papers are stored at universities in Kenya. Moseti found that university professors are involved in the digital preservation of their electronic works, but rarely through the institution's repositories. Mammo and ngolube (2015), a study of attitudes towards open-access journals in a selected number of Ethiopian universities, found that the majority of scholars were aware of open-access journals, had a positive attitude towards them and is willing to use them. Dlamini and Snyman (2017), a study of institutional repositories in Africa, found that a lack of awareness about open-access institutional repositories.

NEED AND IMPORTANT OF RESEARCH

WHAT IS BLENDED LEARNING?

In blended learning, some lessons are taught in a traditional classroom while others are taught online. In the traditional classroom, some lessons are still taught in the traditional context, while in the hybrid classroom, some lessons are taught in the video lesson context. Blended classrooms can also be called blended, blended, or integrated learning because it combines the traditional classroom with educational technology. Blended learning uses technology to expand the learning space in the classroom and give students the freedom to learn in their own way. With the increasing availability of internet connectivity and interactive web applications, more and more schools are adopting blended learning.

OBJECTIVES OF THE STUDY

This study aimed to determine the extent to which graduate students use institutional repositories, with a particular focus on the number of graduate and undergraduate students at the University of Ghana Sunyani. The specific objectives of the study are:

1. Determine the impact of the Common Block Waiver (CBL) on undergraduate and graduate students working off-campus.

2. Determine if CCOD undergraduate and graduate students are aware of the presence of CBL in Sunyani.

3. Find out how many undergraduate and graduate students are using CBL;

4. Identify barriers preventing undergraduate and graduate students from using CBL.

Hypothesis for this study

The researcher's hypothesis for this study is as follows:

H1. Based on GPA, there was no significant difference between students at the main campus directly supported and students at mobilization centres across the country using CBL.

Although implementing blended learning is complex, teachers must decide how best to combine in-person and online learning opportunities when designing lessons. Early research shows that students are more likely to take combination courses than traditional courses (Yapici & Akbayin, 2012). Blended classes are best suited for teaching and learning about computers. Therefore, researchers conduct and test associative/IR learning methods in COD.

METHODOLOGY

This study presents two cases of blended learning using social software. The goal of both cases is to promote cooperative learning by students. Both cases aim to support face-to-face teaching and learning by fostering student engagement as content producers, individually and in small groups. The first case is a lesson scenario in which students write their lectures in a shared online environment – a microblog. In the second case, students work in groups, conduct experiments in the lab, and write their results in a semi-structured wiki environment. In both cases, the face-to-face teaching and learning situation is "extended" to an online environment using a mini laptop connected to a wireless network. Students' opinions and experiences on these two cases were analyzed using qualitative and quantitative methods. In case 1, students' online lecture notes were graded and thoughts on how to approach shared lecture notes were collected by interviewing four students after the lecture. The interviews were recorded and analyzed using an open coding method (Gibbs & Flick, 2007). The purpose of open coding is to gather

students' experiences of the course and use shared lecture notes without ready-made categories to emphasize students' own experiences and insights. . The notes were then analyzed using discourse analysis (Roth, 2005). The purpose of this study is to describe different types of course notes written by students. The experience of the second case is analyzed by quantitative methods. Research materials were collected using an online questionnaire consisting of 40 Likert-style questions from 1 to 5 (1 = strongly disagree, 5 = strongly agree). The data were analyzed using principal component analysis (PCA) in an attempt to consolidate the information (Afifi and Clark, 1996). The separate reports have been condensed into 4 subscales. Reliability coefficients for all subscales are satisfactory; The Cronbach alpha value for each new variable is greater than 0.60 (Mets.Muuronen, 2006).

In this section, we cover these two case studies in more detail and students' experiences with them. These cases can be considered as our first steps in developing a blended learning approach with social software to support collaborative learning. These results are also used to further research and develop this method.

The study was carried out using the descriptive survey method. All mobilization centres were surveyed through Google Surveys from July 2021 to August 2021. The total number of questionnaires distributed to graduate and undergraduate students is based on a random sampling method. Of course, 105 copies were completed and returned, and only 100 were found to be usable for analysis.

Results and Discussion

The table below presents the results of the CCOD Blended Learning "T" test. This indicates that CCBL works with both graduate and undergraduate groups among the groups of test and post-test students surveyed.

Table 1. Pre-test and Post-Test of Survey Group

Test	Total No. of the student	Mean Score	SD	't'	DF	Significant Level
Pre-Test	30	39	7.87	4.049	58	0.01
Post-Test	30	46	5.29			

Table 4 shows the difference between the pre-test and post-test of the test group in the Linux-ubuntu working criteria test in computer science at 4.049 (0.01) and 0.05 (0). .05) for df 58. Post-test the mean of the experimental group (46) against the mean value before the test (39) of the experimental group. Therefore, the research hypothesis is accepted and the null hypothesis is rejected. It can be concluded that the blended classroom works well with CCOD undergraduate and graduate students and positively influences students' academic development in all taught, written, supervised modules and thesis review.

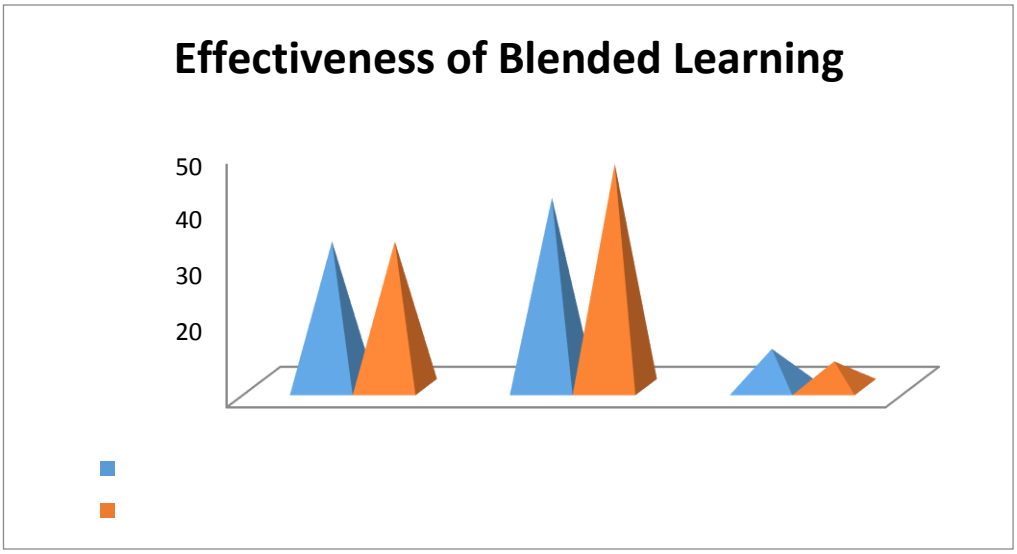

Figure2: Effectiveness of Blended Learning

	N	MEAN	SD
PreTest	30	39	7.87
PostTest	30	46	5.29

Figure 1:

The average success of students using CCOD blended learning compared to students not using CBL between the pre- and post-test of the experimental group.

KNOWLEDGE AND USAGE OF CBL

To achieve the first objective of the study, we examined the respondents' level of understanding of the organ repository, and the results are presented in Table 2 below:

Table 2: Awareness and use of CBL

Response	Students(n= 100)	
	Freq.	Percentage
Yes	87	87
No	13	13
Total	100	100

Source: Fieldwork, 2021

METHODS AND DATA ANALYSIS

The study used a descriptive survey method. The study was conducted across all CCOD mobilization centres by July 2021. 110 questionnaires were sent to CCOD fellows and graduate students based on a random sample on Google. 105 copies were completed and returned. 100 replicates were deemed usable and were therefore used for analysis.

ANALYSE ARTICLES FOR CBL

Item analysis is often used to improve test validity and reliability. From element analysis, we need to determine the Element Difficulty Level (ELPL) and Element Discrimination Index Level (ADI).

DATA COLLECTION

The present study is a pre-trial post-trial survey group design. The sample selected for the study is presented in the table above.

DATA ANALYSIS

The researcher applies a "T" test between the before and after results of the Ubuntu criterion test in the chapter on computers. Knowledge and usage of CBL

To achieve the first objective of the study, respondents' level of understanding of the existence of an organ repository was tested and the data are presented in Table 2 above.

SOURCE OF AWARENESS ABOUT CBL FOR STUDENTS

The study also sought to identify different sources through which respondents heard about CBL for the first time. The data are presented in Table 3 below.

Table 3: Sources of Awareness of CBL for Students

	Frequency	Percent (%)
Colleague	6	6
Lecturer	12	12
Library	28	28
Internet	52	52
Total	**100**	**100**

Source: Fieldwork Data, 2021

According to Table 3, the majority of respondents (52%) first discovered CBL while browsing the web.

28 (28%) of those who first heard about it through the library came later. Twelve (12%) of the respondents first learned about IR from a teacher, while six (6%) learned through friends. This could also be due to the library's inability to provide orientation or outreach programs for graduate students. According to Table 3, the majority of respondents (52%) first discovered IR while surfing the web.

The next 28 people (28%) discovered it through the library. Twelve (12%) of respondents heard about IR for the first time from a speaker, while six (6%) of respondents heard about it for the first time.

of a researcher.

Table4: Purpose for Using the CBL

	Frequency	Per cent
To access thesis and dissertations	75	75
Search for journal articles	21	21
Search for all kinds of information	4	4
Total	100	100

Source: Fieldwork Data, 2021

This study aims to examine the main purpose for which respondents use IR. A review of Table 4 shows that the majority (75%) of graduates use IR to access theses and theses, while 21% use IR mainly to find journal articles. Only 3 respondents, or 4%, said they use IR to search for all kinds of information. This result is similar to that of Abdelrahman (2017), in a study conducted with graduate students from Khartoum University, which reported that students mainly use IR to access ETDs and e-books. Similarly, in a study conducted at Loughborough University, Pickton and McKnight (2006) found that students were more interested in accessing full theses, publications, and conference papers. In the end, the majority of respondents agreed with the statement "IR helps me perform my duties more effectively".

FREQUENCY OF USING CBL

This study aims to understand the main purpose of people using IR. Responses to the frequency of IR use were given based on four statements. The obtained results are shown in Table 5.

Table 5: Frequency of CBL usage

Statement	Students(n=100)	
	Frequency	Per cent
At least once every two weeks	17	17
At least once a month	37	37
Whenever I need to	33	33
Never	13	13
Total	100	100

Source: Source: Fieldwork Data, 2021

Out of 100 respondents, 37 (37%) respondents use CBL once a month, 33 (33%) of them said they use CBL whenever they need it, 17 (17%) during Some of them said they use it at least once every time. two weeks and 13 (13%) said they never used it. It was found that the majority of graduates use IR at least once a month. The

implication is that they use CBL from time to time. This finding is supported by Nunda and Elia (2019), who studied the use of institutional repositories by graduate students at Muhimbili College of Health and Allied Sciences and the University of Agriculture. Sokoine in Tanzania and found that respondents occasionally used IR. It can be said that the frequency of use corresponding to the actual usage affected by behavioural intention is also determined by the perceived ease of use (PEOU) factor of CBL. If users visit CBL and find it easy to use, they will continue to use it. However, if users find the IR cumbersome or difficult to use, they will stop using it.

SATISFACTION LEVEL

The questionnaire was also designed to collect data on participants' satisfaction with the use of IR. The results are presented in the table.

SATISFACTION LEVEL

Table 6: Level of Satisfaction

Statement	**Frequency**	**Per cent**
Very Useful	75	75
Useful	25	25
Somehow Useful	16	16
Not Useful	34	34
Total	100	100

Source: Fieldwork Data, 2021

Table 6 shows the students' feedback on the usefulness of CBL to them. The data shows that the majority of respondents (75%) find CBL very useful. Only 25% is useful and 16% is useful to them in some way. Only 34% said CBL was not helpful to them.

Table 7: Benefits of (CBL) to Students

Statement	SD	DA	N	A	SA
CBL enhances learning and innovation	0(0%)	0(0%)	0(0)	25(25%)	75(75%)
I have access to an electronic thesis and Dissertations	0%	14(14%)	0 (0%)	50(50%)	36(36%)
I have access to journal articles authored by CCOD facilitators	3(3%)	97(97%)	0(0%)	0(0%)	0(0%)

CBL helps me accomplish tasks more efficiently	8(9%)	0(0%)	0(0%)	67(67%)	25(25%)
CBL helps to improve the quality of my work	0(0)	14(16%)	0	17(17%)	69(69%)

Source: Fieldwork Data 2021

Five statements about the benefits of CBL to students were made to test the extent to which the surveyed students agreed with them. Table 7 shows that the majority of respondents (25%) agree with the statement that "CBL enhances learning and innovation", while 75% strongly agree with this statement. There are no undecided respondents. Furthermore, no respondents disagreed with this statement.

50% of respondents agree with the statement that CBL gives them access to theses and theses electronically," while 14 of them disagree with this statement. None of the respondents expressed hesitation or completely disagreed with this statement. Table 7 also shows that the statement "I have access to papers written by CCOD professors" was not strongly endorsed by any students (0%) and the majority of respondents (97%) Completely disagree with this statement.

Challenges facing students in the use of the CBL

The researcher looked at the difficulties that students faced when using the statements that the IR provided and asked respondents to rate how much they agreed or disagreed with those claims. Strongly Disagree (SD) Disagree (DA) Neutral (N) Agree (A) Strongly Agree (SA).

Table 8: Challenges of using the CBL

Statement	SD	DA	N	A	SA
Lack of awareness creation about IR	-	-	-	69(69%)	31(31%)
Inadequate or erratic power supply	-	-	-	89(58%)	11(11%)
Insufficient technological skills	70(70%)	20(20%)	-	2(9%)	8(8%)
Inadequate Internet network and infrastructure	-	10(10%)	-	43(43%)	47(47%)
TOTAL	-	-	-	85(85%)	15(15%)

SOURCE: Fieldwork Data, 2021

Participants were asked to indicate how their lack of knowledge or awareness about CBL affected their use of CBL. The majority (69%) agree that it hinders their use of IR, while 31 (31%) strongly agree. None of the respondents held a neutral opinion and no respondents disagreed or completely disagreed with this statement.

Regarding whether inadequate or erratic power supply is a challenge, 89 (89%) of the respondents agree with this statement, while 11 (11%) of the respondents completely agree. idea. None of the participants was undecided and none of the respondents disagreed or completely disagreed with this statement. Another statement that probed students' technology skills in using CBL was strongly opposed by 10 (10%) respondents, 43 (43%) disagreed with

that statement, but no one among the respondents accepted a neutral view. Only 2 (2%) agree with this statement. Similarly, 8 (8%) respondents strongly agree with this statement. "Inadequate Internet networks and infrastructure" was the next statement where respondents indicated their level of agreement or disagreement. Forty-seven percent strongly agree and 43% agree with this statement. The final statement to determine the respondent's response was "Incomplete information provided by CBL". In this situation, the majority of respondents (85%) agree that the Internet is a challenge, while (15%) of respondents strongly agree with the statement that “the information provided by CBL is incomplete. Enough". None of the respondents disagreed or completely disagreed with this statement.

CONCLUSION

This study provides empirical evidence on the perception of all COD students about the use of CBL, particularly in relation to the different CCOD mobilization centres. The results show that the majority of students know about CBL but have not used it effectively. This may be due to the challenges students face such as IT connectivity, infrastructure and occasional power. These challenges will not hinder the effective use of CBL in the improvement, teaching, learning and research at participating COD centres. At a time when face-to-face is faced with shrinking academic and social budgets, COD must take steps to overcome challenges affecting their maximum utilization.

Blended learning is very compatible with most of our generally accepted learning theory practices. Regarding the overall effectiveness of the teaching materials, this study concludes that the University's CBL is very useful for students before and after general education. From this survey, the researcher concludes that students' learning development is strongly positively affected after applying the blended teaching method to students.

EDUCATIONAL INVOLVEMENT

Current research indicates that blended learning has a positive impact on student achievement in all COD courses associated with CBL. Therefore, all instructor-led courses may need to use CBL as the instructional method or strategy for all COD programs. Students may need to learn concepts easily from videos and animations of course content. All participating centres, facilitators, students, non-teaching staff, and other educational institutions can continue to deploy technology-based learning to deliver effective teaching and learning. for all students in this COVID-19 era and for the foreseeable future.

RECOMMENDATIONS

The core philosophy is that graduates and universities have better access to information that will lead to quality research and learning outcomes. To address the low use of CBL by all CCOD students, several strategic steps need to be taken to influence their use by implementing the following recommendations:

ORIENTATION FOR ALL CCOD. STUDENTS

A library orientation session should be organized for all students to make them aware of the benefits of using CBL for learning, especially for research. The use of seminars can help equip students with skills that enable them to easily and effectively search for scientific and academic information in CBL. DIY short videos can be placed on the CBL interface and on the library website to teach students how to use the CBL. COD needs the cooperation of many departments, agencies, ISPs and COD management to be successful. Every effort must be made to achieve this goal.

PROVIDE IT INFRASTRUCTURE

The effective management and use of CBL relies on the Internet to operate. The challenge has always been that the low bandwidth is only available to the office, and it is not accessible to

students from different mobilization centres, which makes document retrieval very slow for those outside the office. Management must ensure that service providers increase bandwidth to the various COD mobilization centres. There is also a need to increase the number of computers and broadband access in the library so that as many users as possible have easy access to downloads from the agency's repository.

PROVIDE GENERATORS

The lack of emergency generators at all mobilization centres is a challenge for CBL users. Management needs to pay due attention to this issue to.

Consent

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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