

The Impact of Online Teaching and Learning by Nursing and Midwifery Students: A Case Study of Garden City University College, Kenyase-Kumasi

Kennedy Addo* and Ernest Opoku Antwi

Department of Nursing and Midwifery

Garden City University College, P.O BOX 12775, Kenyasi-Kumasi, Ghana

ABSTRACT

Context: The emergence and fast growth of the internet, as well as the proliferation of information and communication technology (ICT) facilities, have empowered academic institutions across the globe to adopt e-learning and teaching.

Focus: The study sought to assess the impact of online teaching and learning by nursing and midwifery students at Garden City University College.

Materials and methods: The target population for this study consisted of all nursing and midwifery students of the Garden City University College. A convenient sampling technique was used to select 305 students for the conduct of the study. The structured questionnaires involving close and open-ended questions were employed to collect the data. The Statistical Package for Social Sciences (SPSS, Version 22) was employed for data coding, capture and analysis owing to its ease of use. The outcome of the analysis was presented in frequency distribution tables, percentages and charts.

Results: Students' perception concerning difficulties and frustrations of e-learning revealed that out of 305 respondents, 129 (42.3%) strongly agreed that they faced difficulties and frustrations when using e-learning, while 61 (20%) disagreed and only 35 (11.5%) of the respondents indicated that they neither disagreed nor agreed to the statement. Moreover, 109 (35.7%) students preferred never to have some courses online rather than face-to-face learning, followed by 103 (33.8%) respondents who admitted that they sometimes preferred online learning to face-to face, only 57 (18.7%) responded rarely. Furthermore, lecturers' inability to send online courses on time affects students' performance. It was evident from the study that majority of the respondents found it difficult to download online courses owing to poor internet connectivity.

The study found out that majority of the students have positive perceptions and attitudes towards e-learning. Finally, e-learning and teaching in an institution of higher learning should be embraced by all stakeholders, lecturers, students, and the entire university community.

Keywords: information technology, learning management system, online learning forum platform, information and communication technology, distance education, electronic learning and teaching

INTRODUCTION

Online learning is not new to students, neither could it be new to distance education. It is an indisputable fact that the COVID-19 and its related impact has made educationists to reconsider opportunities for teaching and learning online. In the world today, COVID-19 pandemic has constrained many academic institutions to quickly adopt to distance and online education. We are presently in a highly sensitive situation and must respond with various and accessible methods of learning such as the use of e-learning platforms and mobile learning applications.

* Corresponding Author

Learning is a continuous cycle that happens as knowledge is expended, regardless of the time and location (Aldhafeeri & Khan, 2016). Hence, learning does not need to be a formal instructional course; many can learn without going to the classroom. Students like to share encounters rather than continually meeting in a lecture hall or theatre (Aldhafeeri & Khan, 2016).

E-learning platforms during this time could be more functional. For instance, through e-learning platforms, students can still receive instructional manuals and some learning activities from instructors on their personal computers or cell phones while in their homes. Likewise, learning content is easily made available to students via mobile phones that is either connected to local remote or mobile networks.

One way to deal with e-learning is the utilization of Learning Management Systems thus, Learning Management Systems helps to arrange and control e-learning activities within a system such as students' enrolment, assignments, examination, course outline, lessons planning, messages, schedule and relevant course materials (Oliveira et al., 2016). It is imperative for institutions to make e-learning platforms readily available to students and instructors (Arkorful & Abaidoo, 2015). Studies on this topic are still at their outset stage where the perspectives of the students are not completely investigated. In addition, there are limited studies on the challenges and factors that influenced the usage of e-learning systems in education after the COVID-19 pandemic in Ghana.

The essence of this study is to empirically intensify the knowledge and usage of e-learning in Ghana. The recent world ranking of internet penetration and applications of Ghanaian universities was relatively low among their African counterparts in particular and the world at large (Annum, 2022).

This gives credence to the fact the e-learning in academic institutions is underdeveloped which necessitate prompt research interventions and recommendations to assuage the problem in order to reposition Ghana as part of the top ten e-learning countries globally. To understand this phenomenon, I ask the following overarching questions; in what ways could e-learning adoption in Ghanaian academic institutions be improved?

This research outcome will help the university authorities to identify critical factors that could affect the successful adoption of e-learning and help the universities authority to clearly identify strategies on how e-learning will address emerging issues. Moreover, the results of this study will assist the administrators of the university, especially the Centre for Online Distance Education (CODEL) to recognize the key factors that inhibit the use of electronic learning at the university.

Objectives of Study

The primary objective of the study is to assess the Impact of Online Teaching and Learning by Nursing and Midwifery Students of Garden City University College. Extensively, this study sought to determine students' perception of e-learning and e-teaching, students' attitude towards e-learning and teaching and the challenges faced by students in the use of the e-learning platforms (module).

LITERATURE REVIEW

It is important to understand the meaning of educational technology in order to successfully use information technologies in educational institutions. In today's world, educational technology is commonly used (Agormedah et al., 2020). When compared to traditional classroom instruction, educational technologies provide students with a more effective and understandable learning experience. This approach facilitates learning by allowing students to gain learning instructional material that gives the instructor positive feedback (Ozcan & Genc, 2016; Simpson & Richards, 2015).

E-learning is described as education provided over the internet without the need for both the teacher and the student to be physically present at the same time (Clark & Mayer, 2016). Students who study by e-learning have unlimited access to the course material and can use the materials however they see fit, as long as they stay under the instructor's guidelines.

Many educational activities are facilitated by e-learning environments. E-learning resources can include text, sound, basic graphical displays, video presentations, animations, simulations, games, testing systems, and interactions with feedback (Bicen & Uzunboylu, 2013; Chen, & Wan, 2019; Yangoz, 2017).

E-learning, on the other hand, is a technological tool for teaching and learning. In general, computers and the internet are required for knowledge and skill transfer. The forms of e-learning tools include computer-based system, web-based learning, interactive education, and digital collaboration. Moreover, content comprises of the internet, audio or videotape, CD-ROM, and satellite TV are all used to provide content. Image, media in the form of text, animation, and streaming video and audio can be used in self-paced or instructor-led e-learning. CBT (Computer-Based Training), WBT (Web-based Training), and IBT (Internet-Based Training) have all been used as synonyms for e-learning (Internet-Based Training) (Rennie & Morrison, 2013). Easy web-based training that does not involve the installation of software or CDs on your device is an example of an e-learning feature (Yagodzinski, 2003). To watch, listen, and observe as teaching experts explain each tutorial on the computer screen, all you need is an internet connection and a web browser (Rapanta et al., 2020).

Perception of Students towards E-learning

Students' educational background, age, as well as their cultural background, have either a negative or positive effect on their perception of the adoption of the online learning system

The study of Salmon (2000) reported that the absence of interaction, students' inability to communicate with their colleagues as well as lecturers, tight work schedule and social challenges are the main factors hampering students' academic performance. Al-Fahad (2009) took a study to find out learners attitude towards mobile learning. According to the students, they have access to the online learning resources through wireless connectivity regardless of their geographical locations. The students went further that the accessibility of online resources has improved their academic performance.

According to Zhao (2007) claimed that the tools that support and facilitate e-learning and teaching are overhead projector, television, video cassette recorder as well as computers. The study affirmed that quite number of the lecturers used power point demonstrations for their lessons, while others also relied on Microsoft Word to conveyed information from the computer via the television screen. Djajalaksana (2011) added that e-learning has provided learners with the opportunity to interact with their lecturers at anytime and anywhere. It has allowed them to put questions on the learning platform and get immediate feedback from the lecturers. The study by Makura (2014) reported that the use of ICT facilities by learners of the high institution has affected their academic performance positively in both academic and curricular matters.

Studies carried out by Zaharias (2009) on e-learning disclosed that faculty members and learners decline to use e-learning facilities due to inadequate skills, the absence of training, as well as negative perceptions towards the use of e-learning system.

Sahin and Shelley (2008) recommended that it is significant for lecturers to consider the perception and needs of students when designing and developing courses for distance students. Asiri et al. (2012) disclosed that for the maximum use of Learning Management Systems (LMS) in an academic institution, it is significant for lecturers to know the levels of computer skills of their students before developing and designing online course content, in doing so will increase the maximum use of the new technology as well as performance.

Another study carried out in the UK by Ituma (2011) expressed that the majority of the students have positive perceptions towards e-learning system. According to the study, these positive perceptions have influenced them to use the online system regularly to support the conventional method of learning. Al-Dosari (2011) took a similar study on lecturers' and learners' perceptions of e-learning in King Khalid University, Saudi Arabia. The study reported that respondents have a positive perception regarding e-learning and that the adoption of online learning has enhanced students' performance as well as the lecturers as compared to the conventional method of learning and teaching.

Access to e-resources was key hindrance, with some lecturers without personal computers, coupled with difficulty to access information from the internet when they are in their offices. Tella et al. (2007) were of the view that students in most cases constantly use the internet to access online information for their studies and this paves way for academic excellence. The findings of Amengor (2011) revealed that 95.6 % of the respondents admitted that the application of ICT facilities in the classroom has influenced their teaching; another 80.6 % acknowledged that ICT has helped them to meet students' demands, while 85.1% reported that the use of ICT facilities has enhanced their teaching performance. Wu and Chen (2012) reported that 70% to 95% of the respondents use the NTC electronic resource for their academic work. According to the study, this positive perception of the students towards the e-resources has enhanced their studies as well as academic performance.

The study of Fozdar and Kumar (2007) revealed that online teaching and learning has bridged the gap between teachers and their learners, and this has made teaching and learning flexible since students can interact with their lecturers at any time and any place without moving from one geographical area to another geographical area.

Attitude of Students towards E-learning

The word attitude plays a significant role in all spheres of human activity, educational, political, economic and socio-cultural. The influence of attitude in human activities cannot be underestimated since it is used to identifying and explaining human behaviour.

Alkhanak and Azmi (2011) defined attitudes as 'evaluated beliefs which predispose the individual to respond in a preferential way'. It is a predisposition to action, a state of readiness to act based on past experience, or a predisposition to act based on evaluations.

Singleton et al. (2004) highlighted that students have the negative attitude towards e-learning, therefore, they preferred traditional teaching to deliver content through the internet for the reason that they were more conversant with the face-to-face teaching. The study of Bonk (2000) reiterated that lecturers are required to have the right teaching skills in their fields to be able to stand tall and play various roles in terms of e-teaching; they ought to acquire adequate ICT competencies to be able to understand and adopt the use of ICT facilities in their teaching. Lecturers are unwilling to convert their print-materials into an electronic format, because of the negative attitude they have towards e-teaching. This attitude has made them prefer face-to-face teaching to the online method, in spite of the availability and accessibility of e-learning facilities (Nihuka & Voogt, 2012).

The study revealed that majority of the learners had positive attitudes towards e-learning. It was established that most of the students agreed that the internet learning model is an attainable way of learning which has certain qualities such as adaptability in time, space and conveniences (Makura, 2014). The attitude of the lecturers can be anticipated by computer features, cultural perception, and computer proficiency. In a related study by Nihuka (2011) found out that learners lack the ability to search for online information through the internet. Interestingly, students are knowledgeable in using word processing to write and send online messages, to their colleagues while getting it difficult to send

attachment documents and PowerPoint presentation to their lecturers. These challenges may be ascribed to lack of information literacy as well as lack of searching skills.

The study of Hussein (2011) showed that faculty members have a positive attitude towards e-learning; however, the study recommended the need for adequate training in the use of the system. Lecturers and students may have different opinions towards e-learning; they may consider it as a modern system while others may view it as a waste of university resources. Whatever their opinions may be, the only antidote for successful e-learning implementation is adequate training, periodic seminars, and orientations for both students and faculty members involved e-learning and teaching.

Challenges of E-learning Platforms among Students

Every new system comes out with challenges which may include financial support, human resource/capital, inadequate infrastructure, lack of technical expertise, and cost of maintenance, institutional and administrative support. The study of Chawinga and Zozie (2016) reported that failure of lecturers to upload/send online courses to students on time; difficult to receive immediate responses from lecturers as well as the late release of the end of semester examination results discourage students to embrace e-learning. The study of Sife et al. (2007) identified some internal influences that negatively affect the growth of online learning and teaching as non-existence of institutional backing, technical challenges, inadequate financial backing and absence of support from the institutional authorities were some of the key factors impeding e-learning in an academic institution.

The study of Onasanya et al. (2010) affirmed in their studies that majority of the lecturers in higher academic institutions in Nigeria do not have pedagogical skills to use ICT tools in their teaching. Psycharis (2011) confirmed that for the successful implementation of e-learning and teaching in an academic institution, technological issues, infrastructural challenges, financial issues and staff with technical skills ought to be looked at for the survival of the system. The support of the university is very paramount at the implementation stage of any new system since the survival and failure of the system depends on the university management because management body is the final decider.

Salmon and Jones (2004) outlined factors to be considered in the initial implementation of e-learning and teaching as; students and lecturers background, institutional policy, technological influences, pedagogical and the influence of lecturers' attitude towards e-teaching. It is obvious that when administrators, students, lecturers and all the stakeholders in the university are well-informed about the goals, mission, vision and the reasons for the implementation of e-learning into the distance education system, they will all offer their unflinching support for the system.

Despite this, research suggests that students and teachers alike are delighted with online education (Ali & Ahmad, 2011). The growing number of students enrolled in distance education promotes online learning as a viable alternative to conventional classroom instruction.

Many students were satisfied with the online education as indicated by Zaheer et al. (2015). It was discovered that e-learning stimulate higher education in countries with less endowed higher educational facilities. Tutorials, involvement of students, teaching methodology and evaluation, available material, learning environment and resources were noted to significantly contribute to satisfaction among students (Zaheer et al., 2015).

As a result, the focus of this research was on the difficulties that students are likely to encounter in online learning. Students' perceptions of online learning barriers, on the other hand, have been documented. Administrative concerns, academic skills, social experiences, technological skills, learner confidence, time and support for studies, expense, and internet connectivity, and technical problems, according to Mulienburg and Berge (2005) are some of

the difficulties associated with online learning. In light of this, this study explored students' challenges in coping with e-learning as well as whether students were able to effectively study online.

METHODS AND MATERIALS

The study employed the descriptive study with a cross-sectional design. A cross-sectional survey has been known as an effective method to provide a snapshot of the current behaviours, attitudes, and perspectives of participants (Gay et al., 2009). Therefore, the present study considered the same approach as an appropriate method for data gathering to assess e-learning by distance education students of the GCUC.

The study was conducted at the Garden City University College. It is a private-based university in Ghana located at Kumasi in the Ashanti region.

Target Population

The target population for this study consisted of all nurses and midwives of the Garden City University College (GCUC). The study population was made up of 305 undergraduate nursing and midwifery students who registered for the semester.

Sample and Sampling Techniques

In line with the Nwana's (2008) recommendation, the study adopted a convenience sampling techniques for selecting a sample size of 305 undergraduate nursing and midwifery students of the GCUC.

The researchers adopted the questionnaire as the main instrument for the data collection. The researchers designed a self-administered questionnaire to gather data from the field. Two different types of questionnaires were distributed to the students. The self-administered method of administering a questionnaire is the suitable approach than other approaches, for instance, individual groups, phone interview(s) and mailing. The structured questionnaires were employed to collect data. The questionnaires were closed-ended questions which permit the participants to select an option by ticking. The questionnaires were divided into five sections (namely, A, B, C and D) in context with the main objectives of the study.

Data Analysis Techniques

In order to draw inferences, proper interpretation, comparison as well as conclusions from the data gathered, the Statistical Package for Social Sciences (SPSS, 17 Version) was employed for data coding, capture and analysis owing to its ease of use. The outcome of the analysis was presented in percentages and tables.

According to Creswell (2014), there is a need for researchers to safeguard their subjects, "in order to build confidence with them, promote the integrity of the research, guard against misconducts and impropriety that might reflect on their organization or institution, and cope with challenges". In line with these principles, an introductory letter was taken from the Head of Department of Nursing and Midwifery and the Centre for Online Distance Education (CODEL) to seek permission before the study was carried out. All the subjects were adequately informed of the reason for the study and were assured of their safety and confidentiality. Moreover, the researchers adhered to the Kwame Nkrumah University of Science and Technology code of conduct for research and all references cited were duly acknowledged.

Validity and Reliability

To ensure reliability and validity of the data, a well-designed questionnaire containing all the details necessary to achieve the set objectives was administered to assist in obtaining the right information from the respondents. The research assistants were trained to acquire knowledge to assist the researchers during the data collection. There was daily monitoring and supervision to ensure data reliability and high quality.

Study Limitations

Due to the researchers acquaintance with the university, there is likely to be recall bias but did not in any way affect the findings of the results.

RESULTS

Demographic Data of Respondents

Out of the total number of 305 copies of questionnaires distributed to the students, all the 305 were retrieved from the respondents and considered valid for the analysis, this represents 100% response rate.

This section of the study presents respondents background. It covers the characteristics of the respondents, gender as well as age. Table 1 indicates that 131 (42.9%) were male students whereas 174 (57.1%) were female students being the dominant population. The results of Table 1 indicate that the majority of the students were between the ages of 20-30 representing 163 (53.4%), followed by 30-40 also representing 96 (31.5%) while 38 (12.5%) fell above the ages of 40 years. This implies that the majority of the student respondents were made up of young students.

The study sought to establish the number of students selected from both nursing and midwifery department and out of 305 students, a significant number being 182 (59.7%) were midwifery students whilst nursing students represented 123 (40.3%) either in level 100 (4.6%), 200 (13.4%), 300 (31.1%) with majority of 50.8% being level 400 students.

Table 1: Socio-demographic Characteristics of the Study Population

Variable	Frequency (305)	Percentage (100)
Gender		
Males	131	42.9
Females	174	57.1
Age of students		
19 years and below	8	2.6
20-30 years	163	53.4
30-40 years	96	31.5
40 and above	38	12.5
Students' Department		
Nursing	123	40.3
Midwifery	182	59.7
Level of study		
Level 100	14	4.6
Level 200	41	13.4
Level 300	95	31.1
Level 400	155	50.8

Students’ Perception Towards E-learning

The first objective sought to establish students’ perception towards the use of e-learning at the Garden City University College, Department of Nursing and Midwifery. Aragon and Johnson (2008) report that students' perception towards e-learning contributes to their decision to withdraw from an e-learning or not. To find out students’ perception towards e-learning, some statements were presented to the students and they were requested to answer.

It can be seen from the responses that out of 305 respondents, 112(37.7%) strongly agreed that e- learning allows them to have better access to e-resources, followed by 77(25.2%) of the respondents who were in agreement with the statement, however, 11(3.6%) neither disagreed nor agreed to the question. Notwithstanding, 57(18.7%) and 46(15.1%) either disagreed or strongly disagreed with the above assertion. This shows that majority of respondents get access to e-resources for their studies. The researchers tried to find out whether students could interact with their colleagues through the e-learning platform. Out of the 305 students, 117(38.4%) of the respondents strongly agreed, 57(18.7%) agreed to the statement, 103(33.8%) disagreed that they could not interact with their colleagues, and only 24(7.9%) of the respondents neither disagreed nor agreed. It can be concluded that quite a sizable number of students could interact with their colleagues through the e-learning platform and only one person strongly disagreed with the above assertion.

To ascertain whether e-learning facilitates the presentation of course content, 103(33.8%) of the respondents strongly agreed to the statement while 96(31.5%) disagreed with the assertion. It can be inferred from the study that the majority of students admitted e-learning facilitates the presentation of course content. Again, to find out students’ perception concerning difficulties and frustrations of e-learning, out of 305 respondents, 129(42.3%) of the respondents strongly agreed that they faced difficulties and frustrations when using e-learning, while 61 (20%) disagreed with the claim, only 35 (11.5%) of the respondents indicated that they neither disagreed nor agreed to the statement. This can be inferred from the responses that majority of the students go through difficulties and challenges when using e-learning platform. The study again, sought the views of students on whether e-learning allow greater interaction with their lecturers, 121(39.7%) disagreed, even though, 25(8.2%) and 23(7.5%) either strongly agreed or agreed that e-learning allowed them to interact with their lecturers. The findings indicated that majority of the students could not interact with their lecturers through the online e-learning platform.

Another statement sought to find out whether the internet and network connectivity (speed) on campus was bad or not. Out of 305 respondents, 134(43.9%) of the respondents strongly agreed that the internet and network connectivity (speed) on campus was bad, while 35(11.5%) disagreed with the statement, however, 49(16.0%) did not agree or disagree to the assertion. This also suggest that the internet and network connectivity (speed) on campus was bad. The results are shown in Table 2, where: SA= Strongly Agree; A=Agree; NDA= Neither Disagree nor Agree; D= Disagree; SD = Strongly Disagree.

Table 2: Students’ perception towards E-learning

Students N = 305					
Students perception towards e-learning	SA	A	NDA	D	SD
E-learning allows better access to e- resources	112(37.7%)	77(25.2%)	11(3.6%)	57(18.7%)	46(15.1%)
I can interact with my colleagues through the e-learning platform	117(38.4%)	57(18.7%)	24(7.9%)	103(33.8%)	4(1.3%)

E-learning facilitates the presentation of course content	103(33.8%)	30(9.8%)	62(20.3%)	96(31.5%)	14(4.6%)
E-learning is difficult and frustrating	129(42.3%)	69(19.7%)	35(11.5%)	61(20.0%)	11(3.6%)
E-learning allows greater interaction with my lecturers	25(8.2%)	23(7.5%)	52(17%)	121(39.7%)	84(27.5%)
Access to the internet is difficult and this affects my learning	134(43.9)	57(18.7%)	49(16.0%)	35(11.5%)	30(9.8%)

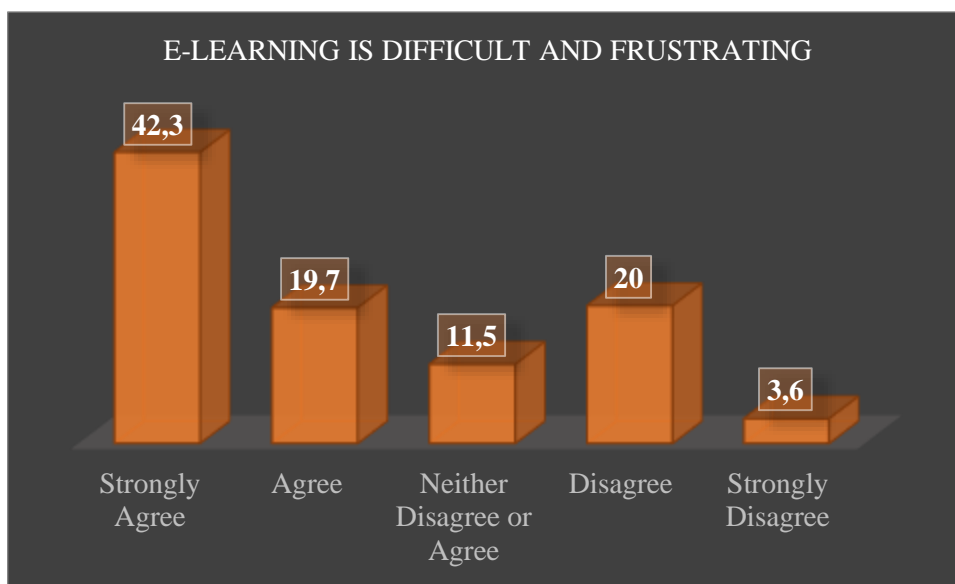


Figure 1: Students’ perception towards E-learning

Students Attitude Towards E-learning

The study of Selim (2005) affirmed that students' behaviour and attitudes toward e-learning are the major factors that determine the failure or success of online learning in an academic institution. The third objective of this study was to find out students’ attitude towards e-learning; therefore, some statements were presented to the respondents as indicated in Table 3.

Results from Table 3 revealed that 128(42%) of the respondents indicated “sometimes” that e-learning was a useful medium for self-learning, while 85(27.9%) respondents indicated “never” to this statement, followed by 51 (16.7%) who indicated “often” to the assertion. In order to establish whether e-learning has developed students’ knowledge and skills in ICT, out of 305 respondents, 101(33.1%) indicated “always”, while 69(22.6%) of the respondents indicated “never”, followed by 53(17.4%) and 52(17%) who indicated rarely and often respectively. It is evident from the results that e-learning has helped develop the majority of students’ knowledge and skills in ICT.

To ascertain whether students preferred to have some courses online rather than face-to-face learning 109(35.7%) indicated never, followed by 103(33.8%) respondents who admitted that they sometimes preferred online learning to face-to-face, only 57(18.7%) responded rarely. This was a clear indication that the majority of the student respondents preferred face-to-face learning to e-learning. The students were asked to state whether they needed training before using the e-learning platform. With this, 117(38.4%) of the

respondents indicated “always”, while 96(31.5%) of the respondents responded ‘sometimes’, only 5(1.6%) responded ‘never’. This indicates that the majority of the students need training on e-learning. In an attempt to find out whether learning with computers was difficult or not; 212 (69.5%) of the respondents indicated it was difficult sometimes, however, 35(11.5%) and 33(10.8%) indicated,, rarely' and,, often' respectively. From the results, the majority of the students found it difficult to learn with computers. Furthermore, in terms of user friendliness of e-learning devices used, 25(8.2%) never used it, 80(26.2%) rarely used it, 150(49.2%) being majority sometimes used it and the rest of 30(9.8%) and 20(6.5 %) often and always use the system respectively. The results are shown in Table 3, where: N= Never; R=Rarely; S= Sometimes; O=Often; A = Always.

Table 3: Students Attitude Towards E-learning

Students N = 305					
Students' attitude towards e-learning	Never	Rarely	Sometimes	Often	Always
E-Learning is a useful medium for self-learning	85(27.9%)	35(11.5%)	128(42%)	51(16.7%)	6(2.0%)
E-Learning has developed my knowledge and skills in ICT	69(22.6%)	53(17.4%)	30(9.8%)	52(17%)	101(33.1%)
I prefer to have some courses online, rather than face-to-face learning	109(35.7%)	57(18.7%)	103(33.8%)	25(8.2%)	11(3.6%)
I need to be trained before the use of e-learning platform	5(1.6%)	25(8.2%)	96(31.5%)	62(20.3%)	117(38.4%)
Learning with a computer is very difficult	8(2.6%)	35(11.5%)	212(69.5%)	33(10.8%)	17(5.6%)
E-learning devices I use for my program are user friendly	25(8.2%)	80(26.2%)	150(49.2%)	30(9.8%)	20(6.5%)

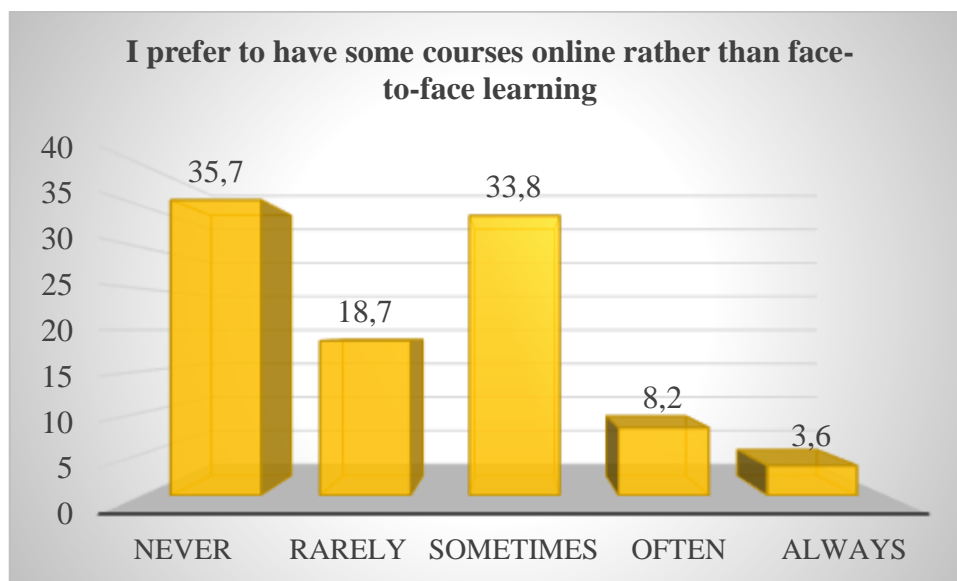


Figure 2: Attitude of students towards e-learning

Internal Factors Affecting Students E-learning

The respondents were asked to show whether the university had enough computers for the e-learning students. From the responses, 1744(57.0%) of the respondents strongly agreed that the university has enough computers for the students, however, 98(32.1%) strongly disagreed with the statement while 8(2.6%) remained neutral on the above statement. The results indicated that the university has enough computers to support e-learning students. The respondents were asked to indicate whether lecturers' inability to send online courses on time affects their performance. From the responses, 237(77.7%) respondents strongly agreed to the assertion, while only 9(3.0%) respondents disagreed with the statement and another 5(1.6%) respondents remained neutral.

The overwhelming number of respondents agreed to the assertion that lecturers' inability to send online courses on time affects students' performance. The findings revealed that 166(54.4%) respondents strongly agreed that it was difficult to download courses due to poor internet connectivity, followed by 87(28.5%) respondents who strongly disagreed with the question. From the responses, it was evident that the majority of the students found it difficult to download online courses owing to poor internet connectivity.

The researcher again sought to find out whether there was a technical support service for e-learning students. It was disclosed that 128(42%) of the respondents disagreed with the statement, however, 40(13.1%) respondents agreed to the question that there was a technical support service for e-learning students. From the results, one can confirm that there was no technical support service for e-learning students.

In order to ascertain whether there is an adequate internet service for e-learning, 215 (70.5%) of the respondents strongly disagreed with the statement, only 57(18.7%) respondents strongly agreed that there was adequate internet services for e-learning students. It can be deduced from the result that there is inadequate internet services for e-learning students. According to the findings, 139(45.6%) of the respondents strongly agreed that the university supports e-learning, while, 76(24.9%) of the respondents disagreed, only 11(3.6%) remained neutral to the statement. This is an indication that the university supports the adoption of e-learning. The results are shown in Table 4, where: SD= Strongly Disagree; D=Disagree; N= Neutral; A= Agree; S = Strongly Agree.

Table 4: Internal Factors Affecting Students E-learning

Students N =305					
Internal factors affecting e-learning	SD	D	N	A	SA
The University has enough computers for the e-learning students	98(32.1%)	4(1.3%)	8(2.6%)	21(6.8%)	174(57.0%)
I have not encountered problems when logging to the e-learning e-platform	14(4.6%)	8(2.6%)	46(15.1%)	101(33.1)	136(44.6%)
Lecturer's inability to send online courses on time affect my performance	8(2.6%)	9(3.0%)	5(1.6%)	46(15.1%)	237(77.7%)
It is difficult to download courses due to poor internet connectivity	87(28.5%)	5(1.6%)	12(3.9%)	35(11.5%)	166(54.4%)
There is technical support services for e-learning students	95(31.1%)	128(42%)	8(2.6%)	40(13.1%)	34(11.1%)

There is adequate internet services for e-learning	215(70.5%)	5(1.6%)	8(2.6%)	20(6.6%)	57(18.7%)
The university is supportive of e-learning	8(2.6%)	76(24.9%)	11(3.6%)	71(23.3%)	139(45.6%)

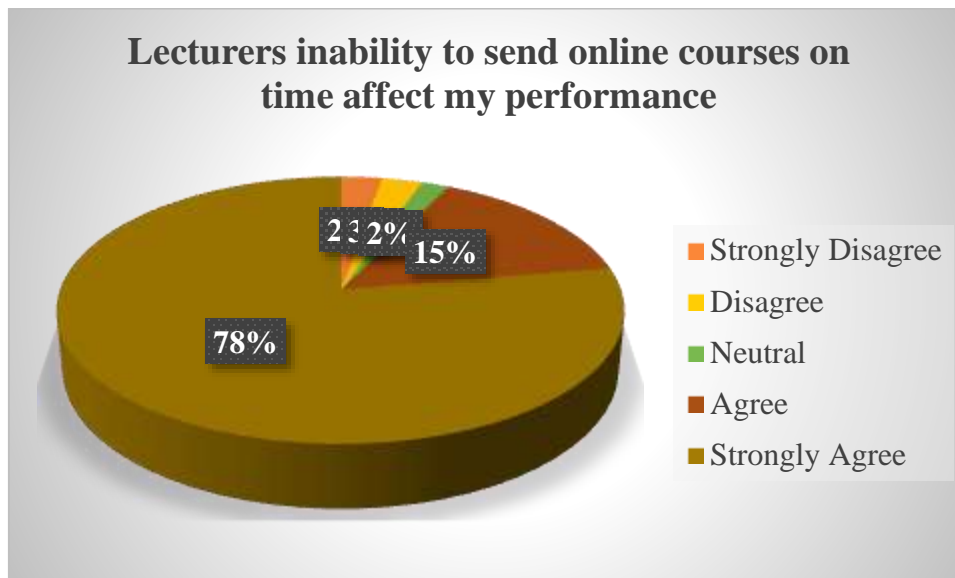


Figure 3: Internal factors affecting e-learning

DISCUSSION

Students' Perception Towards E-learning

In the view of Sarfo and Ansong-Gyimah (2010), there is disparity of perception between students and lecturers regarding the use of technology in learning and teaching in the instructional method which need to be addressed by lecturers as well as instructional system designers in Ghana. Failure to develop e-learning integrated instruction to expedite dynamic teaching and learning may lead to ineffectiveness.

This research was conducted to find out electronic teaching and learning by students of Garden City University College (GCUC). From Makura's (2014) point of view, students' perceptions of the use of e-learning in a higher education reported that the use of e-learning by students has affected their academic performance positively. As the first objective, the study tried to establish students' perception towards e-learning at the GCUC. The study established that the majority of the students representing 195(63.3%) had access to e-learning resources provided by the university.

This result is also in line with the previous studies by Sethi and Panda (2012), Al-Fahad (2009). For example, Sethi and Panda (2012) reported that about 92.18 % of the respondents preferred to use e-learning resources as compared to print documents in spite of some restraints in their effective use. Al-Fahad (2009) added that the "majority of students supported the idea that wireless networks increase the flexibility of access to resources of learning independently in any place". The finding on students' interaction with their colleagues through the e-learning platform revealed that majority being 174 (57.1%) of the respondents indicated that they could interact with their colleagues via the e-platform. The outcome does not support the studies carried out by Bigelow (1999), Salmon (2000), which disclosed that "lack of communication, failure of online students to interact with their colleagues' impeded students' academic performance". Regarding the difficulty and

frustrations that students experience when using e-learning platform, the study revealed that out of 305 respondents, 198(62%) of the respondents either agree and strongly agreed that they faced difficulties and frustrations when using e-learning, while 72(23.6%) strongly disagreed or disagreed with the claim, only 35(11.5%) of the respondents indicated that they neither disagreed nor agreed to the statement. The study reported that the majority of the students could interact with their lecturers through the e-learning platform. Frequent interaction among students is a key component that facilitates their learning and improves academic performance as well. The findings of this present study is not in tandem with a study by Deb and Weissman (2011), which affirmed that the absence of interaction between a student and a lecturer generates a feeling of loneliness, and this feeling leads to a negative perception.

Concerning the issue of internet and network connectivity among the students, it was revealed that internet connectivity has been poor. The poor nature of the network can be linked to low bandwidth in the university. The present study does not support the previous studies done by Tella et al. (2007), who revealed that internet and network connectivity allow students access to information for their studies and this paves way for academic excellence. Again, according to the study, students are faced with some difficulties and challenges regarding the use of the online studies. This revelation is confirmed by Hara and Kling (1999), who pointed out common frustrations confronting students as; “lack of prompt feedback; ambiguous instructions on the web; and technical problems.”

Attitude of Students towards E-learning

The finding revealed that the use of e-learning has developed students’ knowledge and skills in ICT. This was an indication that students have a positive attitude towards e-learning and also have adequate searching skills. This finding does not support the study of Smith et al. (2000) and Govindasamy (2002), whose studies claimed that students have negative attitudes toward online learning. One can conclude that their negative attitude towards e-learning could be attributed to their lack of computer skills or inability to use the e-learning devices which may serve as a barrier. The findings of this study revealed that a significant number of the students preferred face- to- face learning to e-learning. The result of the present study is not in line with the study of Djajalaksana (2011) who indicated that students preferred e-learning because they can ask question(s) related to their course materials at any time and get immediate feedback or answer. This study established again that the majority of the respondents indicated that they found it difficult to learn with computers. This is a clear indication that quite a number of the students lack computer skills which need to be improved. The finding also supports the study of Gakibayo et al. (2013) acknowledging the fact that lack of computer skills, the absence of information literacy skills and inadequate computers for learning were among the prominent factors that contribute to the poor attitude of students towards the usage of e-learning resources.

Internal Factors Affecting E-learning

Internal factors are factors that can impede or facilitate the rapid development of e-learning in an academic institution. Latifah and Ramli (2005) confirmed in their study that for a successful adoption of e-learning system, internal factors should be considered as factors that can impede e-learning implementation. The finding established that an overwhelming number of students representing 238(92.8%) admitted that lecturers’ inability to upload/send online courses on time affects their academic performance. This result is in line with Chawinga and Zozie (2016) who observed that “there was delayed feedback of assignments and release of the end of semester examination results, and these attitudes of some lecturers affect the performance of e-learning students”.

From the study, it was found out that the university has enough computers to support students who enrolled in the e-learning system. Availability and accessibility of adequate computers are some of the key factors that facilitate and encourage the adoption of e-learning in academic institutions. This finding does not support the study of Amengor (2011) which stated that the insufficient number of computers, overhead projectors, printers and scanners as well as insufficient instructional software were some of the internal factors inhibiting e-learning adoption in academic institutions.

The results confirmed that a significant number of respondents lamented on poor internet services on campus. For a successful implementation of e-learning in an academic institution, there should be adequate and reliable internet services for all students to have access. This will go a long way to improve their academic performance as well. The finding supports Mohd et al. (2011) study which reported that poor internet connectivity and slow servers were some of the challenges users faced when accessing electronic resources.

CONCLUSION

As described in this study, majority of students had positive perceptions and attitudes towards e-learning. It was established that students and lecturers interacted on the “Online Forum Learning Platform (OFLP). The study acknowledged the fact that though, it was difficult sometimes for both students to send and download information/files from the platform, yet, and they still appreciated and recognized the platform as a self-learning medium. Finally, e-learning and teaching in an institution of higher learning should be embraced by all stakeholders, lecturers, students, and the entire university community.

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