

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

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FACULTY OF ALLIED HEALTH SCIENCE

DEPARTMENT OF NURSING

DIPLOMA PROGRAMMES



**HOW THE ADOPTION OF E-LEARNING CAN HELP IMPROVE THE
ACADEMIC PERFORMANCE OF STUDENTS OF HOLY FAMILY NURSING
AND MIDWIFERY TRAINING COLLEGE, BEREKUM**

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DECLARATION

We hereby declare that this submission is our own work towards the Diploma in General Nursing and that, to the best of our knowledge, it contains no material previously published by another person nor material which has been accepted for the award of diploma of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

The main aim of this study is to find out how the adoption of e-learning can help improve the academic performance of students of Holy Family Nursing and Midwifery Training College, Berekum. The study has four set objectives; to find out the general knowledge on e-learning from students of Holy Family Nursing and Midwifery Training College, Berekum, to examine the advantages of e-learning to students of HFNMTC, Berekum, to examine the disadvantages of e-learning to students of HFNMTC, Berekum and to recommend critical issues to be considered for the effective implementation of HFNMTC, Berekum e-learning system. A sample population of 100 was used for the study. Primary data was gathered from the field of study (HFNMTC, Berekum) through a set of questionnaires. Data was obtained manually from the answered questionnaires with the help of Microsoft excel. The found that all (100%) the respondents have heard of E-Learning and have used E-Learning before. Majority (96%) of the respondents agreed to that, e-learning is very flexible. Majority (92%) of the respondents believed that, e-learning system mostly focus on theory than practical. It was concluded that the students had an appreciable level of knowledge on the e-learning systems and most of them were able to indicate the advantages and disadvantages of e-learning which shows most of the students have adequate knowledge about the e-learning systems. The study recommends that, learners and lecturer should have some basic Information and Communication Technology skills for an effective implementation of the e-learning system. There should be effective internet connectivity in the e-learning environment. Also, the development of well secured e-learning portal or systems to prevent external manipulation was recommended.

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ABBREVIATION

E-Learning	Electronic Learning
MOOCs	Massive Open Online Courses
VLE	Virtual Learning Environment
UAE	United Arab Emirates

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CHAPTER ONE

INTRODUCTION

1.0 Background of the study

The Internet has become one of the vital ways to make available resources for research and learning for both teachers and students to share and acquire information. In institutions of higher education, the issue of utilizing modern information and communication technologies for teaching and learning is very important (Arkorful & Abaidoo, 2019) . Due to the rapid growth of technology in the world of health and availability of useful materials on the internet, many health institutions and other higher educational institutions has assumed a new trend. The trend involved a significant reliance of online materials in the learning experience of the 21st century students of higher learning (Bower, 2019).

The online learning materials have become one of the major key resources for students undertaking higher education studies due to both its availability and its current nature. Previously, the only sources of educational learning materials available to students were hard copies of books and course materials which many other researchers thought could limit the students' successes. However, the educational conditions nowadays have changed dramatically with the advent of internet (Bhargat, Wu, & Chang, 2021).

The electronic learning is defined as the provision of educational content (electronic) through the media based on the computer and its networks to the recipient in such a way that allows the possibility easy accessibility of learning materials and the possibility of managing and completing the study or course in the expected time, convenient place and speed that suits conditions and abilities (Khrulyova & Sakhieva, 2017).

The most attractive feature of the e-learning system is that; it is student-centred. It accommodates individual preference and needs. At the same time, it empowers students of various backgrounds to have equal access to the best resources and referral materials as mention previously. Most professionals interested in the use of technology in education understand the importance of e-learning (Hodges, et al., 2020).

There is now more open access to information and online materials being accessed outside those hard copies learning materials that were being provided by lecturers. There is even clear indication that the situation in the coming years is likely to accelerate and change the way students are learning. In order to remain relevant and flow with the constant changes in the content of educational teaching and learning materials, most higher educational institutions including health colleges are in one way or the other taken some online teaching and learning initiatives in their own capacity (Wang & Torrisi-Steele, 2021).

E-learning approach has become an increasingly popular approach in higher educational institutions due to vast growth of internet technology. Nowadays, e-learning has a competitive advantage and many tertiary institutions have implemented it and this has impacts on student's academic performance (Arkorful & Abaidoo, 2019).

However, still there are other tertiary institutions which have not yet adopted the use of e-learning systems which put some students at a disadvantage in terms of academics. Today, e-learning is a tool used to remove geographical barriers and facilitates everybody to learn anytime and anywhere without the presence of the lecturer. The main purpose of e-learning is to increase accessibility of education and reducing cost and time as well as improving student's academic performances. This approach of learning facilitates different students with different learning abilities to learn in their own suitable time frame (Aguilera-Hermida, 2020).

It has been found that students in tertiary institutions who engage mostly in e-learning tend to perform better than those who engage only in face-to-face interactions (Holley, 2017). Some of the initiatives of the online environment adopted by the universities included virtual learning environment (VLE) and portals where teaching and learning materials are shared with students. It is a well-known fact that, the use of online materials will help in easy assessing and retrieving of data and easy assessing of students. Instructional methods via tools such as virtual learning environment, audio visuals, video-based self-directed learning like the Khan Academy, and Massive Open Online Courses (MOOCs) (Sharma, et al., 2020). The introduction and the use of online materials in the educational institutions worldwide has been able to assist in student's apprehension in learning (Essel, et al., 2018). This study tapped into the learning environment of the students in order to find out the short-comings associated with the traditional teaching and learning and how well the involvement of technology can help improve teaching and learning.

1.1 Problem Statement

Successful online learning thus requires that students (and teachers) be familiar and proficient in their uses of those devices for learning. Of course, even more fundamentally, it requires that the devices exist (Garcia & Weiss, 2020).

At a time when more nurses are needed in practice as well as the increasing need for nurses with advanced degrees to meet current and future health care needs of society, the shift to online education in nursing creates new challenges for nurse educators (Addah, Addo, & Amo, 2019).

Although nursing students may be attracted to an online course because of accessibility, flexibility, and convenience for their work and personal lives, barriers may occur during the educational experience that causes them to become dissatisfied. Nursing students have been

found to be less satisfied with online courses than traditional courses (Addah, Addo, & Amo, 2019).

Negative results are more common among students who come from disadvantaged backgrounds or have lower levels of preparation (Xu & Jaggars, 2021), resulting in overall negative effects within the community college population (Johnson & Mejia, 2019). The satisfaction of the students towards online classes appears good, and prioritizing the identified predictors and working on the weak links could assist in enhancing students' satisfaction and better outcomes (Sharma, et al., 2020).

There is no doubt about the fact that, students of Holy Family Nursing and Midwifery Training college, Berekum have access to modern and well finished library on campus with great and current books. Also, the fact that, these students do not have access to the library all the time cannot be denied. Mostly, students who prefer to learn late in the night have to get their own source of learning materials since the library closes at 10:00pm which is a disadvantage to them. The library does not also open during weekends which is problem for students to access these learning materials during the weekends. Consequently, creation of e-learning platforms such as the Moodle Application and encouraging lecturers to upload their notes and other needed learning materials will help eradicate the barriers of accessing learning materials all the time. Therefore, it is imperative to assess how possible we can use e-learning to improve the academic performance of students of Holy Family Nursing and Midwifery Training College, Berekum.

1.2 General Objectives

To find out how the adoption of e-learning can help improve the academic performance of students of Holy Family Nursing and Midwifery Training College, Berekum.

1.3 Specific Objective

1. To find out the general knowledge on E-learning from students of HFNMTC, Berekum.
2. To examine the advantages of e-learning to the students of H HFNMTC, Berekum.
3. To examine the disadvantages of e-learning to the students of HFNMTC, Berekum.

1.4 Operational Definition

21st Century learner.

The 21st century learner as used in this context refers to the generation of students from the year 2000 upwards. It talks about how modern students make use of technology nowadays. The current explosion of scientific discoveries leading to a surge in the level of technological advancement globally has opened doors for more opportunities for all. Time and place are no longer barriers any more. People are now easily connected or linked up to share information without limits (Bower, 2019).

Higher Education

Higher Education in this context includes all tertiary institutions in the country. This include institutions such as polytechnics, universities and training colleges which award diploma, degree and post degree certificates after a successful completion of a stated academic program or course (Garcia & Weiss, 2020).

Online learning materials

Online learning materials talks about the various resources available on the internet in an online educational environment. It includes documents such as course or chapter objectives, lecture notes, assignment. It also includes audio or video materials too (Johnson & Mejia, 2019).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the view of other researches related to students' experiences of online learning materials to support success in higher academic education. The objectives of this research work is not to rundown or disapprove of the brick and mortar face to face class room lesson delivery approach which still remains the common approach among all. However, the technology breakthrough of the 21st century leaves learners with multiple sources of information that contribute to their academic success at all levels of their educational career.

2.1 Concept of E-learning

A learning system based on formalised teaching but the help of electronic resources is known as E-learning. E-learning can also be termed as a network enabled transfer of skills and knowledge and the delivery of education can be made to a large number of recipients as the same time in different place (Cidral, et al., 2018).

Earlier, it was not accepted wholeheartedly as it was assumed that this system lacked the human element required in learning. However, with rapid progress in technology and advancement in learning systems, it is now embraced by the masses (Bower, 2019). The introduction of computers was the basis of the revolution and with passage of time, as we get hooked to smartphones, tablets, etc. and these devices now have an important place in the role of e-learning. Books are gradually getting replaced by electronic educational materials

like optical discs or pen drive. Knowledge can also be shared via the internet, which is accessible 24/7, anywhere, anytime (Xu & Jaggars, 2021).

E-learning has proven to be the best means in the educational sector, especially when training individuals to become professionals across the globe. The schools which uses e-learning technologies are a step ahead of those which still use only the traditional approach towards teaching and learning (Johnson & Mejia, 2019).

Presently, e-learning is an issue of concern in higher education in Ghana. The nation has it at heart to widen access to education and promote independent and lifelong learning through the use of e-learning (Addah, et al., 2019). A web based report indicates that the Kwame Nkrumah University of Science and Technology in Ghana is currently employing e-learning on distance learning mode; where students rarely or never meet face-to-face, nor access on-campus educational facilities (Assiamah, Essel, & Lamptey, 2018).

Moreover, it has been reported by prior studies that, KNUST has installed electronic devices and technologies to allow e-learning within the university. This indicate the need and importance in the adaptation of e-learning in our higher educations (Assiamah, et al., 2018).

2.2 Types of Online Learning Materials

Classifying online learning materials is not that easy especially when the list is an endless. Every blessed day comes with its own sets of E-learning materials due to the technological surge in recent times.

Live videos: There are many institutions that provide live online classes for their students. These are equally suitable for students who do not have easy access to coaching centres as well as the ones who prefer one-to-one learning. Example is the use of zoom conference application (Garcia & Weiss, 2020).

Application Software: Mobile apps are another example of digital learning material. Nowadays, almost all the students have smartphones with an internet connection. These students download apps to learn new things. Not just simple apps, there are mobile apps for specific exams such as Moodle Application for smart phones (Garcia & Weiss, 2020).

Podcasts: These are recorded audio clips; which students can download and listen to whenever they want. There are so many teachers who upload their recorded lectures for the students who want to study by listening to the study material (Garcia & Weiss, 2020).

Info-graphic

This is a combination of text and graphics to explain a concept which in the view of the writer could not be done with only one format. In order to solve this deficiency, there is the need for the use of multimedia information that blends text and pictures to enhance easy understanding of concepts to learners (Wang & Torrisi-Steele, 2021). These are just some of the examples of digital learning materials. The notes and online course text materials usually come in the form of PDF, Word Document or PowerPoint Presentation. Depending on the nature of the online material; an appropriate format is usually chosen for it (Xu & Jaggars, 2021).

2.3 Knowledge on E-learning

Electronic learning or e-learning is used to offer instructional programs to distant learners (Addah, Addo, & Amo, 2019). It is an online learning platform that emerges in a formal context and utilizes a variety of multimedia technologies. Electronic hardware and software support this system either offline or online. A personal computer is usually used for delivering training or computer-enhanced learning related to e-learning (Bower, 2019).

A descriptive research was conducted in Malaysia among students in University Colleges to examine their awareness on e-learning. A total of 200 students participated in the study. The

method of data collection used was questionnaire. The results showed that the awareness of students towards technology usage is 99.5%. There is only 0.5% unaware with the technology usage (Yacob, et al., 2020).

2.4 Advantages of Online Learning

E-learning ensures that students are completely involved as learning takes place together with texts, videos, sounds, collaborative sharing, and interactive graphics. It may enhance the quality of teaching and learning, report the need for higher institutions for maintaining competitive advantage, and access to education and training in this globalizing marketplace for students (Allen & Seaman, 2019).

Many higher education and nursing education studies have compared student learning outcomes in online and traditional courses, finding positive learning outcomes for students enrolled in online courses (Van Schyndel, 2019). Evidences show that online learning can play the role of catalyst for active learning, enhancing creativity, motivation for learning and updating existing body of knowledge and communication (Cidral, et al., 2018).

A cross sectional study was conducted in Egypt on online education during COVID 19 pandemic lockdown. Purposive sampling technique was used to select 245 participants for the study. Data showed that participants used several electronic devices to study online. The most used device was the smartphone (51.0%) followed by laptop (32.8%) and tablet (9.6%), while the least used device was the personal computer (6.6%). The studying hours spent for online learning ranged from <1hr/day to 14hr/day. The distribution of these online tools was as follow; Zoom had the highest preference followed by WhatsApp, Google classroom, and social networks. Microsoft Teams, Edmodo, Skype, and Google Meet were moderately used. The current study showed that the most popular device that students used to access the online

materials was the smart phone (58%) followed by laptop (34%), while the least used tool was the personal computer (8%) (Mahdy, 2020).

A cross sectional study design is adopted to identify the advantages of e-learning in university education in United Arab Emirates (UAE). A close-ended structured questionnaire was constructed to collect data from students. Frequencies and percentages were used to analyse the data collected. The study found that majority of the study members agree that there are positives to the use of e-learning. 81% students have stated that e-learning provides scientific material in an interesting way. Similarly, 80% students have responded that e-learning increases the possibility of communication and interaction between students and with teacher. Furthermore, 78% students indicate that e-learning enable students to communicate with the teacher by e-mail at any time and any place and provides the subject throughout the day and all days of the week (Al-Rawashdeh, et al., 2021).

A descriptive research was conducted in Malaysia among students in University Colleges to examine their awareness on e-learning. 200 students participated in the study. The method of data collection used was questionnaire. The result from the awareness of implementation e-learning shows that, e-learning system is useful in their study where the percentage of agree shows 46.90% and strongly agree 32.10%. Meanwhile, only 2.60% strongly disagree and 3.10% disagree. Not sure 15.30%. These show that, the students aware about the implementation of e-learning and prefer to use the technology in their study. Due to the usefulness of e-learning, the quality also should put under consideration. The result for the question on overall the quality in using e-learning is easy to use shows that 52.00% agree, 26.50% strongly agree. Disagree shows 4.60%, strongly disagree 1.00% and not sure 15.30%. There also questions related to self-efficacy in the questionnaire. The result for question overall, the e-learning affects my self-efficacy shows that 46.90% agree, 28.90% strongly agree. While disagree 2.60%, strongly disagree 2.10% and not sure 19.60%. The

implementation of e-learning has make the students relies the important of e-learning in their study. Meanwhile, for the student that still do not aware or understand about e-learning should be expose more during lecturing and communicating. This is important since e-learning could benefit them more in searching for information and upgrade their knowledge and skills. In conclusion, by using e-learning student also confess that this concept is very useful for them in their study. Related to this result showing that e-learning affect their self-efficacy especially in upgrading their knowledge and skills (Yacob, et al., 2020).

2.5 Disadvantages of Online Learning

The transformation from traditional learning to complete web-based learning, however presents several challenges to nursing educators as well as the students (Dawadi, Giri, & Simkhada, 2020). Lack of presence in online courses can result in perceived isolation leading to student dissatisfaction with the learning experience (Van Schyndel, 2019). Despite of the significant advantages of e-learning, students encounter several challenges which ultimately lead towards either limited or negative outcomes (Allen & Seaman, 2019).

A cross sectional study design is adopted to identify the disadvantages of e-learning in university education in United Arab Emirates (UAE). A close-ended structured questionnaire was constructed to collect data from students. Frequencies and percentages were used to analyse the data collected. The study found that study members agreed that there are drawbacks to the use of e-learning at Ajman University. 73% students indicate that due to increasing social isolation, they spend more time in front of the technical means of social interaction account and face-to-face with others. 70% students have indicated that there is a presence of electronic illiteracy among parents, which reduces their ability to follow their children electronically. 68% students have revealed that the application of e-learning needs to a certain extent of qualified users to deal with technological developments used in this type of education (Al-Rawashdeh, et al., 2021).

A cross sectional study conducted by Motala and Menon (2020) researched into online learning of a university in South Africa. A simple random sampling technique was used to select 345 participants for the study. A number of issues became evident, both in terms of access to learning and the broader societal context in which this is taking place. Reflecting on the university's response, factors that compromised student learning included: No access to a device inclusive of a laptop or smartphone (impacts on how to learn if the medium or means to learn is absent), Either no network coverage or limited coverage, Cost of data, Limited bandwidth, Living conditions not conducive to studying and other psychosocial factors. The findings of the study confirmed that motivation decreased when students transitioned to online learning.

CHAPTER THREE

MATERIALS AND METHODS

3.0 Introduction

This chapter provides, the study area and study population, study design, sampling techniques, data collection method and instrument, data analysis techniques, ethical consideration and limitations of the study.

3.1 Study area

The research was conducted at the Holy Family Nursing and Midwifery Training College, Berekum in the Bono Region. The Nursing and Midwifery Training College, Berekum is located at New Biadan. The school shares boundary with the Holy Family Hospital, Berekum and Freeman Methodist School. The school was established in the year 1957. The major inhabitants of the college campus are nursing trainees and midwifery trainees. The total population of the school is seven hundred and twenty-two (722) including students, teaching and non-teaching staffs with different ethnic backgrounds. The teaching staffs include the principal of the college, academic coordinators and tutors. The non-teaching staffs includes, drivers, security men, cooks and cleaners. According to the dean of students, the settlement of the college has a student population of six hundred and eighty-five (685). The settlement type of the schools' building is a nucleated one with building mainly built with blocks and roofed with aluminium sheets. Lectures starts from 8:00am and ends at 4:00pm

The school has an administration block, a class room block made up of nine (9) lecture halls, tutor offices, a conference hall, an auditorium, a supermarket, a hairdressing salon, a dining hall and a kitchen. There is a well-furnished computer laboratory, two skills laboratories for nursing and midwifery students as well as a well-furnished library in the school. The school has four hostels; one for the female nursing students, one for the Post basic students, one for

the male nursing students and the other one for the midwifery students as well as four bungalows for tutors. The school has a bus which helps them to carry students to any event or occasions. It also has a school field which serves as a playing field and two summer huts. There are two security post, car park and a fore court.

3.2 Study population

It is the entire group of items which the researcher wishes to study and plan to generalize on. The population of the research comprises all students of Holy Family Nursing and Midwifery Training College, Berekum. The school has a population of 685 students.

The target population can be defined as "the whole accumulation of respondents that meet the assigned arrangement of criteria" (Grove & Burns, 2017). It is the group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population usually has varying characteristics and it is referred to as the theoretical population.

Table 3. 1: Population of the Study

Year Group	Number of students
RGN 22 / RM 17	183
RGN 23/ RM 18	190
RGN 24/ RM 19	235
NAP/NAC 4&5	77
Total Population	685

3.3 Study design

A cross sectional study was conducted which led to the generation of both descriptive and analytic data. A cross-sectional study is a type of research design in which researchers collect data from many individuals at a single point in time. It was chosen because it allows the researcher to collect data from a large pool of subjects and compare differences between groups.

3.4 Sampling technique and size

The sampling technique used was stratified technique sampling. The sample size used for the study was 100 students. The whole student's body consisting of 685 students were group into 4 strata. Each stratum representing each year group. 25 students were randomly selected from each stratum making 100 participants in general. The inclusion criteria consisted of 100 students (25 from each year group) who agreed to willingly participate in the study.

This technique was used because students were selected from each year group making the study unbiased. This study also leads to large improvement in terms of representative since the right proportions of different groups in the population are represented.

3.5 Data collection methods and instruments

The major data collection instrument adopted for this research work was a set of questionnaires for the sampled respondents. It was well structured purposely to obtain relevant information for this research work only. Respondents were given the option to tick in order to make a choice out of the multiple options given in areas wherever applicable.

The questions were group into sections. Section 'A' deals with bio graphical data of the respondent which include sex, age and marital status. Section B focusses on the general knowledge on e-learning, section C focusses on advantages and disadvantages and section D

also focusses on how to consider and recommend critical issues for effective implementation of Holy Family Nursing and Midwifery Training College, Berekum e-learning system.

3.6 Data analysis techniques

The data was analysed and presented in tables, graphs and charts with concise explanatory notes to add meaning to the results. Results were obtained manually from the answered questionnaires with the help of Microsoft excel. The data was analysed descriptively and presented through frequency tables, bar charts, pie charts and percentages accompanied by concise explanatory text in simple language to aid in easy understanding of the findings.

3.7 Ethical consideration

Ethically, a research of this nature requires that, the rationale or the motive behind it be made known to the respondents and also give some form of assurance to the respondents that the information sourced from him or her will not be used for any other purpose. Institutional ethical clearance was obtained from the Department of General Nursing and the Department of Midwifery before conducting the study as well as the department of Post Basic Midwifery for Nurse Assistant Preventive and Nurse Assistant Clinical (NAP/NAC). The respondents were well informed about the purpose of the study and that participation was optional and that they could withdraw at any point along the study.

In furtherance to the ethical considerations, the case study bank was written to in order to seek approval before commencement of the actual research work. The researcher also assured respondents that confidentiality and privacy of participant's information was guaranteed. With regards to the mode of questioning, the researcher avoided the use of deceptive statements and questions. During the course of the research and most importantly, the participants were never in anyway coerced to participate. Above all, the researcher also ensured that the activities of the entire project were accident-free.

3.8 Limitations of the Study

Even though the study was generally successful, they were other challenges encountered during the study. The first challenge has to do with the unwillingness of most respondents to respond to the questionnaires either for lack of time due to the tight schedules.

The second challenge borders on financing. The researcher was burdened financially having to foot the cost of typing and printing cost all alone without support.

Also, a good number of the student population was not represented and hence cannot be generalized to the whole population.

Despite the evidence of the few challenges encountered, user or beneficiaries of this research materials are assured that the challenges did not in any way compromised the validity and the reliability of the outcome of this work.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.0 Introduction

This chapter presents a detail analysis and discussions of the data gathered from the field. The results are presented in tables, graph and charts. The analysis data was done according to the specific objectives of the study. The results are categorized into the demographic characteristics of the respondents, respondents' knowledge on e-learning, the advantages and disadvantages of e-learning.

4.1 Demographic Characteristics of the Respondents

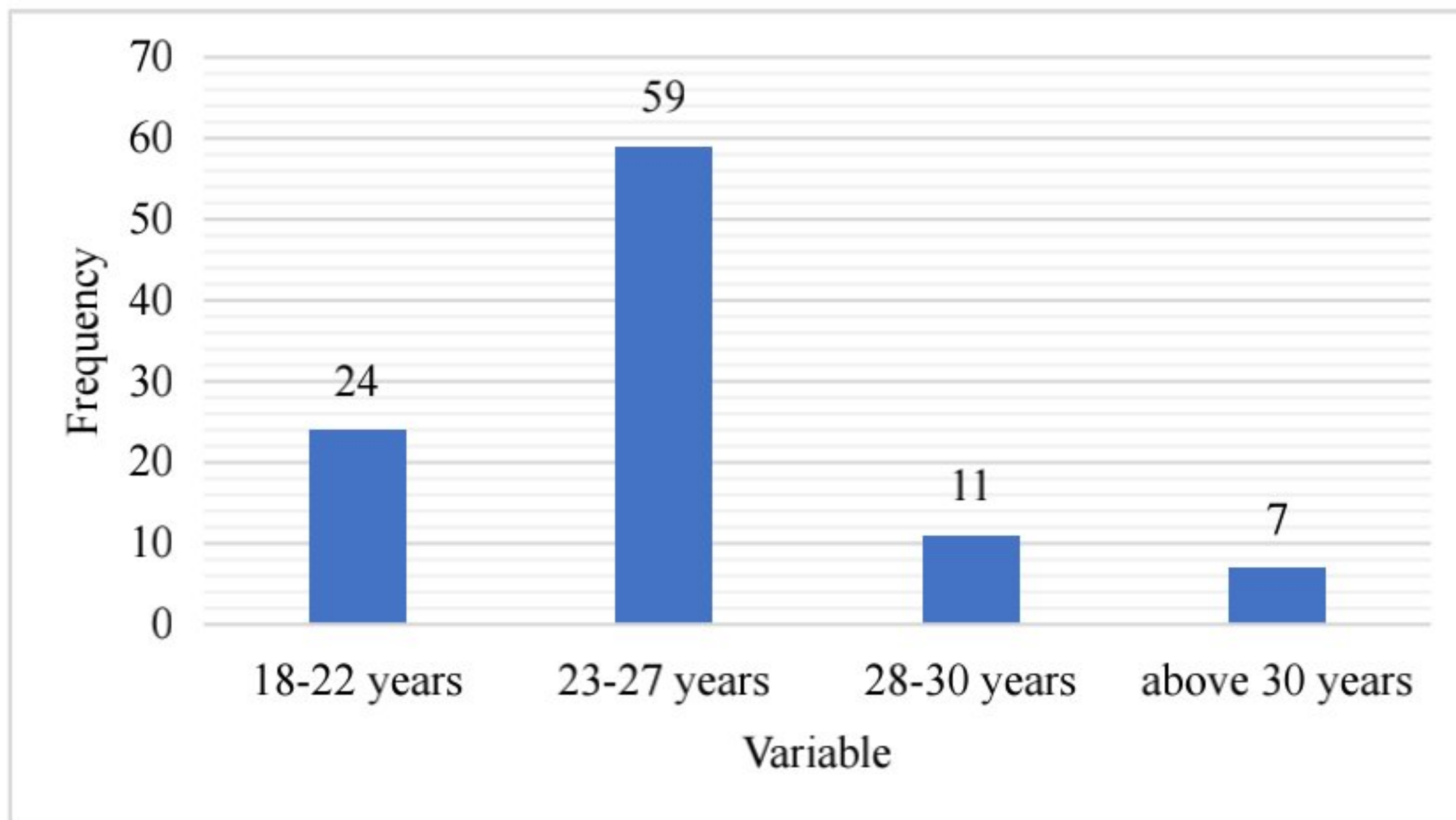


Figure 4. 1: Respondents age

From figure 4.1, majority (59%) of the respondents aged 23-27 followed by 18-22 years (24%), 28-30 years (11%) and above 30 years (7%).

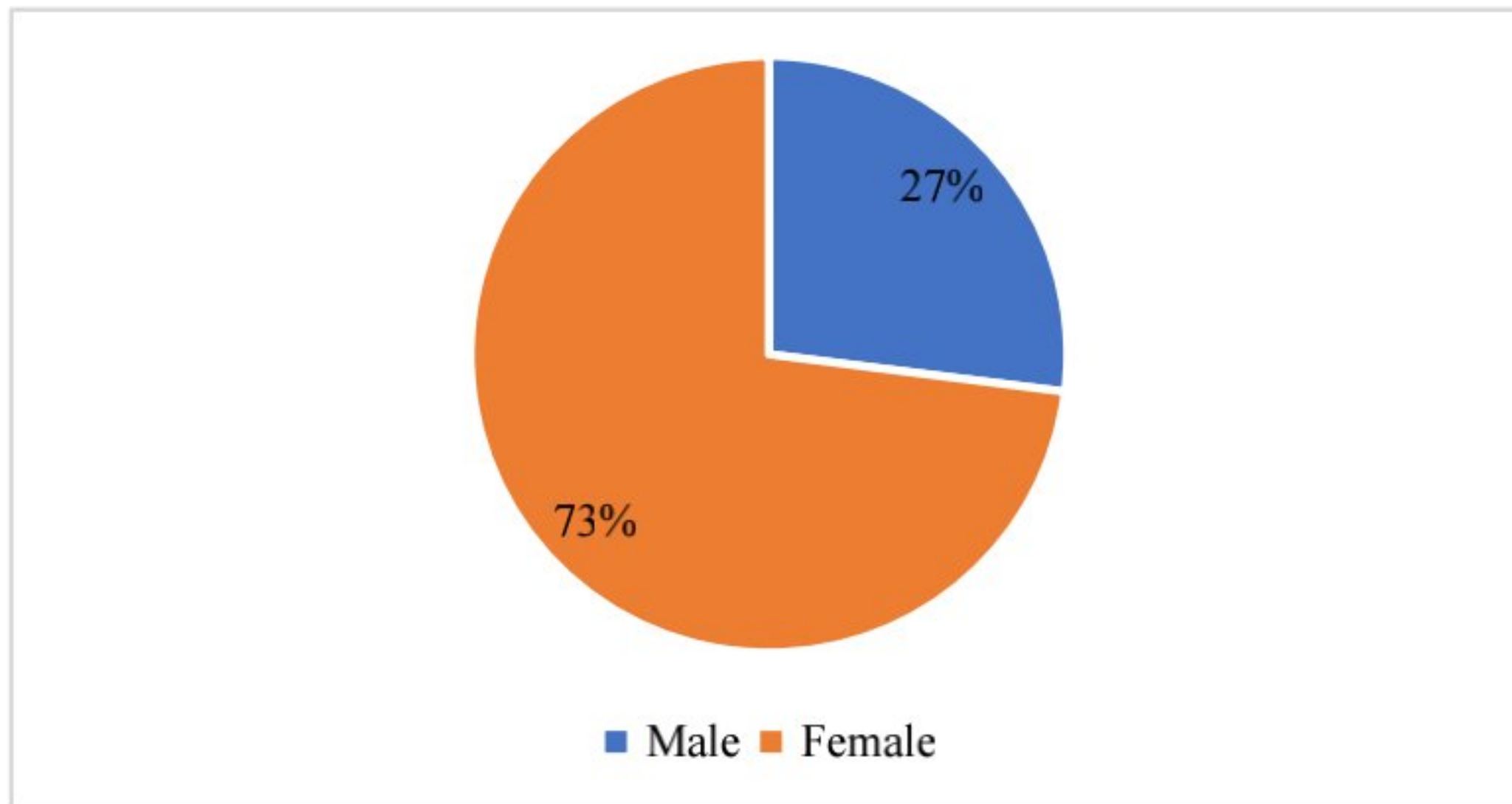


Figure 4. 2: Respondents gender

Figure 4.2 represents gender of respondents. Majority (73%) of the respondents were females while the remaining 27% were males.

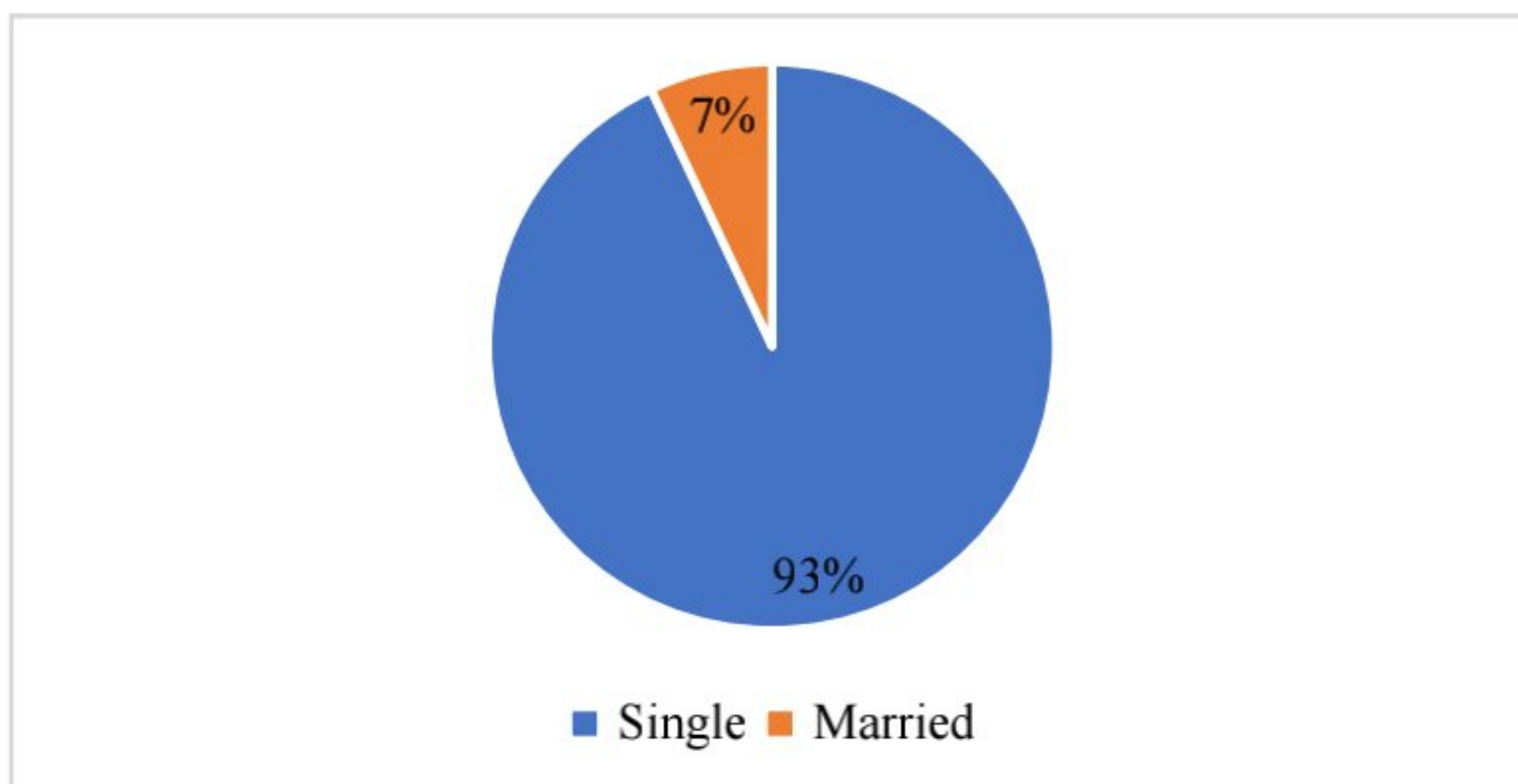


Figure 4. 3: Respondents marital status

Figure 4.3 above shows the distribution of marital statuses of the respondents of this study. According to the findings, majority (93%) of the respondents stated there they were single and remaining (7%) indicated there were married.

4.2 General Knowledge on E-Learning

Table 4. 1: Distribution of respondent’s awareness on E-learning

Variable		Yes	No
Have you ever heard of E-learning?	n	100	0
	%	100	0
Have you ever used any E-learning system before?	n	100	0
	%	100	0

As depicted in table 4.1, all (100%) the respondents have heard of E-Learning and have used E-Learning before.

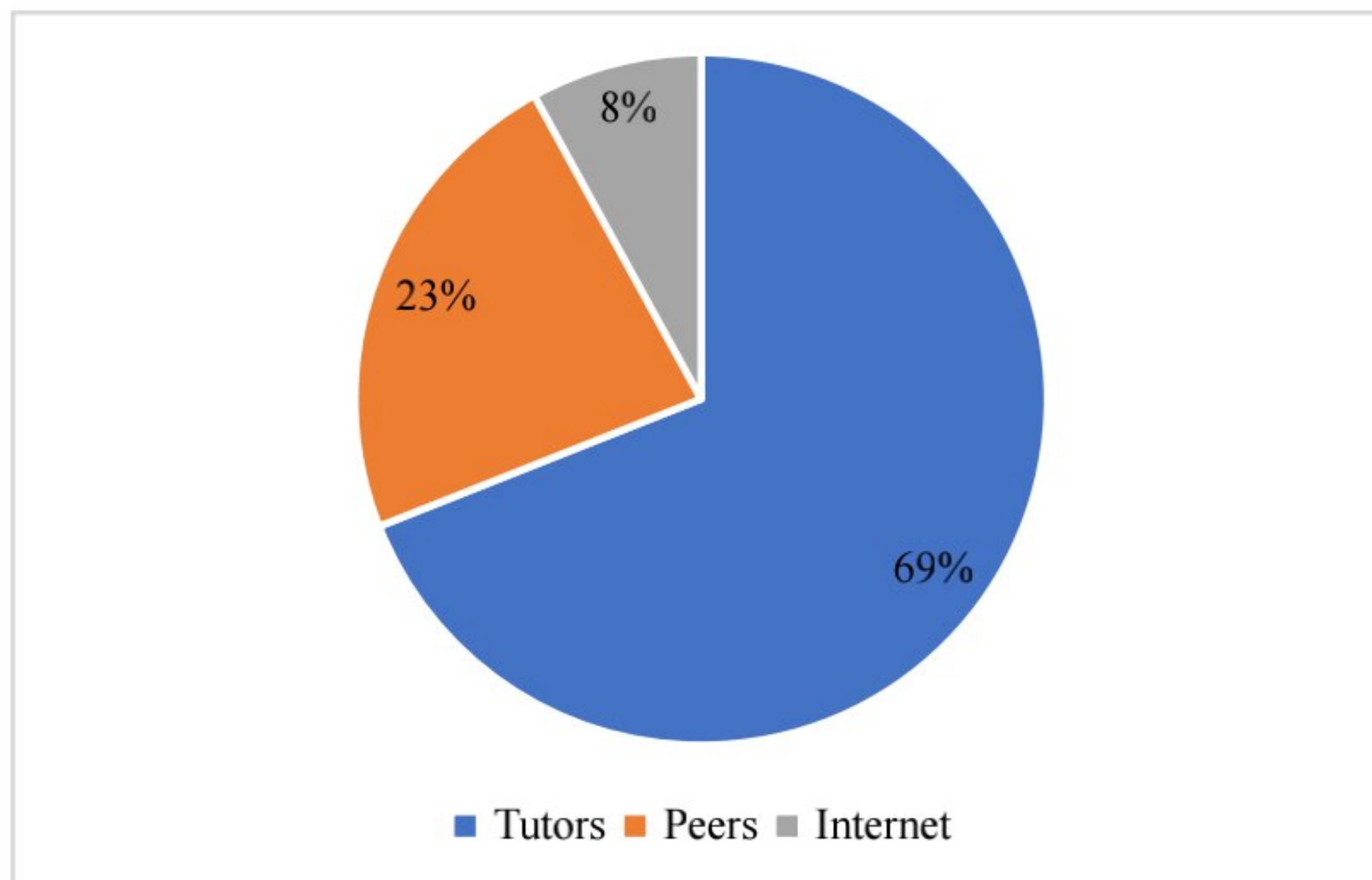


Figure 4. 4: Respondents source of information on E-Learning

Figure 4.4 indicates that majority (69%) of the respondents had their source of information from tutors of HFNMTC, Berekum followed by peers or friends (23%) and online sites and webpages (8%).

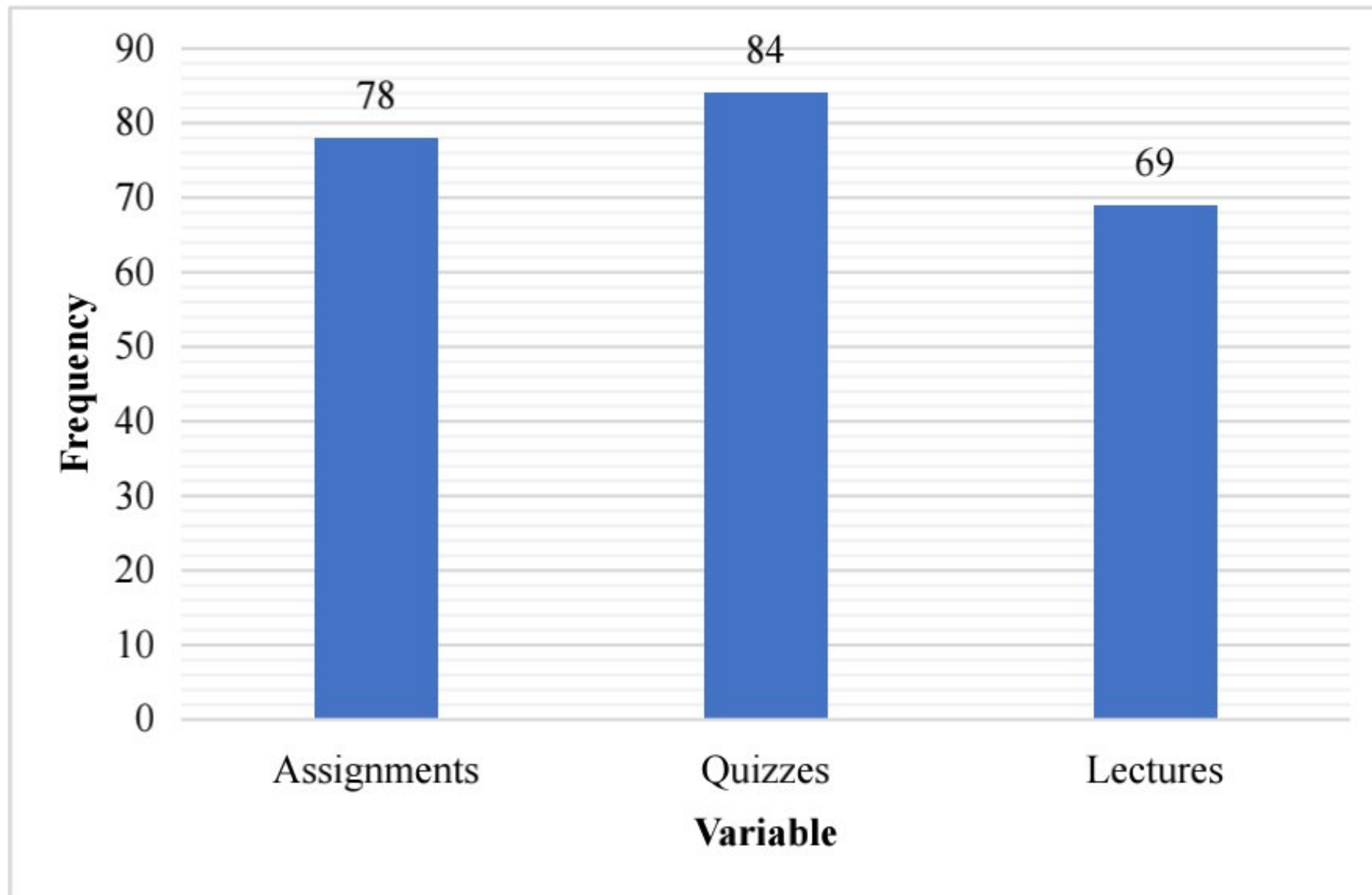


Figure 4. 5: Respondents on the use of E-Learning

Figure 4.5 depicts that majority (84%) of the respondents used E-learning system for quizzes.

Most of them used the E-learning system for assignments (78%) and lectures (69%).

Table 4. 2: Distribution of respondent’s knowledge on e-learning

Variable		True	False	Don't know
E-learning can be explained as the learning conducted via electronic media, typically on the internet	n	98	2	0
	%	98	2	0
E-learning can done on all computers and smartphones that have access to internet connection	n	95	5	0
	%	95	5	0

From table 4.2 almost all (98%) the respondents indicated that it is true that E-learning can be explained as the learning conducted via electronic media, typically on the internet. Majority

(95%) of the respondents cited that it is true that E-learning can be done on all computers and smartphones that have access to internet connection.

4.3 Advantages of E-Learning

Table 4. 3: Respondents on advantages of E-Learning

Variable		Agree	Disagree	Don't know
E-learning is very flexible because students can access learning materials in their own convenient place and time outside the class room.	n	96	1	3
	%	96	1	3
Using e-learning resources saves a great deal of time on finding learning resources	n	82	7	11
	%	82	7	11
E-learning can encourage learners to take an active part in learning	n	74	6	20
	%	74	6	20
E-learning can provide useful and quicker ways of assessing students feedback	n	97	1	2
	%	97	1	2
E-learning can accommodate learners having different learning styles	n	51	23	26
	%	51	23	26
E-learning can enhance independent learning	n	88	10	2
	%	88	10	2
E-learning method provides an opportunity for collaborative learning despite the time and place	n	90	10	0
	%	90	10	0

Table 4.3 illustrates the advantages of e-learning. Majority (96%) of the respondents agreed to that, e-learning is very flexible. Again, a large number of the respondents (82%) agreed that using e-learning resources saves a great deal of time on finding learning resources. Also, most (74%) of the respondents agreed that, e-learning can encourage learners to take an active part in learning. A vast majority (97%), of the respondents also agreed to the fact that, e-

learning can provide useful and quicker ways of assessing students feedback. Over half (51%) of the respondents agreed that, e-learning can accommodate learners having different learning styles, 23% of them disagreed while 26% had no knowledge on that. Majority (88%) of the respondents were in agreement that, e-learning can enhance independent learning. A significant (90%) of the respondents believed that, E-learning method provides an opportunity for collaborative learning despite the time.

4.4 Disadvantages of E-Learning

Table 4. 4: Respondents on disadvantages of E-Learning

Variable		Agree	Disagree	Don't know
Internet connectivity is a major problem in the environment of E-learning.	n	100	0	0
	%	100	0	0
Focus more on theory than practical	n	92	8	0
	%	92	8	0
Cheating is unavoidable	n	22	76	2
	%	22	76	2
There is lack of social interactions physically	n	100	0	0
	%	100	0	0
Is expensive as compared to the traditional means of teaching and learning	n	43	54	3
	%	43	54	3

Table 4.4 indicates the disadvantages of e-learning system. All (100%) of the respondents agreed to the fact that, unstable internet connectivity is a major problem in the environment of e-learning. Majority (92%) of the respondents believed that, e-learning system mostly focus on theory than practical. Majority of the respondents (76%) disagreed to the assertion that, cheating is unavoidable with e-learning system while 22% of them agreed to it that, cheating while using e-learning systems in school is unavoidable. Furthermore, all (100%) of

the respondents agreed to the assertion that, there is lack of social interactions physically. In the view of cost, majority (54%) of them disagreed to the assertion that, e-learning is expensive as compared to the traditional means of teaching and learning.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

5.0 Introduction

This chapter presents the discussion of the findings of the studies as presented in the previous chapter. The findings of the study are digested and compared with the findings of similar studies by other scholars and students on the subject of E-learning. Also, in this chapter, conclusion of the whole study is made based on the specific objectives and the findings of the study and then recommendations are made based on the findings.

5.1 Discussion.

E-learning is becoming the future of academics across the world. Any institution that want to catch up with the future has implemented the e-learning system and making good use of it and those who haven't are yet to implement the system.

5.1.1 General Knowledge on E-learning

The present study found that all (100%) the respondents have heard of E-Learning and have used E-Learning before. This finding is in agreement with a studies conducted by Yacob et al. (2020), which found high awareness of students towards E-learning usage.

In the current study majority (69%) of the respondents had their source of information from tutors of HFNMTC, Berekum followed by peers or friends (23%) and online sites and webpages (8%). Similarly, a study conducted Bower (2019) found that students' source of information on E-learning were tutors, electronic media and friends.

The present study found that majority (84%) of the respondents used E-learning system for quizzes followed by assignments (78%) and lectures (69%). These findings are in line with a

report by Garcia and Weiss (2020), they reported that many institutions that provide live online classes for their students. Example is the use of zoom conference application.

In the current study almost all (98%) the respondents indicated that it is true that E-learning can be explained as the learning conducted via electronic media, typically on the internet. Majority (95%) of the respondents cited that it is true that E-learning can done on all computers and smartphones that have access to internet connection. Correspondingly, Cidral et al. (2018) reported that E-learning is a learning system based on formalised teaching but the help of electronic resources.

5.1.2 Advantages of E-Learning

In the present study majority (96%) of the respondents agreed to that, e-learning is very flexible. Again, a large number of the respondents (82%) agreed that using e-learning resources saves a great deal of time on finding learning resources. These finding agrees with the studies of Barker & Dickson, (2019) that indicates that, use of e-learning systems is flexible and saves a lot of time.

A significant (90%) of the respondents believed that, E-learning method provides an opportunity for collaborative learning despite the time. Similarly, Addah et al. (2019) found that, e-learning gives independency to online learners.

A vast majority (97%), of the respondents also agreed to the fact that, e-learning can provide useful and quicker ways of assessing students feedback. This is consistent with a study by Al-Rawashdeh et al. (2021), they reported that majority (80%) of the students responded that e-learning increases the possibility of communication and interaction between students and with teacher. Furthermore, 78% students indicate that e-learning enable students to communicate with the teacher by e-mail at any time and any place and provides the subject throughout the day and all days of the week.

5.1.3 Disadvantages of E-learning

All (100%) of the respondents agreed to the fact that, unstable internet connectivity is a major problem in the environment of e-learning. Affirmatively, Allen and Seaman (2019) reported that Despite of the significant advantages of e-learning, students encounter several challenges which ultimately lead towards either limited or negative outcomes. In addition, Motala and Menon (2020) reported that factors that compromised student learning included no network coverage or limited coverage and cost of data.

Furthermore, all (100%) of the respondents agreed to the assertion that, there is lack of social interactions physically. Similarly, Van Schyndel (2019) reported that lack of presence in online courses can result in perceived isolation leading to student dissatisfaction with the learning experience.

5.2 Conclusion

From the study, it can be concluded that the students had an appreciable level of knowledge on the e-learning systems and most of them were able to indicate the advantages and disadvantages of e-learning which shows most of the students have adequate knowledge about the e-learning systems. All the advantages and disadvantages that were suggested to the respondents through the questionnaires we discussed thoroughly and the necessary recommendation were made.

5.3 Recommendation

Bases on the findings of the study and the recommendations that were approved by the respondents, it is believed that when the following recommendations are well noted and taken into consideration, it will yield effective e-learning system which can help improve the academic performance of the students;

1. Learners and lecturers should some have basic Information and Communication Technology knowledge before embarking on E-learning as ascertain by the respondents during the study.
2. There must be establishment of effective internet connectivity in the E-learning environment.
3. There must be development of well secured e-learning portal or system to prevent external manipulation.
4. Learners and lecturers should have some basic IT knowledge before embarking on E-learning.

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APPENDICES

QUESTIONNAIRE

HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BREKUM

How the adoption of e-learning can help improve the academic performance of students?

The purpose of this questionnaire is to find out how the adoption of e-learning in the institution will help improve the academic performance of the students. The researchers are students in this institution, the Holy Family Nursing and Midwifery Training College, Berekum conducting the study for the fulfilment of their requirement for the award of a diploma in General Nursing from the Kwame Nkrumah University of Science and Technology. Your contribution towards the completion of this questionnaire is highly appreciated and information provided will be used only for academic purposes and treated with the utmost confidentiality. Thank you.

Note: Please provide answers to this questionnaire by writing where appropriate and by ticking an option that applies to you.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. **Age**

18-22

23-27

28-30

Above 30

2. **Sex**

Male

Female

3. **Marital status**

Single

Married

SECTION B: GENERAL KNOWLEDGE ON E-LEARNING

4. Have you ever heard of E-learning?

YES **NO**

5. **If yes, how did you hear it?**

From Tutors of HFNMTC

Peers or Friends

Online sites and webpages

Others:
.....
.....
.....

6. Have you ever used any e-learning system before?

YES **NO**

7. If yes, what was it meant for?.....

Please tick your answer.

Numbers	Knowledge on E-learning	True	False	Don't know
8.	E-learning can be explained as the learning conducted via electronic media, typically on the internet			
9.	E-learning can done on all computers and smartphones that have access to internet connection			

SECTION C: ADVANTAGES OF E-LEARNING

Please think about and read each statement carefully and tick to make a choice

Numbers	Advantages of e-learning	Agree	Disagree	Don't know
10.	E-learning if very flexible because students can access learning materials in their own convenient place and time outside the class room.			
11.	Using e-learning resources saves a great deal of time on finding learning resources			
12.	E-learning can encourage learners to take an active part in learning			
13.	E-learning can provide useful and quicker ways of assessing students feedback			
14.	E-learning can accommodate learners having different learning styles			
15.	E-learning can enhance independent learning			
16.	E-learning method provides an opportunity for collaborative learning despite the time and place			

SECTION D: DISADVANTAGES OF E-LEARNING

Please think about and read each statement carefully and tick to make a choice

Numbers	Disadvantages of e-learning	Agree	Disagree	Don't know
17.	Internet connectivity is a major problem in the environment of elearning.			
18.	Focus more on theory than practical			
19.	Cheating is unavoidable			
20.	There is lack of social interactions physically.			
21.	Is expensive as compared to the traditional means of teaching and learning			

**HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE
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ur Ref.

ur Ref.

February 7, 2023

Date

Grace Asantewaa
Holy Family NMTC
Post Office Box 21
Berekum

Dear Ms. Asantewaa

PERMISSION TO CONDUCT RESEARCH

With reference to your Memorandum dated January 30, 2023, I write to notify you that the students listed below have been granted permission to conduct their research in the College on the topic 'How the adoption of E-Learning can help improve the Academic Performance of students of Holy Family Nursing and Midwifery Training College, Berekum'

1. Adams Mariam
2. Acheampong Bemah Rebecca

Thank you.

Yours sincerely

**PRINCIPAL
HOLY FAMILY NURSING AND
MIDWIFERY TRAINING COLLEGE
BEREKUM**

Monica Nkrumah (FGCNM)
Principal