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THE EFFECTIVENESS OF ONLINE LEARNING: A CASE OF GIJ STUDENTS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF

MASTER OF ARTS IN PUBLIC RELATIONS

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DECEMBER, 2021

DECLARATION

CANDIDATE'S DECLARATION

I hereby declare that this dissertation is the result of my own research and that no part of it has been presented for another award in this institution or elsewhere.

Gloria Ayinbono Amoah

15/12/2021

Date

SUPERVISOR'S DECLARATION

I hereby declare that I supervised this dissertation in accordance with the guidelines on the supervision of research works as laid down by the Ghana Institute of Journalism.

Dr. Solace Asafo ~~(PhD)~~

15/12/2021

Date

DEDICATION

I dedicate this work to the Almighty God and my parents for their selfless support.

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Abbreviations

Abbreviation	Meaning
GIJ	Ghana Institute of Journalism
LMS	Learning Management System
UNESCO	United Nations Educational Scientific Cultural Organisation
COVID	Coronavirus disease
GIMPA	Ghana Institute of Management and Public Administration

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ABSTRACT

The Face-to-Face mode of learning was prevalent in times before the ascent of COVID-19. Research revealed that at least 3 in 10 students have been enrolled in one or more online learning programs before COVID-19. The recent pandemic has seen this change from 3 in 10 to all students wherever, partaking in online learning. One that most of them beforehand had little to no knowledge about. This thesis was written to assess this issue of abrupt change in the system learning, from the traditional and familiar face to face mode of delivery to a somewhat strange and unfamiliar online mode of learning that also presents new problems and challenges to students at the Ghana Institute of Journalism. The objectives sought to measure the efficiency, accessibility, affordability, and performance of online learning in GIJ. Data were collected from 50 students at the Ghana Institute of Journalism. From the analysis done, findings suggest that online learning is more expensive compared to traditional learning, while the accessibility of online learning greatly depends on location, internet connectivity and devices available. Additionally, while students were of the view that attendance to online lectures had improved, responses indicate that lecturers need to be trained on how to use the online platforms to deliver lectures effectively to facilitate the overall learning experience.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Face-to-Face learning has been the most popular form of learning in Ghana until recently. With the advent of C0VID-19, a lot of schools decided to migrate online through a lot of online learning platforms. GIJ for instance chose to use Zoom, Google classroom, the LMS for teaching and learning.

However, online learning is just one type of "distance learning" the umbrella term for any learning that takes place across distance and not in a traditional classroom (Stern 2005). According to Abernathy (2000), online learning is the acquisition of knowledge that takes place through electronic technologies and media. Online learning, or virtual classes offered over the internet, is contrasted with traditional courses taken in a brick-and-mortar school building. It is the newest development in distance education that began in mid-1990s with the spread of the internet and the World Wide Web. Learner experience is typically asynchronous but may also incorporate synchronous elements. Most institutions utilize a Learning Management System for the administration of online courses. As theories of distance education evolve, digital technologies to support learning and pedagogy continue to transform as well. Online learning is a form of distance learning or distance education, which has been a part of the American education system, and it has become the largest sector of distance learning in recent years (Bates 2016). Online learning is any form of learning conducted partly or wholly over the internet (Mathes 2020).

In this study, I define online learning as any form of learning that is supported by the internet through various online learning platforms such as Google Classroom and Learning Management Systems. Due to the pandemic, there has been a tremendous rise in online learning

across the country. It is essential to know how effective learning has been in online learning versus Face-to-Face learning.

Oxford dictionary defines effectiveness as the degree to which something is successful in producing the desired result. Cambridge defines the quality of being successful in achieving what is wanted. Dictionary.com defines effectiveness as adequate to accomplish a purpose; producing the intended or expected result. Effectiveness is also the degree to which objectives are achieved and the extent to which targeted problems are solved and is determined without reference to costs (IGI 2021). This can also be defined as the measure of the match between stated goals and their achievement (Aldridge and Fraser 2003). This thesis seeks to measure the effectiveness of online learning by measuring students' perception of its effectiveness: cost, time, and the quality of the teaching and learning process.

Before the outbreak of covid-19, online learning was experiencing modest yet steady growth. The National Center for Education Statistics states that 34.7 percent of college students were enrolled in at least one online course or the other in 2018, compared to 33.1 percent in 2017. Which was less than 2 percent. Schools like Princeton, Harvard, Yale and the University of Massachusetts already had online courses pre COVID and this was done with the aid of popular sites which included Zoom, Microsoft Teams and Learning Management Systems. When the pandemic hit, schools had to immediately switch from traditional face to face to online classes. A report from UNESCO in 2020, states that 191 countries in the world (98%) of the global student population switched to online lessons (UNESCO 2020). This time even the logical thinkers and traditionalists chose to change to internet learning strategies as they could not offer face to face. In Africa, schools like the University of Cape Town, the University of Johannesburg and Stellenbosch University among others practised online learning pre COVID. For example, the University of Johannesburg offers online learning using WordPress and Laravel. In Ghana, a lot of schools were already into online learning before COVID-19.

GIMPA among many others started online learning in 2015 with the aid of MOODLE an online learning platform. Which has been active since 2015. Modular Object-Oriented Dynamic Learning Environment (MOODLE) was founded and developed by Martin Douglamas in 2002, it was designed to provide educators, administrators, and learners with an open, robust, secure, and free platform to create and deliver personalized learning environments.

The Ghana Institute of Journalism, established in 1959, had maintained the traditional Face-to-Face method of teaching. Things changed in 2020 when a government's directive closed all schools because of COVID-19 forcing them to migrate online. As a result of the pandemic, the management of the Ghana Institute of Journalism set up a committee to find alternative ways education could be delivered to the student body other than face to face. The Moodle Functionality Committee led by Dr. Stanley Semarco set up GIJ's first Learning Management System to aid in lecture delivery and assignment administration. So far, the transition has improved since its inception to date.

GIJ aimed to blend online and face to face in course delivery but due to certain circumstances, GIJ does more online than Face to face. This is known as blended learning which the online Oxford dictionary defines as a style of education in which students learn via electronic and online media as well as traditional face to face learning.

1.2 Problem Statement

Globally, online learning is now used in several institutions as a means of furthering studies due to the rise of the novel corona pandemic (Aristovnik et al. 2020). In Ghana, several institutions have resorted to online learning as a way of pursuing further and higher academics and to protect students and faculty against the spread of the deadly virus. Emerging challenges

to online learning in Ghana include internet stability and students' inability to possess smart devices like phones, tablets and personal computers that can enable them to join the various online platforms to pursue their academics.

GIJ is no different from other educational institutions in Ghana. GIJ launched its online learning in 2020. So far, there have been mixed views from GIJ students concerning how effective the Online Learning experience has been.

Looking at several institutions in the modern world, efforts are being made to provide the students with the necessary equipment to be able to have a stress-free online experience. Several homes have access to 24-hour uninterrupted power and internet supply, and this makes the online session an enjoyable one.

This study, therefore, seeks to find out how effective online learning is from the views of students at the Ghana Institute of Journalism to realize if all reported findings from sourced literatures are in line with what happens in GIJ.

1.3 Objectives

1. To measure the efficiency of GIJ online teaching and learning process.
2. To determine whether GIJ online learning platforms are accessible to students.
3. To measure the affordability of GIJ online learning processs.
4. To determine whether online learning improved students' attendance and performance

1.4 Research Questions

1. What are students' views of the delivery of lessons by lecturers?

2. How accessible is the GIJ online learning system to students?
3. How challenging has adapting to online learning been to students?
4. How affordable is online learning to students?
5. How does online learning affect student attendance and performance?

1.5 Scope of the Study

This study assesses the issues and challenges online students face at the Ghana Institute of Journalism.

1.6 Significance of the Study

Research has observed that students who took all or part of their course online did better than those who participated in Face-to-Face lectures (Aristovnik et al. 2020). Interactive and more instructor-directed than face to face studies.

A further review proved that the effectiveness of online learning approaches a wider content and different learner types. From research findings, online learning did not affect student learning outcomes. Online education could transform the educational system by broadening educational opportunities, transforming student populations, and encouraging the development of pedagogical methods, making learning more reliable, efficient, and easier for both lecturers and students. Though our research questions elaborate on online learning either pure or blended, it is recognized that various factors can affect the direction and size of differences in the performance of students when online and face to face learning conditions are compared. Online learning opportunities differ in terms of certain keys that are assessed into (home, informal, classroom), the nature of the content and technology involved. A review by (Aristovnik et al. 2020; Gegenfurtner and Ebner 2019; Schmid et al. 2014; Zulfikar et al. 2019)

informed the development of a conceptual framework for the current meta-analysis. The framework does not only include online learning practices but conditions under which the study was conducted.

1.7 Organisation of the Study

The research is organized into five chapters. Chapter one presents the general introduction, the problem statement, the objectives, the research questions, the scope and limitation of the study and the significance of the study. The second chapter deals with reviewing existing literature that primarily deals with discussion and reviews of literature related to the concepts of research. Chapter three presents the research procedure. It contains research method selection, case study design, discussion of validity and reliability issues and the method of data analysis. This chapter also presents the profile of the case study institution. The fourth chapter comprises compilation, analysis and discussion of data collected from the fieldwork. Chapter five presents the summary of the findings, conclusions, and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Online learning has evolved over the years as technology has opened a world of new possibilities of learning and the old-fashioned way of attending lectures in halls has become one of the alternatives. Online learning has come to stay, and many are taking advantage of it even though it has its downsides which must be considered. The online learning environment gives capabilities and can render services to people all over the world within a short amount of time. Online learning has become possible via the internet and many researchers and educators were intrigued by online studies to enhance and improve student learning outcomes while combating the reduction in resources, particularly in higher education as well as the COVID-19 pandemic (Farinella, Hobbs, and Weeks 2000; Kim and Bonk 2006). In this chapter, the research focuses on existing literature on online studies and research works which other researchers have done to look at online studies and their effectiveness in most institutions and narrowly the Ghana Institute of Journalism. With the set objectives as a guide, this section is intended to identify the various literature on the keywords of the topic, previous works done, contributions made, general findings and possibly criticisms that may exist keeping in mind the scope of the study. Literature on definitions, concepts, theories, merits, and demerits of online studies presented by various authors will also be reviewed. A directional approach to how online learning is to be done to ensure its effectiveness if found will be considered.

2.2 Overview of Online Studies: Definitions, Concepts and Theories

Online education has grown tremendously over the past ten years. The increased accessibility of the internet and the World Wide Web has created vast opportunities for non-traditional education through this medium (Karber 2003). Online studies have become a necessity as restrictions on movement from one country to the other and within countries as the COVID-19 virus continues to spread. Globally, countries have now resorted to online learning as a means of acquiring and furthering education without meeting face to face or in lecture halls and as such curtailing the spread of the deadly virus. Online learning is a form of distance learning or distance education, which has long been a part of the American education system, and it has become the largest sector of distance learning in recent years (Bartley and Golek 2004; Evans and Haase 2001). Online learning is learning with the help of communication and information technology, especially the web and the internet. Online learning also known as E-learning is the use of electronic media for a variety of learning purposes that range from add-on functions in conventional classrooms to full substitution for the Face-to-Face meetings by online encounters" (Guri-Rosenblit 2005). "E-learning is to take a course online using a modem, wireless, or cable connection to access academic course material from a computer, phone, or handheld device" (Miller et al. 2013). E-learning is "the learning supported by digital electronic tools and media" and m-learning is the "e-learning using mobile devices and wireless transmission" (Sharma and Kitchens 2004). *Though it may seem that online education had its beginnings in the late 1900s, the concept of distance learning first came into practice in the mid-19th century when the U.S. Postal Service was developed. The notion of reliable, long-distance correspondence led to the development and implementation of what was called commercial 'correspondence colleges', where instructional missives would be distributed through the postal service between students and professors. Today, distance education programs have become more sophisticated and accessible due to the proliferation of the web*

and digital technology. Elite institutions around the world now offer open courseware, online degrees, and online classes that are both legitimizing and popularizing the idea of education from a computer. Online education is no longer a trend, but mainstream. Of the 18.2 million students enrolled in higher education in the fall of 2007, 3.9 million (21.4%) were enrolled in at least one online course (Allen and Seaman 2008). By fall 2010, the number of higher education students had risen to 21 million, and 6.1 million of those (29.0%) were enrolled in an online course (Allen and Seaman 2011). This represents an 18.8% average increase in the number of students enrolled in online education during that period. Between 2010 and 2012, the growth rate levelled out somewhat, showing an average annual growth of roughly 4.9%. Still, as of fall 2012, of 20.6 million higher education students, 6.7 million (32.5%) enrolled in online courses (Allen and Seaman 2013). That represents a staggering one-third of higher education students enrolled in online courses. With enrollments in online courses still growing and the realization that they are here to stay, educational institutions are challenged to meet the demand while continuing to provide quality education. Indeed, more than two-thirds (69.1%) of chief academic leaders indicate that online learning is critical to an academic institution's long-term strategy (Allen & Seaman, 2013). Online education is defined as a form of distance education that uses computers and the Internet as the delivery mechanism, with at least 80% of the course content delivered online (Shelton and Saltsman 2005). The use of computers to educate arose in the corporate arena during the 1980s as companies used computer-based programs to train new employees (Rudestam and Schoenholtz-Read 2009). Online educational programs emerged in 1989 when the University of Phoenix began using CompuServe, one of the first consumer online services. Shortly thereafter, in 1991, the World Wide Web (Web) was unveiled, and the University of Phoenix became one of the first to offer online education programs through the Internet. Although a for-profit institution, the University of Phoenix's move toward the online educational marketplace prompted many reputable institutions and not-

for-profit colleges and universities to follow suit (Carlson and Carnevale 2001). The Alfred P. Sloan Foundation, a respectable philanthropic, not-for-profit grant-making institution, developed the Asynchronous Learning Networks (ALN) in 1992 to explore educational alternatives for those unable to attend traditional classes in the classroom (Picciano et al. 2012). As online education continued to grow, the Foundation also began funding institutions that offered online programs to improve the quality of online education. The vision and effectiveness for this new medium of distance education were apparent, so it was only a matter of time before academia entered the market. Universities and colleges began experimenting with online courses in the early to mid-1990s. However, the rapid growth of online education in traditional non-profit institutions did not start until 1998 (Arenson 1998). In October of 1998, New York University (NYU), already operating one of the largest continuing education schools in the country, was the first large nonprofit university to create a for-profit online education subsidiary, NYU Online. Western Governors University, a college founded and supported by nineteen state governors, was founded that same fall to make education more accessible. The California Virtual University, a consortium of almost 100 universities and colleges in California with nearly 1,600 online courses, opened in November of 1998 (Arenson, 1998). Several other institutions opened for-profit subsidiaries at about the same time, but many unfortunately did not survive. Even NYU Online, which was believed to be the only institution able to compete with the growing for-profit University of Phoenix, closed its doors in October 2001, along with the University of Maryland's distance education for-profit arm (Carlson & Carnevale, 2001). Surprisingly, that same year, the University of Phoenix's enrollments nearly doubled from 16,000 to 29,000 (Carlson & Carnevale, 2001). By 2002, over 1.6 million postsecondary students were enrolled in online courses, and six years later that number had almost tripled (Allen & Seaman, 2008). However, aside from the University of Phoenix, many fledgling online educational programs started during this time did not survive. Of these, many

were online programs begun by traditional brick-and-mortar institutions. Numerous factors influenced the demise of these online institutions, but perhaps the most significant was the lack of understanding of online pedagogy and online learning styles, as well as the lack of faculty buy-in for online education (Marcus 2004). Online education is a different medium for teaching and learning, and therefore requires a different pedagogy (Bernard et al. 2004). Further, faculty were, and still are, an integral part of any university's success, and many faculty members at the traditional universities did not embrace online education due to concerns regarding the quality of education being provided through this medium (Shelton & Saltsman, 2005). As many traditional universities entered the online marketplace, they did so without the full support of the faculty, ultimately impacting the sustainability of their online programs (Carlson & Carnevale, 2001). As Bates (2000) stated, "Presidents may dream visions and vice presidents may design plans, and deans and department heads may try to implement them, but without the support of the faculty members, nothing will change" (p. 95). Another factor that led to the closure of many of the institutions providing online education was the failure on the part of educators to recognize that differences exist between teaching and learning in the online and Face-to-Face environments (Arenson, 1998). Many professors merely provided the online students with lecture notes from the traditional classroom, with the assumption that this would suffice. However, research has found that a well-designed, documented, and structured online course that facilitates active engagement with the students is essential for success (Dykman and Davis 2008; Palmer, Holt, and Bray 2008). Carlson and Carnevale (2001) contend that online pedagogy is not the only reason for the initial failure, but rather the lack of institutional support for the faculty and lack of leadership with an understanding of online education were also to blame. According to Shelton and Saltsman (2005), the most common complaints from faculty regarding online education are

- The lack of understanding of this method of teaching

- The lack of institutional support
- Fear that the quality of education in the online environment suffers.

In sum, in 1998, as nonprofit institutions sought to increase profits by entering into the online marketplace through the creation of subsidiaries and partnerships, they ignored the fundamental principles of the quality of education, institutional governance, and project planning. Bok (2003) argued that new technologies harness great power with the potential to improve teaching and learning; yet should universities continue to seek a profit and commercialize education, the credibility and integrity of the institution of higher education will be threatened. He further contends that universities must invest in researching new technologies and use them to improve the quality of education we provide. n. Online education is the fastest growing form of distance education and is valued at both traditional and non-traditional colleges and universities. In 2011, 65% of institutions reported that online learning was critical to their long-term strategic plans (Allen & Seaman, 2011). Online education is no longer simply a trend. Online education has not only changed the landscape for distance education but has greatly impacted higher education as a whole across the globe. We have seen the proliferation of for-profit institutions of higher education, the commercialization of education by traditional non-profit institutions, and a continued increase in the demand for online education (Allen & Seaman, 2011). The traditional brick-and-mortar institution has existed for centuries; its current infrastructure has been in place for decades, and faculty, in the traditional classroom, have taught very much as they did fifty years ago (Stark 2003). This is changing. Sener (2012), argues, “education has been, is being, and will continue to be cyberized” Sener contends that the first era of online education has been devoted to providing access, while the second era has the potential to improve the quality of education, not just online education. It is not about changing the knowledge being conveyed, but merely shifting the way it is “transmitted, preserved, and generated” (Sener, 2012). An increasing number of

courses are being situated and studied online, whether for convenience or the affordances offered by online learning. Major goals and uses of online dialogue include promoting critical inquiry and engaging in Computer-Supported Collaborative Learning (Xin and Feenberg 2007). Xin and Feenberg (2007) suggest further investigation into the understanding of the dynamics of learning and participating in asynchronous forums. A theory of online learning can be seen in the concept that the computer and internet are used to deliver course content in Technology Enhanced Learning Environments and to facilitate communication and assessment using Synchronous and Asynchronous Communication: Tools for Collaboration, primarily asynchronous methods. It is largely student-centred requiring personal engagement, a high level of authorship, peer review and mediation. Teachers act as mediators and facilitators in a somewhat shared role in an environment that is based on:

- Knowledge Building/construction, through critical inquiry
- Collaborative Learning and problem solving involve discussion, clarification, and debate
- A knowledge forum that is open and decentralized but also directed at times.

Persons interact with the same content at different times and locations (distance) and can track thoughts or ideas and how they develop and change, based on what/ why that change was made. Tasks need to be open enough to facilitate personal constructive engagement; provide a narrative vs. propositional support structure and place the locus of control in the hands of the user. Learners thus become more intrinsically motivated, independent, and critical thinkers

2.3 Online Learning and Students' Performance

School closures in response to the COVID-19 pandemic have shed light on several issues affecting access to education. COVID19 is soaring due to which the huge number of children,

adults, and youths cannot attend schools and colleges (Huang et al. 2020). Lah and Botelho (2012) contended that the effect of school closing on students' performance is hazy. Similarly, school closing may also affect students because of disruption of teacher and students' networks, leading to poor performance. Bridge (2020) reported that schools and colleges are moving towards educational technologies for student learning to avoid a strain during the pandemic season. Hence, the present study's objective is to develop and test a conceptual model of students' satisfaction with online teaching during COVID-19, where both students and teachers have no other option than to use the online platform uninterrupted learning and teaching. Many comparative studies have been carried out to prove the point to explore whether Face-to-Face or traditional teaching methods are more productive or whether online or hybrid learning is better (González-Gómez, Jeong, and Rodríguez 2016; Lockman and Schirmer 2020). Results of the studies show that the students perform much better in online learning than in traditional learning. Henriksen, Creely and Henderson (2020) highlighted the problems faced by educators while shifting from offline to online mode of teaching. Since the inception of online studies around the world, Online studies has increased enrolment significantly and a two-district survey appointed by the Sloan Consortium. Picciano and Seaman (2007) produced estimates that 700,000 K–12 public school students took online courses in 2005–2006, and more than a million students did so in 2007–2008: a 43% increase in just 2 years. Christensen, Horn and Johnson (2008) predicted that by 2019, one half of all U.S. high school enrolments will be online and indicating the students are showing interest in online studies as compared to Face-to-Face studies. One of the most comprehensive meta-analyses on distance education was conducted by Bernard and his colleagues (Bernard et al. 2004). This study examined 699 independent effect sizes from 232 studies published from 1985 to 2001, comparing distance education with classroom instruction for a variety of learners, from young children to adults, on measures of achievement, attitudes, and course completion. The meta-analysis found an

overall effect size close to zero for student achievement (g+ = 0.01). As well-known, asynchronous distance education had a small but significant positive effect (g+ = 0.05) on student achievement, whereas synchronous distance education had a small but significant negative effect (g+ = -0.10). Bernard et al. found also that a substantial proportion of the variability in effect sizes for student achievement and attitude outcomes was accounted for by the studies' research methodology. In online learning, teachers provide more words of motivation, affirmation or validation of student contributions compared to teachers in face-to face classes according to Wisneski, Ozogul and Bichelmeyer (2015). Furthermore, online access to higher education has allowed working professionals, military personnel in isolated locations and those living in rural areas to earn degrees that were wholly inaccessible just a few years ago (Grenzky and Maitland 2001).

2.4 The Perceptual Measure for Successful Online Studies

	KEY FACTORS MANIFESTING SUCCESSFUL ONLINE STUDIES
A1	**Cognitive factors**
A2	**Social factors**
A3	**The role of the instructor**
A4	**Self-regulated Learning Skills**

A5	**The Platforms Ease of Use**

Figure 1: Key Factors Manifesting Successful Online Studies

The first and most vital element, cognitive presence, refers to cognitive engagement. Critical and reflective discourses play an important role here. Students engage in brainstorming, questioning, exchanging information, connecting ideas, and many other socio-cognitive processes (Garrison, Anderson, and Archer 2001). It is evident that in a successful community of inquiry there is an interaction between cognitive presence and social presence. It can be argued that a higher level of social presence can lead to a higher level of cognitive presence (Garrison, Anderson, & Archer, 2001). The social presence construct is based on the concept of immediacy. This refers to the communication behaviours that enhance closeness to each other. Social presence can be categorized into three different categories: affective, interactive, and cohesive responses. Some ways to express affection in an online learning environment are the use of emoticons, humour, and self-disclosure. Actions such as referring to others' messages, asking questions, and expressing agreement fall under interactive responses. Examples of cohesive responses are calling other participants by name, using inclusive pronouns ('we', 'us', 'our'), and engaging in communication that serves a purely social function (Rourke et al. 1999). Teaching presence consists of activities such as design and administration, facilitating discourse, and direct instruction. Teachers must decide on the curriculum, think of instructional methods, present content and questions, and encourage students to participate in discussions (Anderson et al. 2001). Another factor that is very critical in the success of online studies is self-regulated learning skills. Students with excellent self-regulated learning abilities know how to plan, organize, self-instruct, and self-evaluate. They use metacognition and are intrinsically motivated (Zimmerman and Martinez-Pons 1988). You and Kang (2014) have examined the self-regulated learning process in more detail. They

investigated the role of academic emotions (enjoyment, anxiety, and boredom) in the relationship between perceived academic control and self-regulated learning. Other studies have shown that perceived academic control is an important predictor of academic motivation and performance. In an academic context, being in control means that academic outcomes directly result from a student's efforts. Online students with higher perceived control are likely to concentrate with more pleasure and are more persistent in their learning (Joo, Joung, and Sim 2011). The results from You and Kang's (2014) study showed that higher perceived control is significantly and positively associated with self-regulated learning. However, this relationship was less strong when students were experiencing negative emotions. So, to promote self-regulated learning, not only should students be able to perceive higher levels of control, but negative emotions such as boredom and anxiety should also be lessened. Finally, the platform should be intuitive and user-friendly. This brings us to the subject of usability. Usability can be defined as the ease of use, or the extent to which a product can be used to achieve specified goals efficiently and effectively (Oztekin, Kong, and Uysal 2010). Technology should facilitate the learning process instead of hindering it, so the learning system must be as easy and user-friendly as possible. In 1990, Nielsen developed a set of usability heuristics. Nowadays, his final ten heuristics are probably still the most-used usability heuristics for user interface design. Perhaps the heuristic that is the most relevant to online learning environments is the visibility of system status, which means that the student should be informed of what is going on. Is the student almost done with a certain module? Which tasks are not completed yet? It could be helpful to show a completion percentage or perhaps a to-do list with tasks that can be checked off. It is also advisable to show notifications when important things are happening, for example when there are announcements or replies on the discussion board. Another important heuristic is user control and freedom (Nielsen 1995). One way to

take care of this is by making sure links to articles or external websites will open in a new window, which allows the user to easily go back to where they were.

2.5 Online Studies Framework

Many institutions have moved away from the traditional way of learning to online studies as a way of acquiring knowledge and curtailing the spread of the virus. And as such most education institution has formed a framework (Aristovnik et al. 2020).

This approach, the negotiated intervention strategy, framed and translated the pedagogical framework into teaching strategies (Jones and Moreland 2004).

This required the researcher to work collaboratively with Adrian to negotiate the design of teaching activities through an interactive process that also responded to issues that emerged in the teaching-learning process. A summary of the intervention teaching activities, as well as the mediating web-based tools adopted in the master's Research Methods course. It is usually conducted three times a year—the summer-school semester, semester A and semester B. Both the summer school and semester A versions of the course are Face-to-Face courses, while the semester B version is conducted online. Typically, 20 students, mostly mid-career professional educators seeking additional postgraduate qualifications, enrol in the course. The course focuses on discussions of mostly qualitative research methodologies and research methods of obtaining data and includes research quality and ethical issues. It consists of four modules (Conceptual Issues, Data Collection Methods, Multiple Research Approaches, and Design and Summary Overview) completed over 12 weeks. The modules are coherently built upon one another to provide students with a holistic view of educational research. Each module involved student participation in weekly online activities and discussions which began on a Monday morning and ended the following Sunday night (Khoo and Cowie 2011).

2.6 Stages in Online Learning

As technology becomes increasingly pervasive, its role in shaping the context of learning continues to evolve. This requires lecturers to reconsider their pedagogic strategies to effectively integrate the use of technology into learning (Fisher and Baird 2005). Research into defining student approaches to learning has led to a range of learning models being proposed and widely adopted. Such models have been largely developed in isolation from advances in the use of information communication technology (ICT) in education (Sadler-Smith and J. Smith 2004). One should note that there are stages involved in carrying out effective online studies which include:

- Access and motivation
- Online socialisation
- Information exchange
- Knowledge construction
- Development

2.7 Merits of Online Studies

Online studies which are popularly used by most institutions to a large extent have their merits. This is very critical and crucial in understanding why most institutions nowadays use online studies as means of furthering education rather than the traditional means of learning. The online learning system, with its range of options and resources, can be personalized in many ways. It is the best way to create a perfect learning environment suited to the needs of each student.

2.7.1 Efficiency

Online learning offers teachers an efficient way to deliver lessons to students. Online learning has several tools such as videos, PDFs, podcasts, and teachers can use all these tools as part of their lesson plans. By extending the lesson plan beyond traditional textbooks to include online resources, teachers can become more efficient educators.

2.7.2 Accessibility of Time and Place

Another advantage of online education is that it allows students to attend classes from any location of their choice. It also allows schools to reach out to a more extensive network of students, instead of being restricted by geographical boundaries. Additionally, online lectures can be recorded, archived, and shared for future reference. This allows students to access the learning material at a time of their comfort. Thus, online learning offers students the accessibility of time and place in education.

2.7.3 Affordability

Another advantage of online learning is reduced financial costs. Online education is far more affordable as compared to physical learning. This is because online learning eliminates the cost points of student transportation, student meals, and most importantly, real estate. Additionally, all the course or study materials are available online, thus creating a paperless learning environment that is more affordable, while also being beneficial to the environment.

2.7.4 Improved Student Attendance

Since online classes can be taken from home or location of choice, there are fewer chances of students missing out on lessons.

2.7.5 Suits a Variety of Learning Styles

Every student has a different learning journey and a different learning style. Some students are visual learners, while some students prefer to learn through audio. Similarly, some students thrive in the classroom, and other students are solo learners who get distracted by large groups.

2.8 Demerits of Online Studies

Online study is a double-edged sword. We cannot address its merits and disregard its demerits as they are equally critical and crucial for this research purpose.

2.8.1 Inability to Focus on Screens

For many students, one of the biggest challenges of online learning is the struggle with focusing on the screen for long periods. With online learning, there is also a greater chance for students to be easily distracted by social media or other sites. Therefore, the teachers must keep their online classes crisp, engaging, and interactive to help students stay focused on the lesson.

2.8.2 Technology Issues

Another key challenge of online classes is internet connectivity. While internet penetration has grown in leaps and bounds over the past few years, in smaller cities and towns, a consistent connection with decent speed is a problem. Without a consistent internet connection for students or teachers, there can be a lack of continuity in learning for the child. This is detrimental to the education process**.**

2.8.3 Sense of Isolation

Students can learn a lot from being in the company of their peers. However, in an online class, there are minimal physical interactions between students and teachers. This often results in a sense of isolation for the students. In this situation, the school must allow for other forms of communication between the students, peers, and teachers. This can include online messages, emails and video conferencing that will allow for Face-to-Face interaction and reduce the sense of isolation.

2.8.4 Teacher Training

Online learning requires teachers to have a basic understanding of using digital forms of learning. However, this is not the case always. Very often, teachers have a very basic understanding of technology. Sometimes, they don’t even have the necessary resources and tools to conduct online classes.

2.8.5 Manage Screen Time

Many parents are concerned about the health hazards of having their children spend so many hours staring at a screen. This increase in screen time is one of the biggest concerns and disadvantages of online learning. Sometimes students also develop bad posture and other physical problems due to staying hunched in front of a screen.

2.9 Ghanaian Online Studies in Perspective

Since the Covid-19 outbreak in Ghana, life has never been the same. Institutions had to navigate the turbulence of the virus to minimize its impact on our student community. In that vein, the most institution had to look at various ways and means by which education can be continued vis a vis curtailing the spread of the deadly virus that has taken a lot of lives. Most educational institutions in Ghana would have been fertile grounds for the spread of the virus due to the orthodox way of teaching thus face to face learning. To prevent this from happening most educational institutions had to migrate from Face-to-Face learning to a more protective way of learning thus online studies to further education likewise prevent the spread of the deadly virus. Online learning is not something the Ghanaian educational system is used to. Several issues may crop up in the event of pursuing studies online as Ghana is not a developed country and still trying to catch up with the modern western world. Notable amongst the issues are internet connectivity, availability of smart devices, easy to use platforms for studying and writing exams amongst others. For this research, we would narrow it down to students in the Ghana Institute of Journalism and their take on how effective online studies is. We would measure how effective and efficient online studies has been in terms of Quality, Affordability and Accessibility.

2.9.1 Quality

The quality of online education has become an increasingly popular topic of discussion following the disruption caused by the COVID-19 pandemic. Over the past two decades, online education has grown considerably and shifted from the margins to become the main source of enrolment in most institutions. For this research, I would define the quality of as why I would choose a particular learning method over the other based on the impact it will make in my life. Quality learning is the goal of any online education program. Quality online learning uses multiple strategies and activities to assess student readiness for, progress in, and mastery of learning outcomes and provides students with feedback about their progress the concept of quality has played an important role in online education debates for decades. Now, as remote learning situations caused by the coronavirus outbreak evolve into more robust online education offerings, the topic has taken on new urgency. There are loads of sources that can help faculty members and instructional design teams create high-quality online learning experiences for students (Drozdowski 2021). Most quality standards for online classes are based on "best practices" identified through experience and research. These standards share the following seven core components for creating an effective environment and facilitating the learning process. They include:

- Learning Objectives
- Assessments
- Course Materials and Activities
- Faculty and Student interaction
- Online Student support
- Technology requirement
- Evaluation and improvement

The work that goes into quality assurance focuses on the student — that includes student success, the student experience, and student satisfaction. According to a Report by Professor Justin Ortagus on thirdway.org, online courses and exclusively online degree programs have the potential to introduce cost efficiencies for institutions and expand access to higher education for many students facing time or location constraints who could not attend college otherwise (Ortagus 2020). Yet the most pressing problem facing proponents of online education is the public's lack of faith in the quality of online courses and these concerns are not unfounded. Despite the growing prevalence of online education in higher education, institutions continue to struggle with how to offer online courses in ways that can reduce costs and increase revenue without harming quality. Many researchers have reported that online students earn lower exam scores and course grades than their Face-to-Face peers enrolled in the same course (Daffin Jr and Jones 2018; Dutton, Dutton, and Perry 2001; Keramidas 2012). Several of those same studies found that Black, Hispanic, and academically underprepared students performed significantly worse in online courses than Face-to-Face courses (Stanley and Zhang 2018). Surprisingly, many colleges and universities have little guidance regarding how to develop and deliver high-quality online courses to improve the short-term outcomes of their online students. Despite compelling evidence suggesting that students perform worse in online courses in the short term, a growing body of research has shown that students who enrol in some online courses may also be more likely to persist and graduate when compared to their peers with similar demographic and academic characteristics (Daffin Jr and Jones 2018). Although hundreds of studies have compared the academic outcomes of Face-to-Face and online students, prior work rarely considers the design of the online courses included in the study. For instance, one experimental study that reported that online instruction has a negative impact on students' average exam scores did not attempt to offer a high-quality online course and merely posted a weekly recording of the in-person class to the course

management software, So, what do high-quality online courses look like in practice? High-quality online courses:

- Are guided by instructional designers, who are in-house specialists with training in the development of online courses and the process of online teaching and learning;
- Use shorter videos (i.e., 10-12 minutes) rather than recordings of long Face-to-Face lectures—any videos longer than 15 minutes should be broken into shorter segments;
- Prioritize faculty-student interaction by providing ongoing and varied feedback, including purposeful discussions to facilitate student learning, limiting each class section to no more than 25 students, and incorporating other activities designed to foster faculty presence and student engagement;
- Identify actionable weekly learning outcomes;
- Remain proactive to ensure students manage their time effectively and take advantage of the institutional support and services made available to them; and
- Evaluate the design and delivery of the online course and incorporate feedback from students into future iterations of the course (Puzziferro and Shelton 2008).

The relevance of the above is that the current study measures the quality of online studies using variables like audio/visual materials used, interactions between lectures and student and lecture slides. The question of the relative efficacy of online and Face-to-Face instruction needs to be revisited in light of the advent of fifth-generation distance learning and today's online learning applications, which can take advantage of a wide range of web resources, including web-based applications (e.g., audio/video streaming, learning management systems, 3D simulations and visualizations, multiuser games) and new collaboration and communication technologies (e.g., Internet telephony, chat, wikis, blogs, screen sharing, shared graphical whiteboards). Learning

that is supported by these Internet-based tools and resources is a far cry from the televised broadcasts and videoconferencing that characterized earlier generations of distance education. Online learning proponents suggest that these newer technologies support learning that is not just as good as, but better than, conventional classroom instruction (Smith 2009; Zhao et al. 2012).

2.9.2 Audio Materials

Merriam-Webster dictionary defines audio as relating to acoustic, mechanical, or electrical frequencies corresponding to normally audible sound waves which are of frequencies approximately from 15 to 20,000 hertz. It can also be defined as the section of television or motion-picture equipment that deals with sound. Audio can also be defined as anything related to sound in terms of receiving, transmitting or reproducing or its specific frequency. An example of something audio is a stereo. In the case of online studies in Ghana Institute of Journalism lecturers sometimes record lecture sessions in audio format which are loaded onto the platform to be accessed by the students. Students sometimes face problems with regards to audio not being able to play on their devices due to the format in which they are saved, and sometimes the inability of students to download the slides because of the nature of the mobile devices they use. In some cases, due to background noises, students may be unable to hear clearly what the lecturer is teaching and downloaded audio slides may be inaudible.

2.9.3 Video Materials

According to the Cambridge Dictionary, video is a recording of moving pictures and sound, especially as a digital file, DVD, etc. Video can also be defined as a series of recorded images

that are shown on television or viewed on a screen. Lecturers sometimes record lecture sessions in video format for students to download on online platforms for their studies. Video may sometimes be downloaded in a format that makes it inaccessible. Students may sometimes be watching the lecture videos and glitches may occur making it impossible for the student to get a better grip of what the lecturer meant the communicate. Instances of having a video slide with only motion coupled with no audio also exist.

2.9.4 Interactions Between Lecturers and Students

Interaction occurs between the lecturers and students on online platforms to make teaching and learning effectively. This interaction may take place on platforms like zoom, Microsoft teams and skype. A student may lack the necessary devices that can give him/her the access to join these various platforms and interact with the lecturer as well as other students. Devices like portable laptops and smart devices like phones and tablets are used to ensure a better online interaction experience but, in this case, students are sometimes unable to because they don't have access to these devices. The interaction may sometimes occur via email where students send electronic mails to lecturers and expect feedback from them. In some instances, poor network connection makes this means of interaction also impossible.

2.9.5 Lecture Notes, Handouts and Slides

Lectures slides are used as means of teaching and learning and these also come in various formats. Most students prefer lecture slides compared to audio/visual because the problems of inaudibility and noise do not exist. A problem that may exist may be due to the students being inaccessible to smart devices to download these lecture slides in the right formats for their

studies (Sajjacholapunt and Joy 2015). There has been an ongoing argument as to why students want lecture slides from lecturers. Researchers have discovered that students that have access to lecture slides have several benefits. The students take fewer notes during lectures, need less time to prepare for tests, and perform better in tests (Marsh and Sink 2010). Also, lecturers who provide handouts and other forms of course materials make it easier for their students to catch up with online classes that were missed (Simamora et al. 2020; Zulfikar et al. 2019).

2.9.6 Affordability

In general, online learning is a more affordable option, as you will get a high-quality education at a much lower cost due to the lower overhead needed to operate these programs (Sit et al. 2005). However, it's important to note that the average cost of online studies is still a significant investment. Online learning is cost effective as compared to the traditional way of learning which is face to face. Several scholars have reported making it clear that online learning is much cheaper in terms of cutting down certain costs which includes transportation costs and hostel facility costs. At the Ghana Institute of journalism, online learning has cut down a lot of costs. Students who come from very far places can now save money for other purposes because they wouldn’t have to acquire hostels and pay fees coupled with transportation fees to attend Face-to-Face lectures.

2.9.7 Accessibility

With accessibility we talk about students being able to have access to course materials online and on time, having access to their lecturers whenever they need them. Platforms have been created where information about courses to be read and lecture slides in audio, video and slides

are disseminated. This makes it easier for students to have access to information pertinent to courses they are reading and have a better online learning experience. In line with these problems of internet connectivity, lack of access to smart devices such as laptops and mobile phones by some students also existed. As Ghana is a developing country, problems of internet connectivity and lack of access to smart devices exist. The platforms have been created for the student to have a better online learning experience but for a student to get access to information pertinent to a course he/she reads sometimes becomes challenging.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

Research design, according to Duodu and Asamoah-Gyimah (2007), refers to the way information is gathered or collected from subjects. It generally describes the plan for collecting data to answer the various research questions. A mixed method approach was used, where both qualitative and quantitative research designs were employed. Qualitative research must occur in a real-life setting for the researcher to understand how and why an intervention occurred. A descriptive case study was employed under the qualitative research because the study sought to understand and explain some present circumstances (Yin, 2014). A case study helps in understanding how or why an individual, group, organization or community has experienced a problem or intervention. Also, the study sought to look at experiences in its real-life setting (Shanks, Robson, and Gray 2012).

3.2 Study Area/Setting

The area for this study is the Ghana Institute of Journalism in Accra-Ghana.

3.3 Population

A population is a group of potential participants to whom a researcher wants to generalize the results of the study(Maxwell and Chmiel 2014). The target population of this study comprised students from the Ghana Institute of Journalism because all the students had to compulsorily engage or participate in the online mode of delivery. Also, this target population was used

because the study wanted to find out students' knowledge, perceptions, and attitude towards the online delivery mode of teaching and learning.

3.4 Sampling and Sampling Technique/Procedure

A sample is a subset of the population, chosen to represent the larger population (Acharya et al. 2013). Sampling is a technique of selecting individual members of a particular population to make statistical inferences from them and estimate the characteristics of the whole population (Mugo 2002). The work needed in-depth knowledge of students' experience in terms of their knowledge of how online learning is conducted. The sample size for the study was 50 due to the unavailability of students on campus since most of them had to stay home to participate in online teaching and learning. The researcher reached out to students who were available and ready to aid in this research personally. It involved students with at least one year of experience in the school. The sample size comprises students from undergraduate to graduate studies. Non-probability sampling was used in selecting respondents. Convenient sampling was adopted in this study where convenient sampling also called haphazard or accidental sampling technique is based on using people who are a captive audience (Sedgwick 2013). For example, a sample is selected because of its availability to the researcher. With this, these students were key informants and chosen because of their availability and thought to be the best to provide the data required for this research. The age of the students was varied because there was the need to cover a wider range of respondents.

3.4.1 Ethical Considerations

Ethical considerations were made in the selection of the informants. During the interaction with the respondents for the data collection, my personal beliefs and attitudes were put aside to avoid subjectivity, to allow a free flow of ideas from the respondents and to ensure that the researcher did not influence the data.

3.5 Instruments For Data Collection

Empirical data is usually required to help validate a theory. In this study, one of the instruments used for data collection was an interview guide in collecting qualitative data from the participants. Interview guides were used because they served as a dynamic instrument for conversation (Habib 2021). This helped the research because, the researcher was interested in finding out the knowledge students had about online learning, hence the need for dynamic conversations. With this, the overall goals of the study were translated into more comprehensive and specific objectives.

In the process of the interview, the researcher adopted both the direct and indirect forms of constructing the questions. The questions ranged from general to specific and participants were asked direct and indirect questions to elicit specific information in terms of their knowledge of online learning. The closed-ended questionnaire and the interview guide were structured in such a way that, each question had a series of items that could be used to address the research questions. There are a lot of strengths and weaknesses in the use of an interview guide as an instrument for data collection. One of its strengths is that it is very flexible and this allows the researcher to develop multi-sensory pathways or channels such as spoken, verbal and non-verbal (Cohen, Manion, and Morrison 2007).

The questionnaire was created in Google Forms and distributed to the respondents through WhatsApp. The responses were collected and kept in a Google Sheet. The questionnaire items were made clear to ensure that the respondents could answer without the involvement of the researcher. The Google Sheet was then exported to be analysed.

3.6 Data Collection Procedure and Analysis

Data collection symbolizes the beginning of a journey in research to find answers to research problems, and the researcher needs to be aware of the different procedures in the data collection journey(Rowley 2002). The approach for collecting data refers to the mechanisms used to establish contact with the study sample and to obtain responses to the designed survey questions. (Habib 2021). This aspect shows and explains the stage through which the collection was done. There was contact with 10 students out of the 50 students over phone calls. These participants answered the interview questions, and their answers were transcribed and analysed. The other 40 students answered the quantitative questions via Google Forms. The students were assured of confidentiality and anonymity. Data analysis represents itself as the most difficult and complicated stage in both qualitative and quantitative research methods if the researcher is to bring into essence, findings that can transform raw data into new knowledge (Evans 2007). Qualitative data analysis is based on quality and not on numbers or quantities. The researcher got qualitative data from the participants through phone calls and the answers were transcribed because a paraphrase of what they said will be considered as a substitute for the participants' consciousness. After the transcription, the information was reduced to the most significant information of interest. The sieving of information was done inductively rather than deductively. The information was carefully transcribed and the areas that were related to the research questions were used.

Also, the quantitative data gotten from the respondents were represented on a pie chart and the results were interpreted in percentages based on the data from the google sheet. The analysis was done manually mainly because of the sample size.

CHAPTER FOUR

DATA PRESENTATION OF FINDINGS

4.1 Biographic Data

This illustrates the diversity of students that were contacted during data gathering. The gender, age, type of degree and ownership of devices were collected from every student involved in the research.

4.1.1 Gender

	Male	Female
Quantity	22	28
Percentage	44%	56%
	Total:	100%

Table 1: Gender Data Table

Out of 50 students, 22 were male and 28 were female.

4.1.2 Age

	Below 18 years	18-30 years	Above 30 years
Quantity	0	42	8
Percentage	0	84%	16%
		Total:	100%

Table 2: Age Data Table

From the data gathered, it was discovered that most of the students contacted were between 18 to 30 years representing 84%.

4.1.3 Type of degree

	Undergraduate	Graduate
Quantity	23	27
Percentage	46%	54%
	Total:	100%

Table 3: Degree Type Data Table

From the data gathered, it was discovered that most of the students contacted were graduate students representing 54%.

4.1.4 Ownership of Smart Devices

	Laptop/Computer only	Smartphone/Tablet only	Both Laptop/Computer and smartphone/Tablet	None
Quantity	5	20	24	1

Percentage	10%	40%	48%	2%
			Total:	100%

Table 4: Device Ownership Data Table

From the data collected, it was discovered that all the students contacted had at least, one of the devices needed to access online learning except for only one student who did not have any of the devices needed.

4.2 Quantitative Data Presentation

In this chapter, answers to the quantitative questions that were posed in the previous chapter were analyzed and grouped. The analysis was done on all the questions using quantitative measurement. This is the measurement of data that can be put into numbers. The responses were exported from Google Forms, then, distributed using pie charts.

The responses were presented in a manner of degree, whereby numbers were used to represent the level of agreement or disagreement to the posed question. The Likert scale (Nemoto and Beglar 2014) type of answers was used in respect to this to ensure that the questions exhibit both symmetry and balance. The Likert scale used was: *1 – Strongly Agree (SA); 2 – Agree (A); 3 – Neutral (N); 4 – Disagree (D); 5 – Strongly Disagree (SD).*

4.2.1 Efficiency

Efficiency is the ability to achieve an end goal with little to no waste, effort, or resources. In this section, the researcher sought to know how the students of GIJ viewed the efficiency of GIJ's efforts in online learning.

Four questions were asked to test the efficiency variable of online learning from the perspective of GIJ students. The responses from the participants showed that they all had varied opinions. Question 1 and 4 had most participants agreeing. Question 3 had most participants disagreeing. Question 2 had an almost even distribution with the participants being on both sides. All the same, more participants agreed.

We can therefore report that the participants felt that online learning offered by GIJ is efficient. This agrees with our findings from sourced literature (Butnaru et al. 2021; Müller and Mildenberger 2021).

Question 1: The question posed here was "Accessing online classes via the various online platforms has been satisfactory".

This question focused on how satisfying the accessibility of online learning platforms is to students.

Results: Out of the 40 respondents, 15% (6 people) strongly agreed, 57% (23 people) agreed, 2% (1 person) was on the neutral side, 13% (5 people) disagreed and 13% (5 people) strongly disagreed.

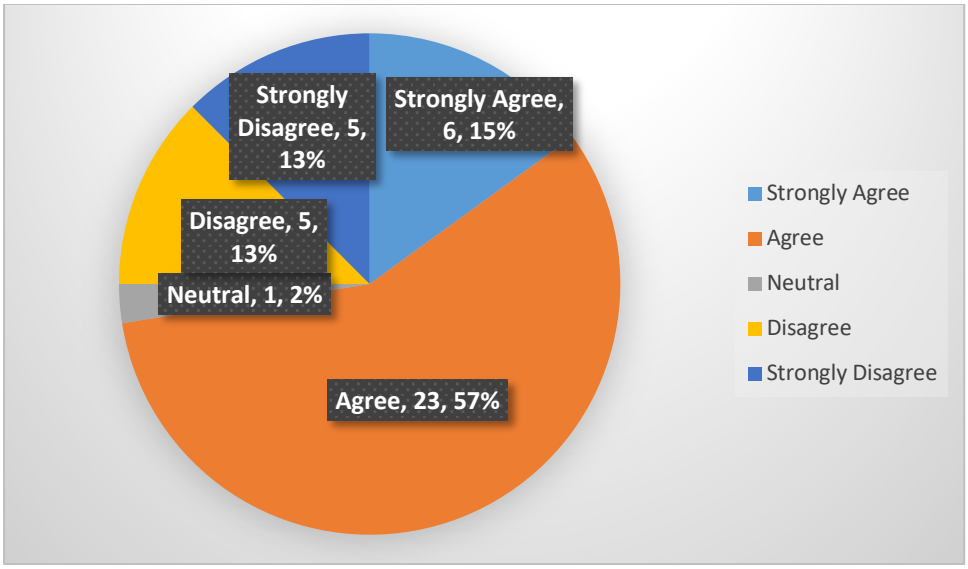

Figure 2: Questionnaire Question 1 Results

Question 2: The question was to ascertain whether lectures were delivered effectively via online learning. This is to know how the students evaluated course delivery in online learning.

Results: Out of the 40 respondents, 24% (10 people) strongly agreed, 28% (8 people) agreed, 12% (8 people) were on the neutral side, 16% (7 people) disagreed and 20% (7 people) strongly disagreed.

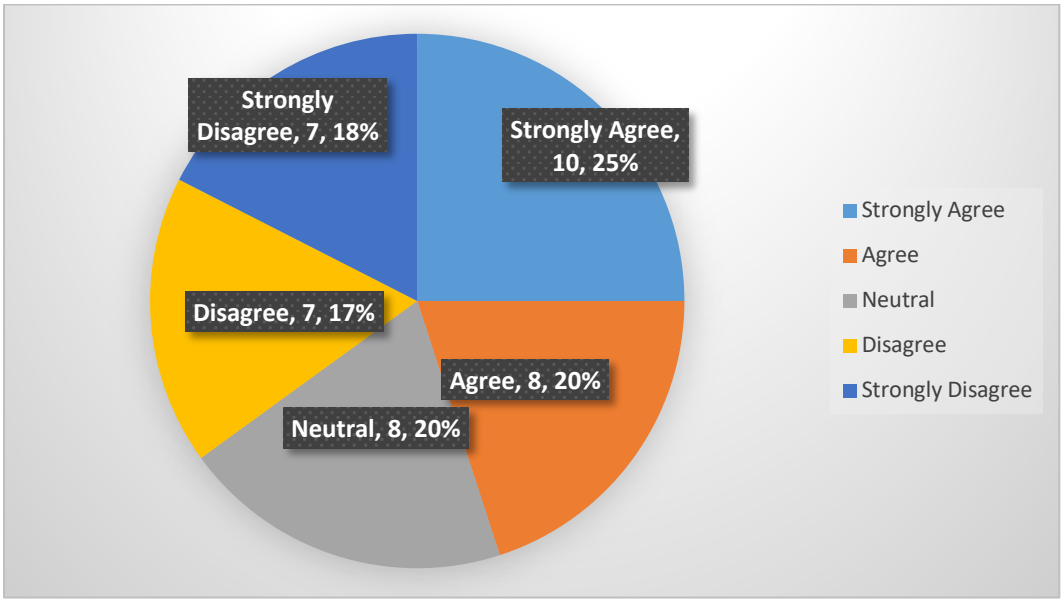

Figure 3: Questionnaire Question 2 Results

Question 3: Learning resources were readily available from lectures and the GIJ's e-Library. This questionnaire focused on if learning resources were readily available from lectures and the GIJ's e-Library.

Results: Out of the 40 respondents, 12% (5 people) strongly agreed, 25% (10 people) agreed, 13% (5 people) were on the neutral side, 25% (10 people) disagreed and 25% (10 people) strongly disagreed.

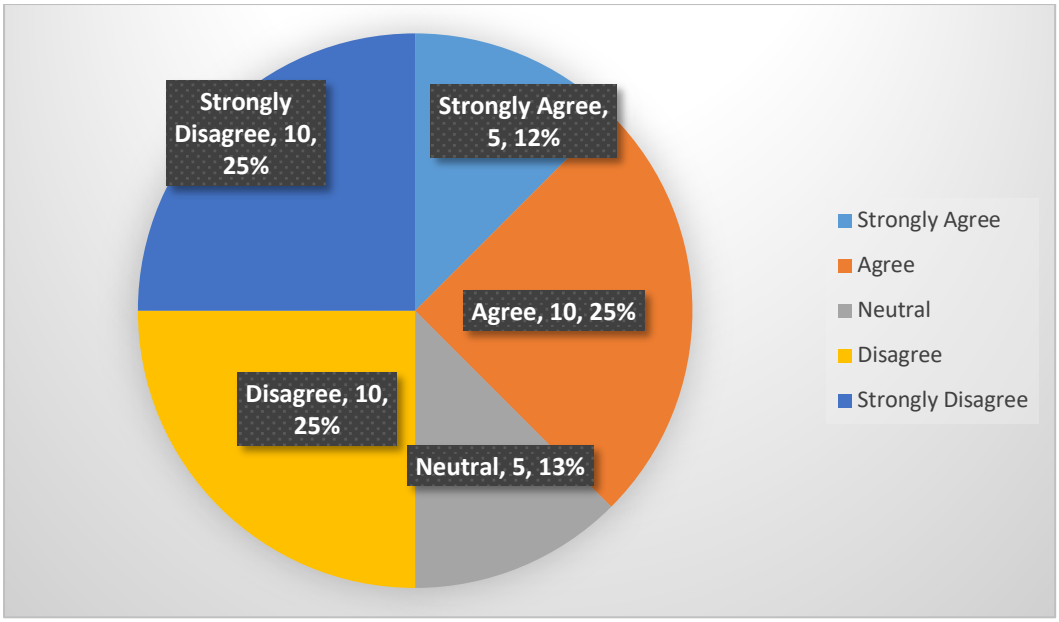

Figure 4: Questionnaire Question 4 Result

Question 4: I understand the course better because the lecturer uses online tools.

This question focused on whether the student understood the course better because the lecturer used online tools.

Results: Out of the 40 respondents, 25% (10 people) strongly agreed, 37% (15 people) agreed, 15% (6 people) were on the neutral side, 15% (6 people) disagreed and 8% (3 people) strongly disagreed.

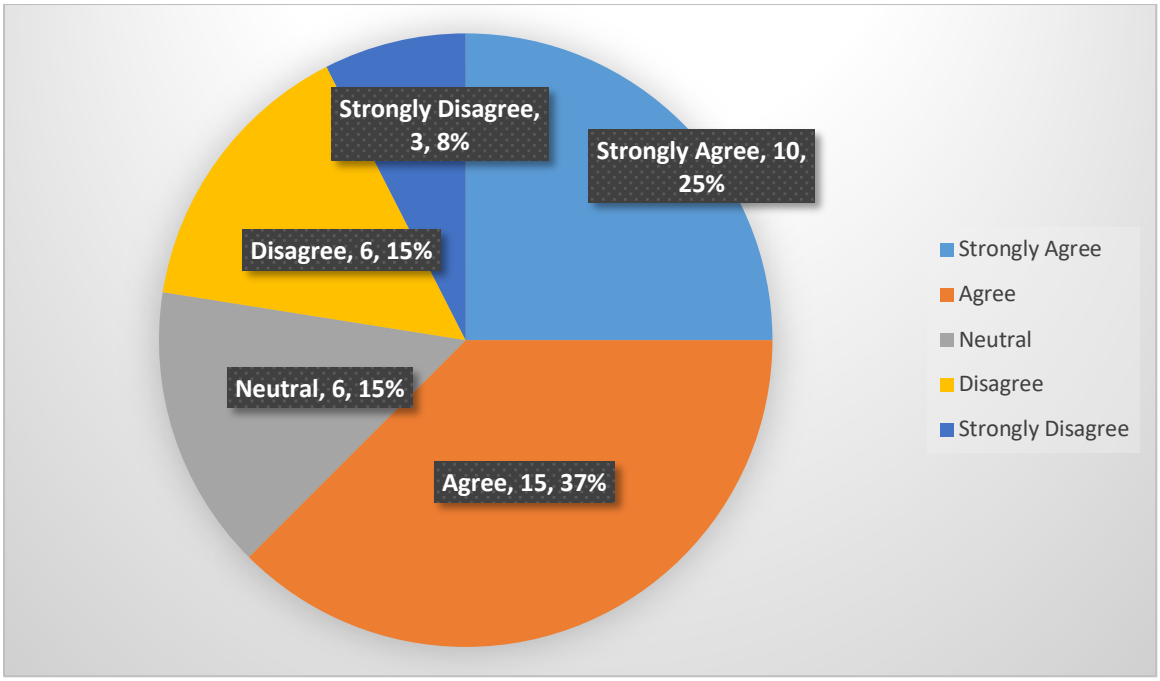

Figure 5: Questionnaire Question 5 Result

4.2.2 Accessibility

Accessibility is the concept of whether a service can be used equally by everyone eligible without barriers. In this section, the researcher sought to know how accessible online learning provided by GIJ was.

Six questions were asked to test the accessibility variable of online learning from the perspective of GIJ students. The responses from the participants showed that they were pleased with the accessibility of online learning offered by GIJ. The only question that had more negative responses had to do with internet connection (question 10). It will be quite unfair to blame GIJ for that since GIJ is not responsible for the internet connection. This is more of a technology issue affecting Ghana as a whole. We can therefore report that the online learning offered by GIJ is accessible. This agrees with our findings from sourced literature (Kim and Bonk 2006; Means et al. 2013)

Question 5: Online learning at the university is easily accessible.

This question focused on if online learning at the university is easily accessible.

Results: Out of 40 respondents, 23% (10 people) strongly agreed, 34% (15 people) agreed, 11% (5 people) were on the neutral side, 8% (3 people) disagreed and 18% (7 people) strongly disagreed

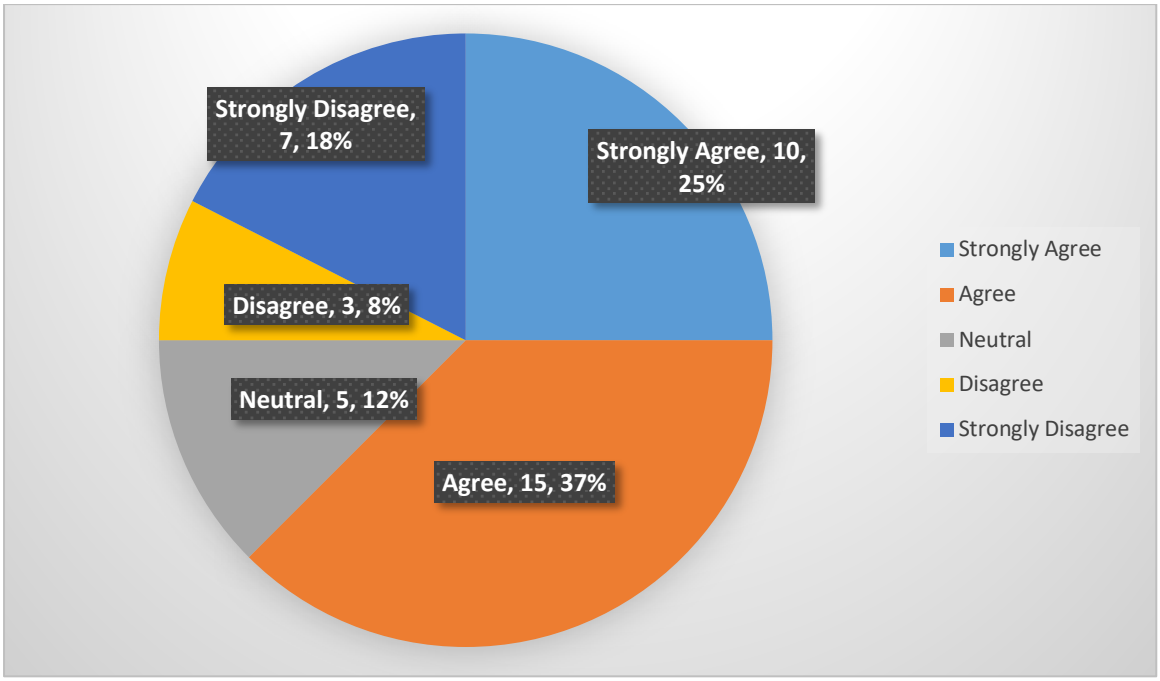

Figure 6: Questionnaire Question 5 Results

Question 6: The platforms used to deliver lectures are user friendly.

This question focused on whether the platforms used to deliver lectures were user friendly.

Results: Out of 40 respondents, 30% (12 people) strongly agreed, 25% (10 people) agreed, 2% (10 people) were on the neutral side, 12% (5 people) disagreed and 8% (3 people) strongly disagreed

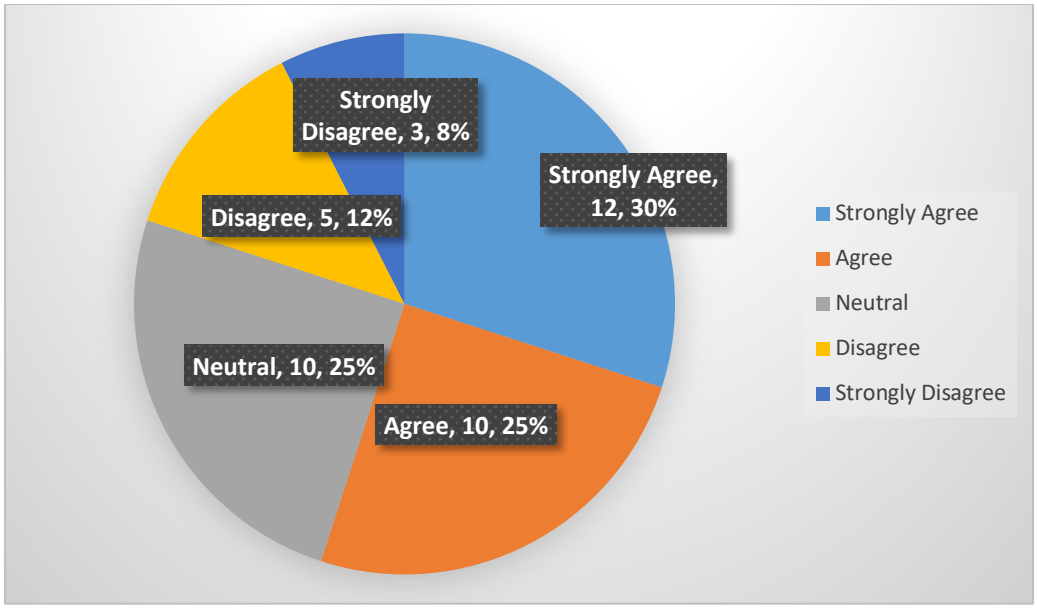

Figure 7: Questionnaire Question 6 Results

Question 7: The learning management system is easily accessible.

This question focused on if the online learning management system was easily accessible.

Results: Out of 40 respondents, 30% (12 people) strongly agreed, 42% (17 people) agreed, 2% (1 person) was on the neutral side, 13% (5 people) disagreed and 13% (5 people) strongly disagreed.

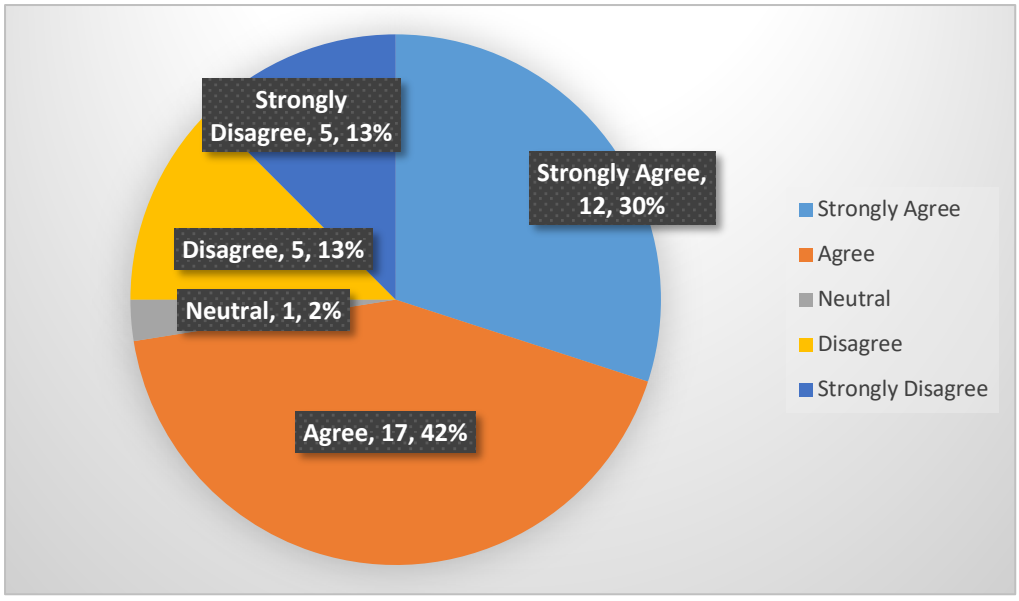

Figure 8: Questionnaire Question 7 Results

Question 8: Connecting to the online platforms is no stress.

This question inquired into whether there was stress associated with connecting to the online platforms.

Results: Out of 40 respondents, 25% (10 people) strongly agreed, 32% (13 people) agreed, 25% (10 people) were on the neutral side, 15% (6 people) disagreed and 3% (1 person) strongly disagreed.

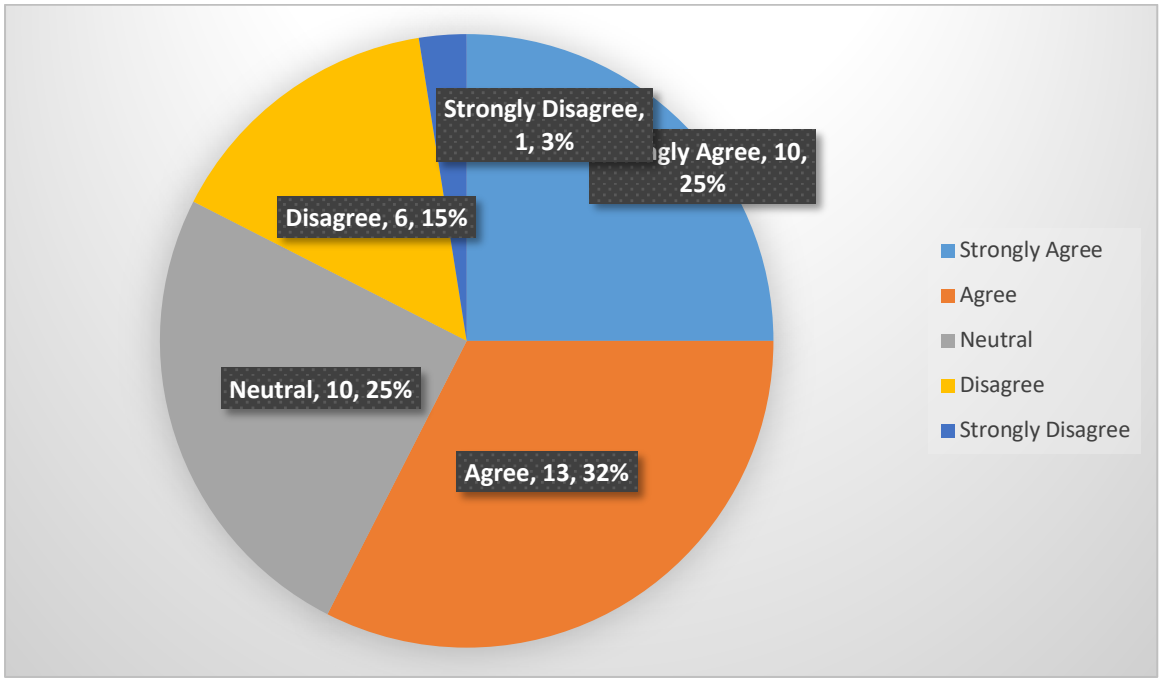

Figure 9: Questionnaire Question 8 Results

Question 9: GIJ tries to ensure that all students can access the online platforms.

This question focused on whether GIJ ensured that all students can access the online platforms.

Results: Out of 40 respondents, 30% (12 people) strongly agreed, 42% (17 people) agreed, 2% (1 person) was on the neutral side, 13% (5 people) disagreed and 13% (5 people) strongly disagreed.

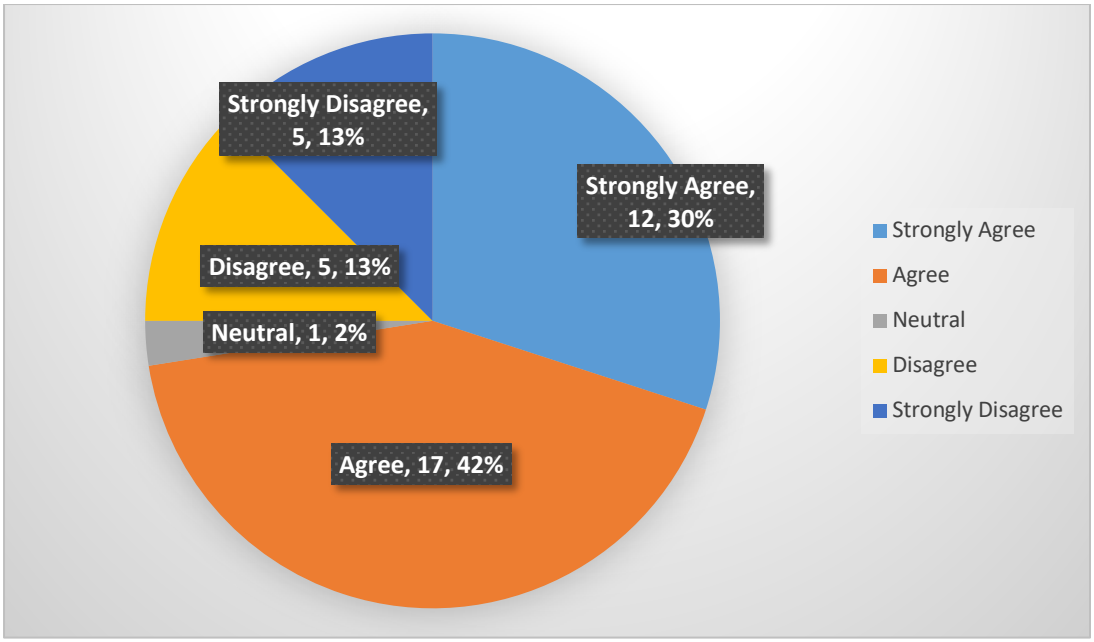

Figure 10: Questionnaire Question 9 Results

Question 10: The internet connection is stable throughout the online lectures.

This question focused on whether the internet connection is stable throughout the online lectures.

Results: Out of 40 respondents, 7% (3 people) strongly agreed, 12% (5 people) agreed, 13% (5 people) were on the neutral side, 50% (20 people) disagreed and 18% (7 people) strongly disagreed.

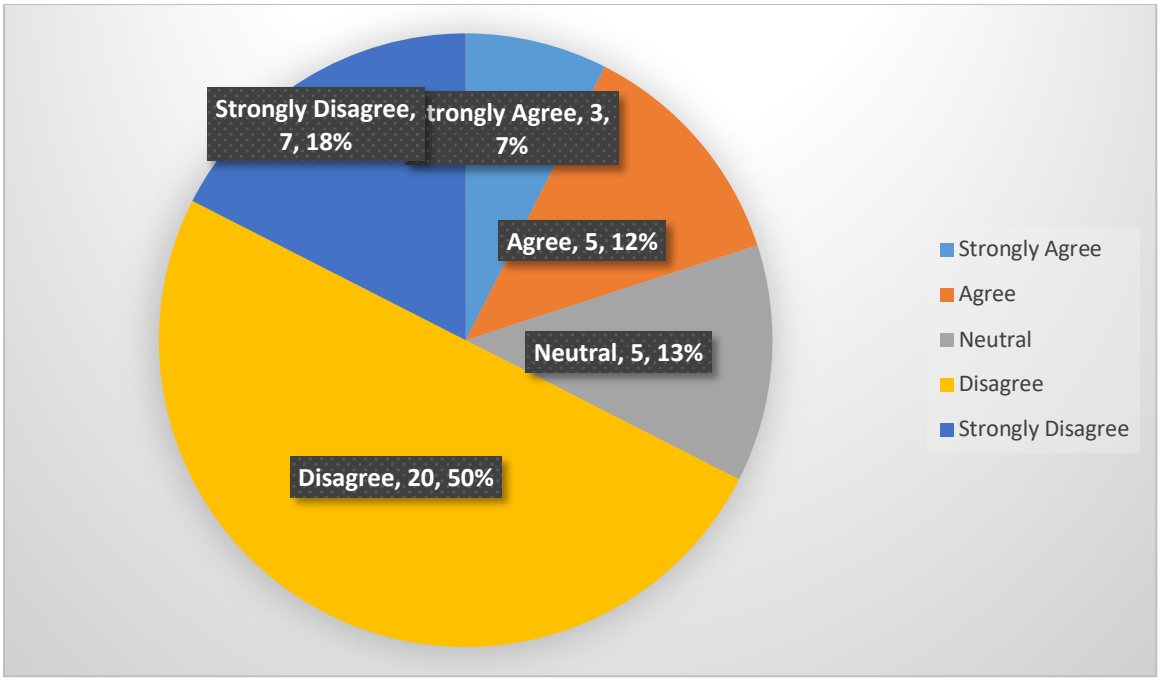

Figure 11: Questionnaire Question 10 Results

4.2.3 Affordability

Affordability in this scope is a measure of an average student's ability to afford the general cost of online learning offered by GIJ compared to traditional learning.

Four questions were asked to test the affordability variable of online learning from the perspective of GIJ students. The responses from the participants showed that they were displeased with the affordability of online learning offered by GIJ. The only question that had more positive responses had to do with transportation costs (question 13). Also, it will be unfair to GIJ to blame them for the high cost of internet data as this is a technology issue affecting the country. The participants believed GIJ did not do enough to make online learning affordable to them. From sourcing other literature, it was discovered that other schools offered online learning at a reduced cost compared to face to face learning (Bartley and Golek 2004). This disagrees with our findings from sourced literature.

Question 11: Online learning is inexpensive compared to traditional learning.

This question focused on whether the students found online learning to be cheaper compared to traditional learning.

Results: Out of 40 respondents, 7% (3 people) strongly agreed, 7% (3 people) agreed, 10% (4 people) were on the neutral side, 63% (25 people) disagreed and 13% (5 people) strongly disagreed.

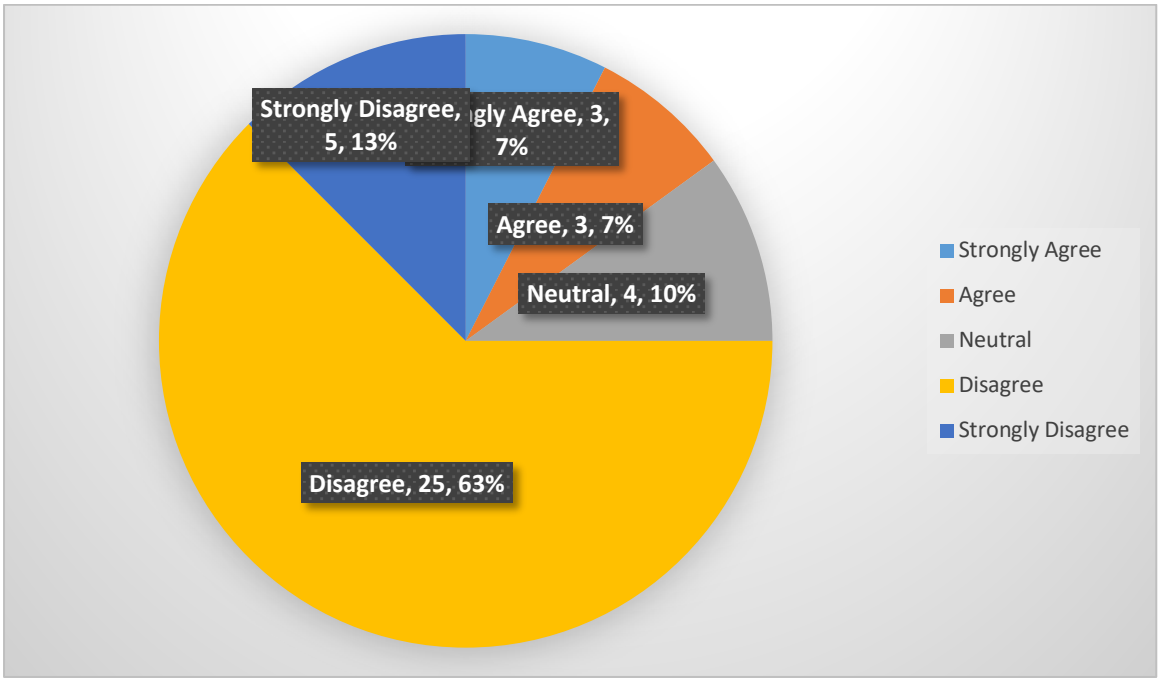

Figure 12: Questionnaire Question 11 Results

Question 12: The internet data needed to access the online platforms is inexpensive.

This question focused on if internet data needed to access the online platforms is inexpensive.

Results: Out of 40 respondents, 5% (2 people) strongly agreed, 5% (2 people) agreed, 7% (3 people) were on the neutral side, 68% (27 people) disagreed and 22% (2 people) strongly disagreed.

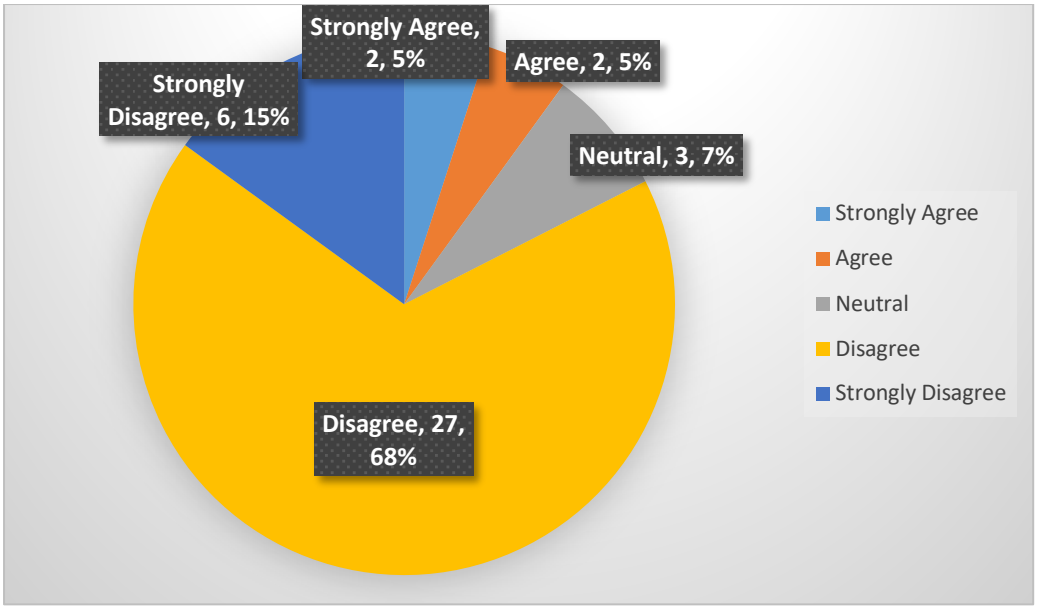

Figure 13: Questionnaire Question 12 Results

Question 13: Online learning saves transportation costs of commuting to GIJ campus.

This question sought to find out if online learning saves transportation costs of commuting to GIJ campus.

Results: Out of 40 respondents, 65% (26 people) strongly agreed, 22% (9 people) agreed, 0% (no person) was on the neutral side, 8% (53 people) disagreed and 5% (2 people) strongly disagreed.

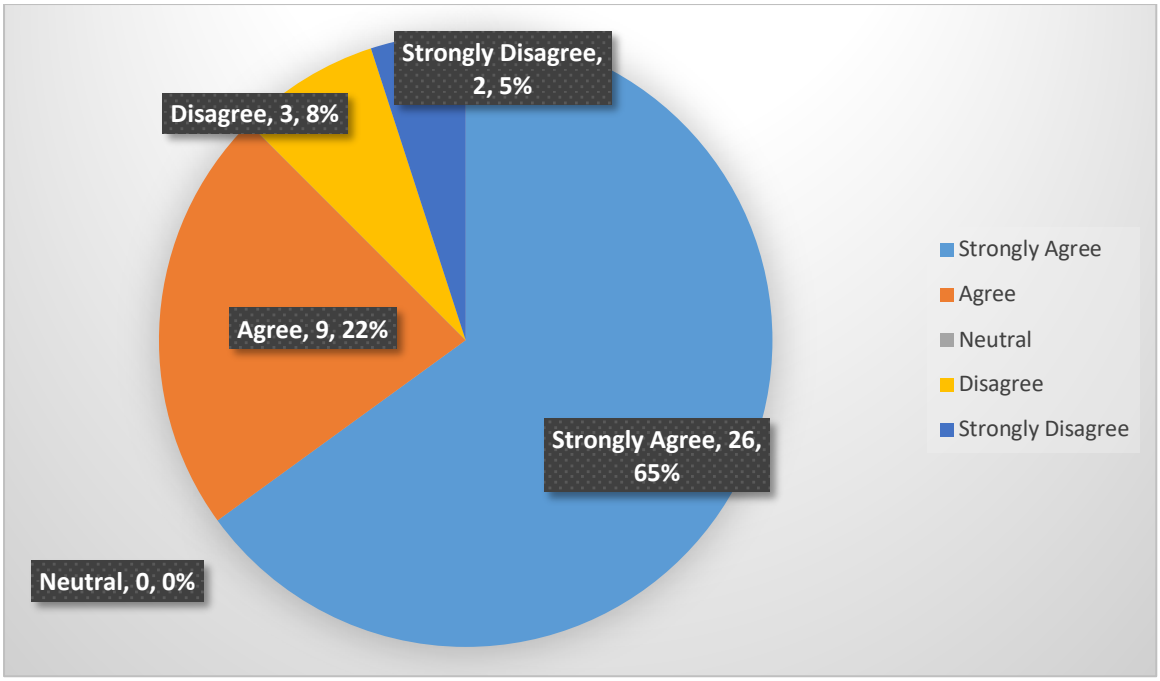

Figure 14: Questionnaire Question 13 Results

Question 14: GIJ subsidized the school fees to aid students purchase internet data for online learning.

This question was aimed at determining if GIJ subsidized the school fees to aid students to purchase internet data for online learning.

Results: Out of 40 respondents, 2% (1 person) strongly agreed, 2% (1 person) agreed, 3% (1 person) were on the neutral side, 68% (27 people) disagreed and 25% (10 people) strongly disagreed.

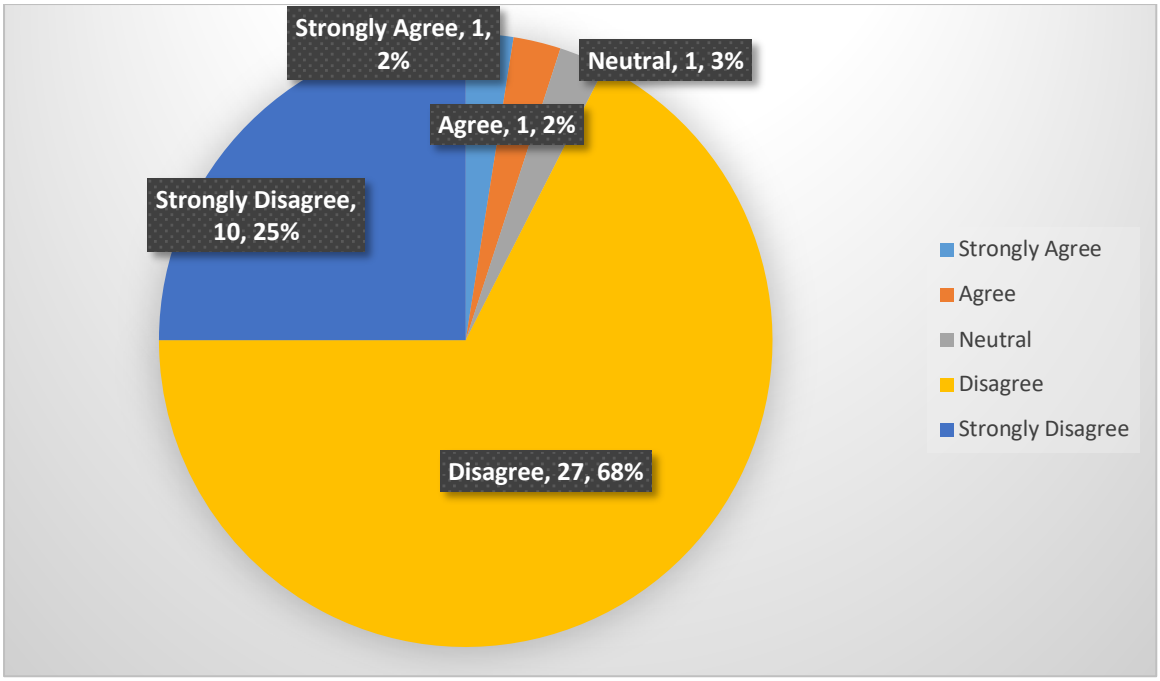

Figure 15: Questionnaire Question 14 Results

4.2.4 Attendance and Performance

Four questions were asked to test the attendance and performance variable of online learning from the perspective of GIJ students. The responses from the participants showed that they were displeased with the attendance and performance of online learning offered by GIJ. The only question that had more positive responses had to do with improved performance (question 16). The participants believed that there is less interaction in online learning compared to face-to-face learning. This agrees with our findings from sourced literature (Butnaru et al. 2021; Setena, Mariyatni, and Meitri 2021).

Question 15: The attendance of students and lecturers to online lectures is good.

This question aimed at finding if the attendance of students and lecturers to online lectures is better compared to the attendance in the traditional system.

Results: Out of 40 respondents, 5% (2 people) strongly agreed, 7% (3 people) agreed, 2% (1 person) was on the neutral side, 63% (25 people) disagreed and 23% (9 people) strongly disagreed

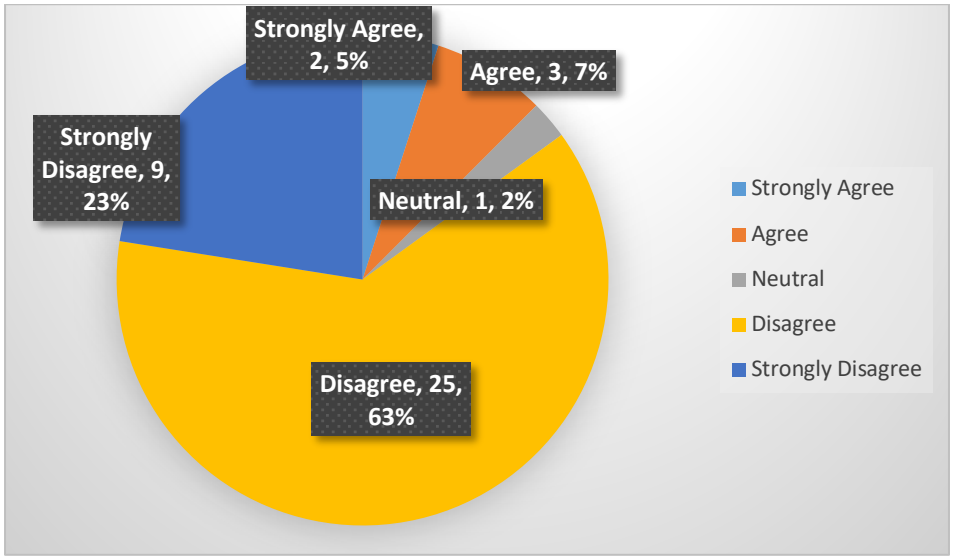

Figure 16: Questionnaire Question 15 Results

Question 16: Online learning has improved my performance in the courses.

This question focused on whether online learning has improved the student's performance in the courses they undertook.

Results: Out of 40 respondents, 30% (12 people) strongly agreed, 37% (15 people) agreed, 7% (3 people) were on the neutral side, 13% (5 people) disagreed and 13% (5 people) strongly

disagreed.

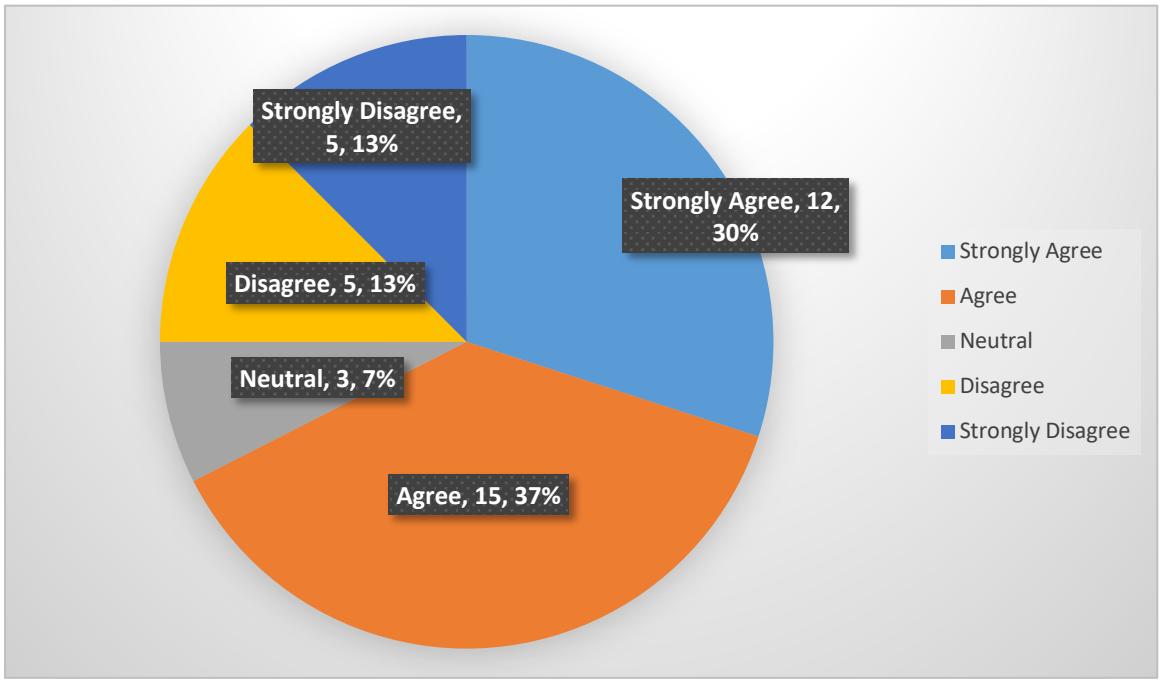

Figure 17: Questionnaire Question 16 Results

Question 17: I can interact with my coursemates using the learning management system.

This question focused on whether the online learning management system enabled the student to interact with his or her mates.

Results: Out of 40 respondents, 5% (2 people) strongly agreed, 7% (3 people) agreed, 2% (1 person) was on the neutral side, 63% (25 people) disagreed and 2% (5 people) strongly disagreed.

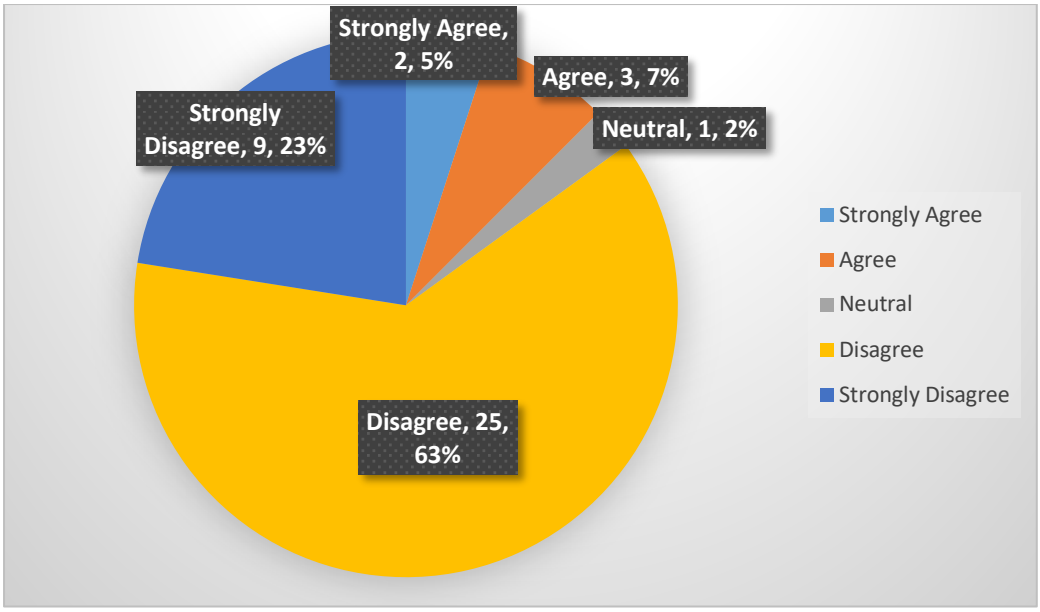

Figure 18: Questionnaire Question 16 Results

Question 17: Due to the amount of research needed to be done when it comes to online learning, my ability to understand the courses has improved my performance.

This question focused on if online learning had helped to improve students' performance through the incorporation of research in the learning process.

Results: Out of 40 respondents, 5% (2 people) strongly agreed, 7% (3 people) agreed, 2% (1 person) were on the neutral side, 63% (25 people) disagreed and 23% (9 people) strongly disagreed.

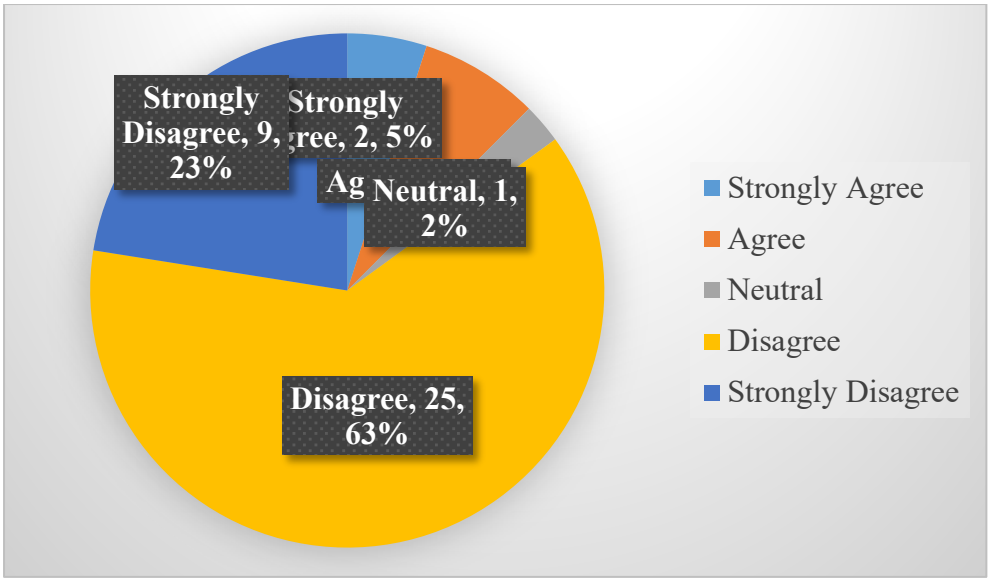

Figure 19: Questionnaire Question 19 Results

4.3 Qualitative Data Analysis

Responses to Research Questions

To obtain accurate answers to the four research questions, a series of items used in the structured interview were analyzed.

4.3.1 Research Question One (1)

1. What are students' perceptions of the delivery of lessons by lecturers?

In response to this research question, items labelled 3,7 and 10 on the interview structure were used. The researcher wanted to find out from item three (3) if there have been any improvements in the delivery of lessons by lecturers during online learning. Most of the participants answered positively that, more improvements had been made in the delivery of lessons. It was deduced out of the 10 participants that, 5 people responded negatively.

Interviewee 1: *Yes, I believe there have been vast improvements in the delivery of lessons, such that, more examples are given to understand the concepts that are being taught, but during traditional learning, the examples are limited.*

Interviewee 2: *erm, I would say yes, because more slides were provided by the lecturer to enable us to grasp a better understanding of what we are learning. It was very ok, let me put it that way.*

Interviewee 3: *Well, this is my second year here, so I'm kind of finding it difficult to access some slides, but averagely I would say, yes, the mode of delivery has improved as compared to my first year.*

Interviewee 5: *to be honest with you, I'm very happy with the delivery of lessons, the lecturers were very much concerned with that, so they made sure to make things easier for us by providing documents that were relevant to our study.*

Interviewee 7: *frankly, the delivery of lessons was averagely okay. I would say 70% because most of the documents seemed difficult to understand.*

The remaining 5 respondents were not very much happy with the delivery of lessons by the lecturers. For instance:

Interviewee 4: *Most of My lecturers were very bad at their delivery of lessons, they didn't know how to even send slides to us using different platforms. We struggled.*

Interviewee 6: *it was appalling, I could go three weeks without getting slides to study. Some of the lecturers did not mind us at all.*

Interviewee 8: *no improvements have been made frankly, we are still in the same old tradition of getting limited slides and documents.*

It can be deduced from the interview that all the respondents knew about the mode of delivery, but most of them were not happy with it. Some of the participants spoke about the documents and slides they received. It was very adequate while others complained that they struggled to get enough information. Most believed that the traditional mode of delivery of lessons was the best and that they do not frankly enjoy this kind of delivery.

Item seven (7) on the interview list dealt with how the school has been supportive during the online learning. With this, the researcher wanted to know from the participants how the school has been supportive in keeping teaching and learning at its best during online learning. It was deduced from the participants that, the school has been supportive, and they were very much impressed with that. Most of their answers and observations were the same. It was realized from them that, at least one of them said something very positive about the school in terms of support. This can be deduced from the following conversations.

> ***Interviewee 3:*** *Oh yes, the school has been supportive during these times. They provided avenues for everyone to join in the online class.*
>
> ***Interviewee 2:*** *I was disappointed with what the school did. They didn't provide us with data or even reduce the school fees so that we can use the money to buy the data.*
>
> ***Interviewee 5:*** *with this, I give the school a thumbs up, they made provisions of platforms that I would say was very good because most of us didn't know how we would have joined the classes. I mean the covid drove us out of the lecture rooms. So, I would say the school did very well.*
>
> ***Interviewee 9:*** *Supportive??, oh yeah, they were very supportive. It was impromptu but the way, they structured everything was superb, they constantly made sure that information got to us all the time.*

The findings show that almost all of them were very pleased with how the school was supportive during those perilous times. Although some participants expected a reduction in school fees and provision of data to facilitate the online learning process.

Item ten (10) which sought to find out the overall impression of the respondents if self-paced learning was good or they found it difficult to learn was used to conclude on Research question One.

Item ten (10) reads: *Is self-paced learning very dominant in online learning as compared to traditional learning?*

All the 10 informants expressed very similar sentiments about how self-paced learning looked like during online learning. Most of them lamented on how they were forced to do a lot of research on their own to get maximum understanding of concepts. This can be deduced from some of the conversations. For instance:

> ***Interviewee 10:*** *With online learning, you learn on your own and you would have to do a lot of research as compared to the traditional mode of delivery.*
>
> ***Interviewee 7:*** *I'm forced to put up my best, by researching more on everything we do…and this has made me become a very good independent learner.*
>
> ***Interviewee 4:*** *I now understood that you must learn on your own or else you are doomed haha.*

In all, the informants shared their knowledge on the delivery of lessons, how supportive the school has been and how much they needed to learn on their own. All the majority were pleased, a few of them weren't pleased with the delivery of lessons. The overall findings to this

research question allowed the researcher to know how well the school sailed through in the covid period in terms of delivery of lessons.

4.3.2 Research Question 2

How accessible is the online learning system to students?

The researcher wanted to find out the ease and availability of data to access the various online learning system. The researcher wanted to know if the students encountered some difficulty in accessing these systems. Items six (6) and eight (8) on the qualitative interview structure list was used to answer these questions. Item six (6) on the interview list read:

How readily accessible are the devices to help you achieve online schoolwork (laptop, WIFI)?

With this, the researcher wanted to find out from the students if they had the means to access these systems. 6 of the respondents answered positively whiles 3 made the same complaints. Interviewees 1, 2, 4, 7, 9 and 10 gave very positive responses whiles interviewees 5, 8 and 3 gave similar complaints. This can be noticed from the following responses

> ***Interviewee 1:*** *For me, my parents bought me a laptop since year one, so I didn't have problems accessing the online systems used for teaching and learning.*
>
> ***Interviewee 2:*** *I don't have a laptop, so I used my phone to access the online classes usually through the zoom app.*
>
> ***Interviewees 4 and 5 and 7:*** *Accessing the platforms was very difficult for me at a point, due to the lack of data.*

All six respondents had the means to access the online systems via various platforms without any problems. Some had smartphones, laptops and desktop computers, and the library accessories to access the online systems

The following responses showed that some had issues accessing the platforms. It was challenging for them. Some shared their responses, and this can be seen in the following conversation.

> ***Interviewee 5:*** *Although I had both a tablet and a smartphone, connectivity issues didn't permit me to access the online learning platforms most of the time. I think this could be due to my residence.*
>
> ***Interviewee 3:*** *I had to go to the café to get a good connection because, in my house, the network was very poor. I was stressed when it came to accessing these online platforms.*
>
> ***Interviewee 8:*** *I had to log on to these platforms via my brother's phone because I use a yam.*

The respondents complained about connectivity problems and a lack of accessories. This became a problem to them because they felt that they were lacking behind in class and this was a disturbing issue.

Items (8) on the qualitative interview structure list also dealt with the improvements that were needed to improve ways of accessing the online systems in the school. This would help the

school to know where they fall short. Item (8) read: *Would you like any improvements to be made to the online learning system in your school? If yes, then what are those improvements.*

With this, 6 of the respondents responded that no improvement is required. They were very comfortable with how they accessed the online platform. Interviewee 3,5 and 8 answered that more improvements are needed to make the online system accessible. This was deduced from the following responses.

> ***Interviewee 3:*** *oh yes, more improvement is needed, because the school should be able to make it possible to access the online systems without internet connectivity. That will favour most of us.*
>
> ***Interviewee 5:*** *Yes, improvements are needed. Sometimes the system or platforms get choked, so they should expand the number of people that the system can accommodate.*
>
> ***Interviewee 8****: oh yes, the connectivity is a concern. They should provide free connectivity without hesitation. that will help us paaa. And also, if they can provide us with some mini-tablets for those who don't have the accessories. I don't know if the school is aware of this.*

These three informants suggested many ways the school can improve on their online systems. This will help create some easy access to the online systems. They will be able to log on to platforms when the time for class is due. The responses showed that the school should try their best to satisfy the less privileged students. In 2011, 65% of institutions reported that online learning was critical to their long-term strategic plans (Allen & Seaman, 2011). This supports this claim that institutions need to think about their future concerning online education so that they won't encounter problems when the time arises.

4.3.3 Research Questions 3

How challenging has adapting to online learning been for you?

Qualitative question 4 was used to answer this question. The quantitative question that was posed was to ascertain whether the students encountered any challenges during online learning and further encouraged them to explain the challenges they faced. This question elicited answers from all ten (10) interviewees. The responses from the interviewees are stated below.

> ***Interviewee 1:*** *Oh yes! I did encounter some challenges with the cost of data. I had to buy extra data because my data usage is out of the ordinary.*
>
> ***Interviewee 2:*** *My main challenge with online learning was the fact that I had to adapt to the usage of the new apps since we didn't know of these apps until recently.*
>
> ***Interviewee 6:*** *I faced a lot of challenges adapting to the system because I never had to use my devices as much as I do now. That took a little bit of time to get used to.*
>
> ***Interviewee 10:*** *I didn't particularly have any problems with the usage of the devices just the online platform along with the schools' class structure was just a bit complex which made adapting to the system a bit longer and harder.*

Interviewees 1,3 and 8 gave similar responses having to do with the cost of data. Interviewees 2, 4, 5 and 9 also gave similar responses concerning the students' being unfamiliar with apps that grant access to the various online learning platforms. Interviewees 6 and 7 also gave responses concerning having to use their devices more than they were accustomed to before. Interviewee 10 had a differing response from the other interviewees.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter summarizes the interpreted data as well as make recommendations based on the results.

5.2 Summary

The rationale for the study was to determine the students' views about online learning and how effective it has been so far. It was also to determine how they coped with Online learning during the covid 19 pandemic. Through a mixed-method approach, data was gathered from respondents, transcribed, and critically represented on a pie chart. The study showed that most of the students' knowledge about online learning was very superficial. Again, it was found out that, their knowledge of the concept of online education was not what they expected according to many. A very few of them were very content with how things were going, since, they had many of the gadgets used for online learning at their disposal, whiles many of them struggled to get these gadgets. Due to the lack of electronic gadgets, online learning became a problem to them which ultimately affected their performance. Many of these students had problems that varied from person to person. Whilst some had problems with getting lesson materials from lecturers, others also encountered network problems that greatly affected their performance. The findings of the study had mixed reactions. Most of the findings were built on existing literature whiles some of them raised further questions about the academic and professional decline of some students.

5.3 Key Findings

1. **Attendance on online education was satisfactory**

   Most of the students attended lectures during the online class although they struggled with connectivity issues. Some of these students resorted to going to the café to be able to join the online class. This was very critical to them because they needed to keep track and improve upon their academic performance.

2. **Lecturers' usage of online learning platforms on the delivery of lessons.**

   Most of the students had problems accessing some of the lecture materials. While some of the lecturers saw the need to provide online lecture notes others sought to encourage self-paced learning. Also, most of the lecturers were not good at using online learning platforms. Most of them struggled to use the various teaching and learning platforms. They had inadequate in-service training on how to use the technological tools

3. **The level of interaction during online teaching and learning is against Traditional face to face teaching and learning.**

   It was realized that most of the students like the level of interactivity during the online class. Most of these students expressed that, with the online learning, the lecturers interacted with them a lot to ensure a deeper understanding of concepts that are being taught as compared to traditional learning. Although there is interaction during traditional learning, it was minimal as compared to online learning.

4. **Online learning accessibility**

   It was realised that students had varied opinions on how accessible GIJ's online learning was. This was because of location and the availability of devices needed.

Students who lived in urban communities had little to no problem accessing the online learning platforms while students who lived in other communities had issues accessing the online learning platforms. The same applies to the lecturers. It was discovered that the following greatly impacted the accessibility of GIJ's online learning:

a. Location
b. Devices
c. Internet connectivity
d. Internet data

5. **Online learning affordability**

It was realised that most students found online learning to be expensive as against the findings from other literature and case studies. This was due to the initial cost of the devices needed by students to partake in online learning. Also, internet cost in Ghana is quite high compared to the cost of the internet in other parts of the world.

5.4 Recommendations.

Based on the findings, it is recommended that:

1. More attention should be given to the delivery of lessons during online teaching and learning. That is, lecturers should be able to deliver their lessons through different platforms that can cover most of the students. This way, the students can perform very well without any hurdles to climb.
2. Lecturers in the field should be updated with current trends on how to use the new technological devices to ensure a free flow of teaching and learning during difficult times such as these. This can be done through in-service training and workshops.

3. The school should be able to create online platforms that can accommodate over 1000 participants at a time, to avoid online bandwidth issues when classes are ongoing.
4. Also, the school should be able to find ways to support the less privileged in terms of network problems. Most of these students are in remote parts of the country and they find it difficult to access the internet and this has caused a lot of damage to their academic life in these difficult times. The school should make provisions to cover these challenges.
5. Further research should be done to discover why online learning is seen to be expensive in Ghana as compared to other countries.
6. Further research should be done to understand why students want presentation slides from lecturers in online learning.
7. This research was conducted to discover how effective online learning has been in GIJ in the past year. More research should be done to know if more factors should be considered.

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APPENDIX

1. Questionnaire

https://forms.gle/LMsXM5RLDquAVX3B9

2. Interview Guide

1. What interests you about online learning?

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2. Has online learning had any positive influence(s) on your academic performance?

If yes, then what are those influences?

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3. Has online learning made any improvement(s) on delivery of lessons by lecturers?

If yes, then what are those improvements?

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4. Did you encounter any challenges during online learning?

If yes, then what are those challenges

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5. Have you developed any skill(s) through online learning (Technology-wise or ICT literacy)?

If yes, then what are those skills?

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6. How readily accessible are the devices (Wi-Fi, laptop, tablet, computer) to help you achieve online schoolwork?

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7. Has your school been supportive during the online classes?

If yes, then how have they been supportive?

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8. Would you like any improvements to be made to the online learning system in your school?

If yes, then what are those improvements?

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9. Is online education more susceptible to cheating?

Answer yes or no, and why.

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10. Is self- paced learning very dominant in online learning as compared to traditional learning?

Answer yes or no, and why.

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